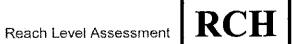
SURVEY REACH ID: 2 WTRSHD/SUBSHD: 486	DATE: 2/3/09 ASSESSED BY: 66
START TIME: 2:00 WPM LMK:	END TIME: 7:20 (O)PM LMK: GPS ID:
LAT ? LONG ?	LAT 4/ 0 50 1 21 " LONG 72 0 42 149 " (W)
1 · ·	DESCRIPTION: Junction water BBE-01
DESCRIPTION: JUNGAN WITH BBE-4/BBE-3	DESCRIPTION DANGER DISK - 01
D	RESENT CONDITIONS
	Clear
	Urban/Residential Suburban/Res Streeted □ Institutional
	Crop Pasture Sother: H tentian former live
AVERAGE CONDITIONS (check applicable)	REACH SKETCH AND SITE IMPACT TRACKING
BASE FLOW AS \$\$\$ □ 0.25% □ 50%-75%	Simple planar sketch of survey reach. Track locations and Tract or all site impacts within the survey reach (OT, ER, IB,SC, UT, TR, MI) as well as any additional
Channel Width □25-50 % ■ 75-100%	within the survey reach (OT, ER, IB,SC, UT, TR, MI) as well as any additional
	features deemed appropriate. Indicate direction of flow
DOMINANT SUBSTRATE ☐ Silt/clay (fine or slick) ☐ Cobble (2.5 -10")	
☐ Sand (gritty) ☐ Boulder (>10")	A CONTRACTOR OF THE PARTY OF TH
☐ Gravel (0.1-2.5") ☐ Bed rock	
	Dike
WATER CLARITY Clear	-culvert
☐ Stained (clear, naturally colored) ☐ Opaque (milky)	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \
☐ Other (chemicals, dyes)	
AQUATIC PLANTS Attached: none some lots	7 9 9
IN STREAM Floating: S none some lots	
	1 July 1
WILDLIFE IN OR	C LEVEN
AROUND STREAM Snails Stother: PT hank	Succe
✓ Mostly shaded (≥75% coverage)	3000
STREAM SHADING Halfway (\geq 50%)	3
(water surface) ☐ Partially shaded (≥25%)	[6]
☐ Unshaded (< 25%)	
CHANNEL Downcutting Bed scour	3
CHANNEL DWidgeing Donk foilure	
DYNAMICS	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \
	F all flooded
Unknown Sed. deposition Channelized	flooded flooded nethands
R an V fall	
CHANNEL Height: LT bank 3 (ft)	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \
DIMENSIONS RT bank(ft)	4
(FACING Width: Bottom \\. (ft)	
DOWNSTREAM) Top (ft)	
REACH ACCESSIBILITY	
Fair Forested or Difficult Must cross	SSE 03
Good: Open area in developed area wetland, steep slope, or	1398-101
sufficient room to adjacent to stream. Sensitive areas to get to	h low
stockpile materials, Access requires tree stream. Few areas to stockpile evailable	4 (3)
easy stream channel landscaped areas and/or located a great	
access for heavy equipment using Stockpile areas distance from stream. Seculation	•
existing roads or trails. small or distant from stream. Specialized heavy equipment required.	
5 4 3 (2) 1	
NOTES: (biggest problem you see in survey reach) Junked	- CAR + heary sediment lovel
sunkea	CANE . WELL
1	Deponted to Armionizing TVrs TNs
1	REPORTED TO AUTHORITIES YES NO

APPLACE AND APPLACEMENT		OVERALL STREAM CON	DITION			
[Optimal	Suboptimal	Marginal			
IN-STREAM HABITAT (May modify criteria based on appropriate habitat regime)	that are <u>not</u> new fall and <u>not</u> transient)	du-70% mix of stable habitat; well- suited for full colonization potential; adequate habitat for maintenance of populations; presence of additional substrate in the form of newfall, but not yet prepared for colonization (ma rate at high end of scale).	20-40% mix of stable habitat; habitat availability less than desirable; substrate frequently	Poor Less than 20% stable habitat; la of habitat is obvious; substrate unstable or lacking.		
Vnann	20 19 18 17 16	15 14 13 (2) 11	10 9 8 7 6	5 4 3 2 1 0		
VEGETATIVE PROTECTION (score each bank, determine sides by facing downstream)	not evident; almost all plants allowed to grow naturally.	represented; disruption evident but not affecting full plant growth potentia	disruption obvious; patches of	Less than 50% of the otroop have		
	Left Bank 10 9	8 7 6	5 4 3	2 1 0		
-	Right Bank 10 9	8 7 6	5 4 3			
BANK EROSION (facing downstream)	Banks stable; evidence of erosion or bank failure absent or minimal; little potential for future problems. <5% of bank affected.	Grade and width stable; isolated areas of bank failure/erosion; likely caused by a pipe outfall, local scour, impaired riparian vegetation or adjacent use.	Past downcutting evident, active stream widening, banks actively eroding at a moderate rate; no threat to properly a	Active downcutting; tall banks on both sides of the stream eroding a fast rate; erosion contributing significant amount of sediment to stream; obvious threat to property or infrastructure.		
water -	Left Bank 10 9 Right Bank 10 9	8 7 6	5 4 3	2 1 0		
GENT COL	Right Bank 10 9	8 7 6	5 4 3	2 1 0		
FLOODPLAIN CONNECTION	High flows (greater than bankfulf) able to enter floodplain. Stream not deeply entrenched.	High flows (greater than bankfull) able to enter floodplain. Stream not deeply entrenched.	High flows (greater than bankfull) not able to enter floodplain. Stream deeply entrenched.	High flows (greater than bankfull) not able to enter floodplain. Stream deeply entrenched.		
	20 19 18 17 16	15 14 13 12 11	10 9 8 7 6	5 4 3 2 1 0		
		ALL BUFFER AND FLOODPLA	N CONDITION			
	Optimal	Suboptimal	Marginal	Poor		
/EGETATED BUFFER VIDTH	Width of buffer zone >50 feet; human activities (i.e., parking lots, roadbeds, clear-cuts, lawns, crops) have not impacted zone. Left Bank 10 9	Width of buffer zone 25-50 feet; human activities have impacted zone only minimally.	Width of buffer zone 10-25 feet; human activities have impacted zone a great deal.	Width of buffer zone <10 feet: little or no riparian vegetation due to human activities.		
	Left Bank 10 9 Right Bank 10 9	8 7 6 8 7 6	5 4 3	2 1 0		
LOODPLAIN	Predominant floodplain vegetation type		5 4 3	2 1 0		
EGETATION	is mature forest	Predominant floodplain vegetation type is young forest	Predominant floodplain vegetation type is shrub or old field	Predominant floodplain vegetation type is turf or crop land		
		[3] 14 13 12 11	10 9 8 7 6	5 4 3 2 1 0		
LOODPLAIN ABITAT	Even mix of wetland and non-wetland habitats, evidence of standing/ponded water 20 19 18 17 16	Even mix of wetland and non-wetland habitats, no evidence of standing/ponded water	Either all wetland or all non- wetland habitat, evidence of standing/ponded water	Either all wetland or all non- wetland habitat, no evidence of standing/ponded water		
		15 14 13 12 11	10 9 8 7 6	5 4 3 2 1 0		
NCROACH-	material, land development, or	form of fill material, land development, or manmade structures, but not effecting floodolain function	Moderate floodplain encroachment in the form of filling, land development, or manmade structures, some effect on floodplain function	Significant floodplain encroachment (i.e. fill material, land development, or man-made structures). Significant effect on floodplain function		
	20 19 18 17 16	15 14 12 12 631		100dplain function		
	20 19 18 17 16	15 14 13 12 (11)	10 9 8 7 6	5 4 3 2 1 0		

Trash and Debris



WATERSHED/SUB	SHED: BB.E		DATE: 12 / 03	<u>/ 09</u>	ASSESSED BY: UM+BG			
SURVEY REACH	ம்: ஒ	TIME: 9 : 10 (M)/PM	Рното ID: (Са	mera-Pic#) PCG50 1	o /# 0 8			
SITE ID: (Condition	1-#) TR-Set LAT	41°50 1 18 "Long	372° 40 ' 52	<u> </u>	GPS: (Unit 1D)			
TYPE: Industrial Commercial Residential	= =	onstruction	SOURCE: Unknown Flooding Illegal dump Local outfall	LOCATION: Stream Riparian Area Lt bank Rt bank	a LAND OWNERSHIP: □ Public Unknown □ Private AMOUNT (# Pickup truck loads):			
POTENTIAL REST	TORATION CANDIDATE	☑ Stream cleanup ☐ Stream ☐ Other:	um adoption segment	Removal/pre	evention of dumping			
If yes for trash or debris removal	EQUIPMENT NEEDED: Heavy equipment Trash bags Unknown DUMPSTER WITHIN 100 FT:							
aeoris removai	WHO CAN DO IT: Volunteers Local Gov Hazmat Team Other Yes No Unknown							
CLEAN-UP POTENTIAL: (Circle #)	A small amount of trash (i.e., than two pickup truck loads) loo inside a park with easy access	less with easy access. Trash n a long period of time but few days, possibly with a s	nay have been dumped or it could be cleaned up in	ver area, where acc	of trash or debris scattered over a large sess is very difficult. Or presence of drums hazardous materials			
()	5	<u>(4)</u>	3	2	1			
NOTES: very	old CAR - Rela	thely what, wa	y Reavire	wellinery	be ferrand			
·				REPORTED	TO AUTHORITIES TYES NO			



SURVEY REACH!	D: <u>BBE 04</u> w	TRSHD/SUBSHD:	35AMAN	BROOK E.	DATE: 12/3	109	ASSESSED BY:	-M
START TIM	e: <u>& 30</u> am/p >8 " Long		END	TIME?	AM/PM " LONG	ァ LMI	K:	GPS ID:
DESCRIPTION: COL		· — — — — — — — — — — — — — — — — — — —	_		FWENCE W/	BBE -	03 CNSTEN	
RAIN IN LAST 24 HO	OURS Heavy rain		Prese	NT CONDITIONS	☐ Heavy rain ☐ Trace	☐ Stead	ly rain □ Inter reast □ Part	mittent ly cloudy
SURROUNDING LAN	D USE: ☐ Industri ☐ Golf co	al ☐ Commerc ourse ☑ Park ?	cial □ Urb □ Cro		☑ Suburban/Res ☐ Pasture	☑ Fores ☐ Othe		tutional
Average	CONDITIONS (ch	eck applicable)		R occommon bill bill 195	SKETCH AND SI	iticteterrommerrin.	mbadadadamining	
Base Flow as % Channel Width	□ 0-25% □25-50 %	□ 50%-75% □ 75-100%	, ,	thin the survey red	of survey reach. Tra och (OT, ER, IB,SC, deemed appropriate	UT, TR, M	II) as well as any	
DOMINANT SUBSTR ✓ Silt/clay (fine or ☐ Sand (gritty) ☐ Gravel (0.1-2.5	slick) 🗆 (Cobble (2.5 –10") Boulder (>10") Bed rock						
WATER CLARITY ☐ Stained (clear, n ☐ Other (chemicals,	aturally colored) 🛭)					
AQUATIC PLANTS IN STREAM	Attached: no	ne some le ne some lo	Ε		\ P\			
WILDLIFE IN OR AROUND STREAM	(Evidence of) ☐ Fish ☐ Bea ☐ Snails ☑ Oth	iver Deer er: RED-THUED 4	IAWK-		BIREO		•	
STREAM SHADING (water surface)	☐ Partially shade				\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\		a.s.	
CHANNEL DYNAMICS	Downcutting Widening Headcutting Aggrading	Bed scour Bank failt Bank scot	ıre ır		JA S		5	(NOT SEE
Unknown	Sed. depositi	I = 1	ed E	ECENTRA	CLEANED)	1	<i>3</i>)	
CHANNEL DIMENSIONS	Height: 17 bank	·	(ft) (ft)	STYPA CALL		H	FLOO	pers
(FACING DOWNSTREAM)	Width: Bottom		(ft) (ft)	TRADITION FA	PIPE PASINI			
	REACH ACCESSIBIT	Difficult. Must cross	ZZ		1	/ /		
Good: Open area in public ownership, sufficient room to stockpile materials,	developed area adjacent to stream. Access requires tree removal or impact to	wetland, steep slope sensitive areas to ge stream. Few areas	e, or et to		一步	\ ~ 6	APE	•
easy stream channel access for heavy equipment using existing roads or trails.	landscaped areas. Stockpile areas small or distant from stream.	and/or located a gre distance from strear	n.		OPE	N FEE	cid, Mon	W
	4) 3 FRAM	2 PINEA LA	UE					
NOTES: (biggest pro	blem you see in surve	Pyreach) IN CARIN- PHON BUNY ANY SED ASIVE PLANT	+ PIPE	ed trubu	THLY B	BANK	NOF	
	W#A	AM CLN	i Maclifi	-1501	1N 12/3	nten to :	urnopiries F	IVES INA
) Wil	ACIVE OLAN	S (PA	Chy SAvola	A, OLRAS	mil	A ROSA	KATINK!
	(100	to),	V	7 , , ,	<i>/</i>	r	,	

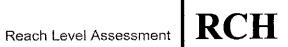
	Optimal	Suboptimal	Marginal	Poor
IN-STREAM HABITAT (May modify criteria based on appropriate habitat regime)	Greater than 70% of substrate favorable for epifaunal colonization and fish cover; mix of snags, submerged logs, undercut banks, cobble or other stable habitat and at stage to allow full colonization potential (i.e., logs/snags that are not new fall and not transient).	40-70% mix of stable habitat; well- suited for full colonization potential; adequate habitat for maintenance of populations; presence of additional substrate in the form of newfall, but not yet prepared for colonization (may rate at high end of scale).	20-40% mix of stable habitat; habitat availability less than desirable; substrate frequently disturbed or removed.	Less than 20% stable habitat; lact of habitat is obvious; substrate unstable or lacking.
indian regime)	20 19 18 17 16	15 (14) 13 12 11	10 9 8 7 6	5 4 3 2 1 0
VEGETATIVE PROTECTION (score each bank, determine sides by facing downstream)	More than 90% of the streambank surfaces and immediate riparian zone covered by native vegetation, including trees, understory shrubs, or nonwoody macrophytes; vegetative disruption through grazing or mowing minimal or not evident; almost all plants allowed to grow naturally.	70-90% of the streambank surfaces covered by native vegetation, but one class of plants is not well-represented; disruption evident but not affecting full plant growth potential to any great extent; more than one-half of the potential plant stubble height remaining.	50-70% of the streambank surfaces covered by vegetation; disruption obvious; patches of bare soil or closely cropped vegetation common; less than one-half of the potential plant stubble height remaining.	Less than 50% of the streambank surfaces covered by vegetation; disruption of streambank vegetation is very high; vegetation has been removed to 5 centimeters or less in average stubble height.
	Left Bank 10 (5)	8 7 6	5 4 3	2 1 0
	Right Bank 10 9	(8) 7 6	5 4 3	2 1 0
BANK EROSION (facing downstream)	Banks stable; evidence of erosion or bank failure absent or minimal; little potential for future problems. <5% of bank affected.	Grade and width stable; isolated areas of bank failure/erosion; likely caused by a pipe outfall, local scour, impaired riparian vegetation or adjacent use.	Past downcutting evident, active stream widening, banks actively eroding at a moderate rate; no threat to property or infrastructure	Active downcutting; tall banks on both sides of the stream eroding a fast rate; erosion contributing significant amount of sediment to stream; obvious threat to property or infrastructure.
	Left Bank 10 9 WA	8 7 6	5 4 3	2 1 0
	Right Bank 10 9	8 7 6	5 4 3	2 1 0
FLOODPLAIN CONNECTION	High flows (greater than bankfull) able to enter floodplain. Stream not deeply entrenched.	High flows (greater than bankfull) able to enter floodplain. Stream not deeply entrenched.	High flows (greater than bankfull) not able to enter floodplain. Stream deeply entrenched.	High flows (greater than bankfull) not able to enter floodplain. Stream deeply entrenched.
SUCCESSI ARKITANANI, ARKITYSSÄÄS	20 (19) 18 17 16	15 14 13 12 11	10 9 8 7 6	5 4 3 2 1 0
	Oyer	ALL BUFFER AND FLOODPLAI	N CONDITION	
	Optimal	Suboptimal	Marginal	Poor
Vegetated Buffer Width	Width of buffer zone >50 feet; human activities (i.e., parking lots, roadbeds, clear-cuts, lawns, crops) have not impacted zone.	Width of buffer zone 25-50 feet; human activities have impacted zone only minimally.	Width of buffer zone 10-25 feet; human activities have impacted zone a great deal.	Width of buffer zone <10 feet: little or no riparian vegetation due to human activities.
	Left Bank (10 9)	8 7 6	5 4 3	2 1 0
	Right Bank 10 9	8 7 6	5 4 3	2 1 0
FLOODPLAIN VEGETATION	Predominant floodplain vegetation type is mature forest	Predominant floodplain vegetation type is young forest	Predominant floodplain vegetation type is shrub or old field with 50 ME FATES	Predominant floodplain vegetation type is turf or crop land
	20 19 18 17 16	15 14 13 12 11	10) 9 8 7 6	5 4 3 2 1 0
FLOODPLAIN HABITAT	Even mix of wetland and non-wetland habitats, evidence of standing/ponded water	Even mix of wetland and non-wetland habitats, no evidence of standing/ponded water	Either all wetland or all non- wetland habitat, evidence of standing/ponded water	Either all wetland or all non- wetland habitat, no evidence of standing/ponded water
	20 19 18 17 16	15 14 13 12 11	10 9 8 7 6	5 4 3 2 1 0
FLOODPLAIN Encroach- ment	No evidence of floodplain encroachment in the form of fill material, land development, or manmade structures	Minor floodplain encroachment in the form of fill material, land development, or manmade structures, but not effecting floodplain function	Moderate floodplain encroachment in the form of filling, land development, or manmade structures, some effect on floodplain function	Significant floodplain encroachment (i.e. fill material, land development, or man-made structures). Significant effect on floodplain function
	20 19 18 (17) 16	15 14 13 12 11	10 9 8 7 6	5 4 3 2 1 0

WATERSHED/SUBSHED: BEE						<u> 103 /09</u>	Asse	SSED BY:	cm + 186
SURVEY REACH ID: OH TIME: 8: 45 AD/PM						: (Camera-Pic	:#) fcoz	00 /#	
SITE ID: (Con		41 ° 50 ' 0°	<u>1_" Long 1</u>	<u>} ° </u>	43 1	09 " LI	мк	GPS	(Unit ID)
	wintenbury Ave.								
TYPE: KRO	ad Crossing Railroad Crossi		<u> </u>			Geological Forr		Other:	
	SHAPE:	#BARRELS:	MATERIAL:			NMENT:			riable, sketch)
	☐ Arch ☐ Bottomless ☐ Box ☐ Elliptical	Single Double	Concrete Metal		_	w-aligned t flow-aligned	Barrel dia		<u></u> (ft)
FOR ROAD/	☑ Circular	Triple	Other:			not know		Height: _	(ft)
RAILROAD	Other:	Other:				not know	Culver le		(ft)
CROSSINGS ONLY	CONDITION: (Evidence of)					ERT SLOPE:	Culvert le	width:	(ft)
0.,22	Cracking/chipping/corrosion				☐ Fla	ght (2° – 5°)		widii	(II)
	☐ Sediment deposition☐ Other (describe):	☐ Failing emb	ankment			vious (>5°)	Roadway	elevation:	(ft)
<u> </u>	☐ Ouler (describe).					, ,	- Itoua way		(11)
POTENTIAL I	RESTORATION CANDIDATE	Fish barrier re	moval 🔲 Culv	ert re	pair/rej	olacement 🔲 l	Jpstream st	orage retro	fit
🛛 no	•	Local stream	repair 🔲 Oth	er:					
Is SC ACTING	G AS GRADE CONTROL	□No □Y	es 🔲 Unk	nown					
	EXTENT OF PHYSICAL BLO	CKAGE:			BLO	CKAGE SEVER	UTY: (circ	le #)	
· F	☐ Total ☐ Partial ☐ Temporary ☐ Unknow	ım	A structure such	as a da	ım or	A total fish blocka	ge on a	A temporary	barrier such as a
If yes for		road culvert on a 3rd order or greater stream blocking the					beaver dam or a blockage at the very head of a stream with		
fish barrier	CAUSE:	<i>(</i> : \	upstream movement of			or partial blockage	e that may	very little via	ıble fish habitat
	☐ Drop too high Water Drop too shallow Water Drop too shallow Water Drop too shallow Water Drop too high		anadromous fish; passage device p			interfere with the anadromous fish.		above it; nat as waterfalls	tural barriers such s.
	Other:	(m)	5			1 3		2	1
NOTES/SKET	CH:					†	· · · · · · · · · · · · · · · · · · ·	<u> </u>	•
			÷						
									-
	•								
									[
					,				
						•			
	•								
					÷				
7						Repor	FED TO AUT	THORITIES	□ Yes □ No

Storm Water Outfalls

\mathbf{O}	٦
UI	_

WATERSHED/SUBSHED: BE			DATE: 12/03/09 ASSESSED BY: CM +B6						
SURVEY REACH ID:				#) PC0300 # C	Y				
SITE ID (Condition-#): O	T- La	т <u>41°56 ' 1 "</u> L	ong 72 · 43 · 07 "	LMK	GPS: (Unit ID)				
	GROWN CONTRACTOR OF THE CONTRA								
BANK: LT RT Head FLOW:	TYPE:	MATERIAL: ☐ Concrete ☐ Metal ☐ PVC/Plastic ☐ Brick	SHAPE: Single Circular Double Elliptical Triple	Dimensions: Diameter: (in)	SUBMERGED: ☑ No ☐ Partially				
None Trickle	pipe	Other:	Other:		☐ Fully				
Moderate Substantial Other:	Open channel	Concrete Earthen Other:	Parabolic W	epth: (in) idth (Top): (in) (Bottom): (in)	NOT APPASCABLE				
CONDITION: ☐ None ☐ Chip/Cracked	ODOR: NO Gas Sewage Rancid/Sour	DEPOSITS/STAINS: None □Oily □ Flow Line	VEGGIE DENSITY: None Normal Inhibited	PIPE BENTHIC GRO Brown Oran Other:	ge 🗌 Green				
☐ Peeling Paint ☐ Corrosion ☐ Other:	Sulfide Other:	Paint Other:	Excessive Other:	POOL QUALITY: [Good Godors Suds Algae Gother:	□Colors □Oils				
FLOWING TURBID ONLY FLOATA OTHER	FOR COLOR: Glear Brown Grey Yellow Green Orange Red Other: FLOWING TURBIDITY: None Slight Cloudiness Cloudy Opaque ONLY FLOATABLES: None Sewage (toilet paper, etc.) Petroleum (oil sheen) OTHER Excess Trash (paper/plastic bags) Dumping (bulk) Excessive Sedimentation								
POTENTIAL RESTORA	rion Candidati	E Discharge investigati	on Stream daylighting	Local stream repair/	outfall stabilization				
[X] no		☐ Storm water retrofit	Other:		·				
If yes for daylighting:				a.	0				
Length of vegetative cove	er from outfall:	ft Type of exi	sting vegetation:	Slope:					
If yes for stormwater: Is stormwater currently co ☐ Yes ☐ No ☐ Not		Land Use d Area availal	•						
SEVERITY: stro	npared to the amount of am; discharge appears officant impact downstre	of discharge is significant discharge from al flow in receiving to be having a sam.	all discharge; flow mostly clear and odorless. If the harge has a color and/or odor, the amount of harge is very small compared to the stream's base and any impact appears to be minor / localized. Outfall does not have d discharge; staining; or a of causing any erosion						
	5	4	3	2	1				
SKETCH/NOTES: 7	ns under	durenmys. P	1 chysandra + pw	examples '	vene too				
	•	·			i				
				•					
	•	•							
			ı	REPORTED TO AUTHOR	ITIES: YES NO				
									



SURVEY REACH I	D: <u>ВВИ</u>-са W т	RSHD/SUBSHD: B らべ	AN BROOK WES	T DATE: <u>12</u> /_		SED BY:
START TIM	E:	LMK:	END TIME:	10: 15 AD/PM	LMK:	GPS ID:
LATH . 50 'E	98 " Long 7	2043 111 "	LAT41 . 50 '	<i>ã</i> ⊘_" Long	72 . 43 . 18	<u>'</u> "
		IM BBE-04	DESCRIPTION: (SEND BEH	HOY!	ies U
RAIN IN LAST 24 HO	urs Heavy rain		PRESENT CONDITIONS	-	in Steady rain	
☐ None	☐ Intermittent		Clear	☐ Trace	☐ Overcast	☐ Partly cloudy
SURROUNDING LAN	☐ Golf cour	se Park? BEen	□ Urban/Residential □ Crop	☐ Pasture	☐ Other:	Institutional ELEM. SCHOOL
ÄVERAGE	CONDITIONS (chec	ek applicable)	REACH	etata sterorberna harrina anna partigista.	STE IMPACT TR	***!}**!!
Base Flow as % Channel Width	□ 0-25% □25-50 %	□ 50%-75% № 75-100%	within the survey r	each (OT, ER, IB,S	Track locations and L C, UT, TR, MI) as we ate. Indicate direction	Ds for all site impacts ell as any additional n of flow
DOMINANT SUBSTR. Silt/clay (fine or Sand (gritty) Gravel (0.1-2.5	slick) □ Co □ Bo	obble (2.5 –10") oulder (>10") d rock			y.	
		Opaque (milky)				
AQUATIC PLANTS IN STREAM	Attached: Inone	e some lots				
WILDLIFE IN OR AROUND STREAM	(Evidence of) ☐ Fish ☐ Beave ☐ Snails ☐ Other					
STREAM SHADING (water surface)	☑ Mostly shaded ☐ Halfway (≥50% ☑ Partially shaded ☐ Unshaded (< 25	(≥25%) BELOW		, END		
CHANNEL	☐ Downcutting	☐ Bed scour				
DYNAMICS	Widening	Bank failure	_ /	,		
Unknown	Headcutting Aggrading Sed. deposition	Bank scour Slope failure Channelized	WOODED		•	
CHANGE	Height: L7 bank	4 (ft)	TRUB.	_ 4//		
CHANNEL DIMENSIONS	KT bank	(ft)	HOW	N H	A	
(FACING	Width: Bottom	(ft)	EVENEWARM EVENEWARM	ickbor /	P	
DOWNSTREAM)	Top BA	ж <u>би</u>		//m \		
TO THE REPORT OF THE	REACH ACCESSIBILE	THE RESERVE AND DESCRIPTION OF THE PROPERTY OF		//~	רו לעם	
Good: Open area in	Fair: Forested or	Difficult. Must cross		// [] LAV		
public ownership,	developed area adjacent to stream.	wetland, steep slope, or sensitive areas to get to		// PP	<u>ځې</u>	س ، ، ،
sufficient room to stockpile materials,	Access requires tree removal or impact to	stream. Few areas to stockpile available]		LAW	N6 CONDIT
easy stream channel	landscaped areas.	and/or located a great	/	Laurane	JOY DO	
access for heavy equipment using	Stockpile areas small or distant from	distance from stream. Specialized heavy	//	S	- H-110	
existing roads or trails.	stream.	equipment required.] //	<u> </u>	FIELD FIELD	/
		2 1		<u> </u>		BOTTOM END
NOTES: (biggest pro	blem you see in survey TWN LAWNS	reach) SUBUNBIA. DUMPING-L	OF YARD WA	ISTE, DAM	tuin 50A	POOL-TO STREAM
				REP	PORTED TO AUTHOR	RITIES YES NO

	Optimal	Suboptimal	Marginal	Poor
IN-STREAM HABITAT (May modify criteria based on appropriate habitat regime)	Greater than 70% of substrate favorable for epifaunal colonization and fish cover; mix of snags, submerged logs, undercut banks, cobble or other stable habitat and at stage to allow full colonization potential (i.e., logs/snags that are not new fall and not transient).	40-70% mix of stable habitat; well- suited for full colonization potential; adequate habitat for maintenance of populations; presence of additional substrate in the form of newfall, but not yet prepared for colonization (may rate at high end of scale).	20-40% mix of stable habitat; habitat availability less than desirable; substrate frequently disturbed or removed.	Less than 20% stable habitat; lack of habitat is obvious; substrate unstable or lacking.
	20 19 18 17 16	15 14 (13) 12 11	10 9 8 7 6	5 4 3 2 1 0
VEGETATIVE PROTECTION (score each bank, determine sides by facing downstream)	More than 90% of the streambank surfaces and immediate riparian zone covered by native vegetation, including trees, understory shrubs, or nonwoody macrophytes; vegetative disruption through grazing or mowing minimal or not evident; almost all plants allowed to grow naturally.	70-90% of the streambank surfaces covered by native vegetation, but one class of plants is not well-represented; disruption evident but not affecting full plant growth potential to any great extent; more than one-half of the potential plant stubble height remaining.	50-70% of the streambank surfaces covered by vegetation; disruption obvious; patches of bare soil or closely cropped vegetation common; less than one-half of the potential plant stubble height remaining.	Less than 50% of the streambank surfaces covered by vegetation; disruption of streambank vegetation is very high; vegetation has been removed to 5 centimeters or less in average stubble height.
	Left Bank 10 9	8 7 6	(3) 4 3	2 1 0
	Right Bank 10 9	8 7 6	5 4 3	2 1 0
BANK EROSION (facing downstream)	Banks stable; evidence of erosion or bank failure absent or minimal; little potential for future problems. <5% of bank affected. SOME ANEAS NOT VISIBLE	Grade and width stable; isolated areas of bank failure/erosion; likely caused by a pipe outfall, local scour, impaired riparian vegetation or adjacent use.	Past downcutting evident, active stream widening, banks actively eroding at a moderate rate; no threat to property or infrastructure	Active downcutting; tall banks on both sides of the stream eroding a fast rate; erosion contributing significant amount of sediment to stream; obvious threat to property or infrastructure.
	Left Bank 10	8 7 6	5 4 3	2 1 0
	Right Bank 10 9	8 7 6	5 -4 3	2 1 0
FLOODPLAIN CONNECTION	High flows (greater than bankfull) able to enter floodplain. Stream not deeply entrenched.	High flows (greater than bankfull) able to enter floodplain. Stream not deeply entrenched.	High flows (greater than bankfull) not able to enter floodplain. Stream deeply entrenched.	High flows (greater than bankfull) not able to enter floodplain. Stream deeply entrenched.
		ALL BUFFER AND FLOODPLAI	n Condition	
	Optimal	Suboptimal	Marginal	Poor
VEGETATED BUFFER WIDTH	Width of buffer zone >50 feet; human activities (i.e., parking lots, roadbeds, clear-cuts, lawns, crops) have not impacted zone.	Width of buffer zone 25-50 feet; human activities have impacted zone only minimally.	Width of buffer zone 10-25 feet; human activities have impacted zone a great deal.	Width of buffer zone <10 feet: little or no riparian vegetation due to human activities.
	Left Bank 10 9	8 7 6	5 4 (3)	2 1 0
	Right Bank 10 9	8 7 6	5 4 3	2 1 0
FLOODPLAIN VEGETATION	Predominant floodplain vegetation type is mature forest	Predominant floodplain vegetation type is young forest	Predominant floodplain vegetation type is shrub or old field	Predominant floodplain vegetation type is turf or crop land Some Snrway AM
	20 19 18 17 16	15 14 13 12 11	10 9 8 7 6	(5) 4 3 2 1 0
FLOODPLAIN HABITAT	Even mix of wetland and non-wetland habitats, evidence of standing/ponded water	Even mix of wetland and non-wetland habitats, no evidence of standing/ponded water	Either all wetland or all non- wetland habitat, evidence of standing/ponded water	Either all wetland or all non- wetland habitat, no evidence of standing/ponded water
	20 19 18 17 16	15 14 (13) 12 11	10 9 8 7 6	5 4 3 2 1 0
FLOODPLAIN Encroach-	No evidence of floodplain encroachment in the form of fill material, land development, or manmade structures	Minor floodplain encroachment in the form of fill material, land development, or manmade structures, but not effecting floodplain function	Moderate floodplain encroachment in the form of filling, land development, or manmade structures, some effect on floodplain function	Significant floodplain encroachment (i.e. fill material, land development, or man-made structures). Significant effect on floodplain function
MENT	mannado suddides	~	enection noodplain function	Hoodplain lunction

SITE IDS (contitions): SC Lat 41	_	WATERSHED	/SUBSHED: BBW	Date: <u>\2</u>				M+1	50		
TYPE: Road Crossing Manmaude Dam Beaver Dam Geological Formation Other:		SURVEY REA						6			
Type: Road Crossing Railroad Crossing Manmade Dam Beaver Dam Geological Formation Other: March Mar		SITE ID: (Con		<u>41 • 51 - 14</u>	<u>_" Long_7</u>	<u> </u>	LI	<u>ик</u>	GPS (Unit ID)	
SHAPE:			7					. –			\dashv
FOR ROAD Bot Bottomless Single Concrete Show-aligned Not flow-aligned Not		TYPE: 🔀 Roa	d Crossing Railroad Crossi	· · · · · · · · · · · · · · · · · · ·	T						_
FOR ROAD CROSSINGS Conditions of the continue Color				•		- ·					
FOR ROAD Circular City Cother: Do not know City Cit							-			-	1
CONDITION: (Evidence of) ONLY CROSSINGS ONLY CROCKING/chipping/corrosion Calivert slope: (fi) Criticating/chipping/corrosion Downstream scour hole Flat Slight (2° – 5°) Roadway elevation: (fi) Clivert slope: (fi) Cliver		FOR ROAD/	☑ Circular	Triple			- 1		Torgin		,
Constitute Constitute Created profession Downstream scour hole Sediment deposition Failing embankment Slight (2° -5°) Roadway elevation:				Other:				Culvert ler	ngth:	((ft)
Cacking/chipping/corrosson Downstream scour fulle Sediment deposition Failing embankment Sediment deposition Failing embankment Sediment deposition Roadway elevation: (ft)									· =	(ft)
Obvious (>3") Roadway clevation:				_			_				
POTENTIAL RESTORATION CANDIDATE Fish barrier removal Culvert repair/replacement Upstream storage retrofit S of Catting as Grade Control No Yes Unknown EXTENT OF PHYSICAL BLOCKAGE Fotal Partial Temporary Unknown A structure such as a demo or goal culvert on a 3d order or partial blockage that may be a supervise with the migration of an admonus fish. To fish barrier CAUSE: Depot too high Water Drop: (in) Plow too shallow Water Depth; (in) Passage device present. S			· •	ranning cano	ankinent	□ОЬ	vious (>5°)	Roadway e	elevation:		<u>(ft)</u>
IS SC ACTING AS GRADE CONTROL No Yes Unknown If yes for fish barrier									~		\blacksquare
Is SC ACTING AS GRADE CONTROL No Yes Unknown EXTENT OF PHYSICAL BLOCKAGE: Total Partial Temporary Unknown If yes for Jish barrier CAUSE: Drop too high Water Drop: (in) Plow too shallow Water Depth: (in) Other: 5 4 3 2 1 NOTES/SKETCH: Rig -RAP on Lysheem Lysheem		POTENTIAL I	RESTORATION CANDIDATE	☐ Fish barrier re	emoval 🔲 Culv	ert repair/rep	olacement 🔲 🕻	Jpstream sto	orage retrof	it	
EXTENT OF PHYSICAL BLOCKAGE: BLOCKAGE SEVERITY: (circle #) Total Partial A structure such as a dam or road culvert on a 3rd order or greater steam blocking the unstream movement of Drop too high Water Drop:		⊠.no		Local stream	repair Othe	er:					
Total Partial Total Partial Temporary Unknown A structure such as a dam or road outwert on a 3rd order or greater stream blocking the upstream movement of anadromous fish; no fish project on high Water Drop:		Is SC ACTING	G AS GRADE CONTROL	□ No □ Y	es 🔲 Unki						
Temporary Unknown A structure such as a dard advertine as 3rd order or greater stream blocking the significant reach of stream, who was shallow Water Depth: (in) Other: Stream Notes/Sketch: Prop too high Water Depth: (in) Other: Stream Notes/Sketch: Prop too high Water Depth: (in) Other: Stream Notes/Sketch: Prop too high Water Depth: (in) Other: Stream Notes/Sketch: Prop too high Water Depth: (in) Other: Stream Notes/Sketch: Prop -Rap on Westleton Prop -Rap on Westleton Prop -Rap on Westleton Prop -Rap on P				CKAGE:		BLO	CKAGE SEVEI	RITY: (circl	e #)		\dashv
If yes for fish barrier CAUSE: Drop too high Water Drop:			_ =	wn	n I						
Jish barrier		If yes for	es for					t reach of stream, blockage that may with the migration of the wigner of the wery head of a streat very little viable fish hab above it; natural barriers		d of a stream v	with
Flow too shallow Water Depth: (in) passage device present. anadromous fish. as waterfalls.											
Notes/Sketch: Rip-Rap on tupsthethm sides of culvert atomy both banks bor ~30' Head walls causists 16 Rip-Ray.				-	1		•		as waterfalls.		Ī
			Culturary		5		1 3	I.	2	1	
		NOTES/SKET	CH: 4:0 -444 -00 +	JOUNSTHEPAN	THE AC	- Joseph	Alona	both 1	24uks		
			A- 1301	l	المراجعة المراجعة	L dia-	ل مده	9 2 (12)	S v		ļ
			100 - 30, f	rena worms s	-engists of	G P	walk .				
										٠	
					•						
			•								
			•								1
REPORTED TO AUTHORITIES TYPES IN NO	I	1	•				Repor	RTED TO AU	THORITIES	☐ Yes ☐	No

K

WATERSHED/SUBSHED:	BBW				D	ATE: \\	103/09	Ass	ESSED BY: WA
SURVEY REACH:	69		TIME:	: 55 M	PM P	ното II	: (Camera-Pic		300/# 12
SITE ID: (Condition-#)	START L	ΛT °	<u> </u>	LONG	0 1	11	LMK	/ 1 3	GPS: (Unit ID)
в. А		AT °			5 •	11	LMK	_	1
######################################									l
IMPACTED BANK:	REASON IN	ADEQUATE:	Lack of	-	Too na	arrow 🔲	Widespread inv	asive p	plants
LAND USE:	Private	Institutional	Golf Cou	rse Park		Public			
(Facing downstream) LT Bar] [3√2	□:			
RT Bar					<u> </u>				
DOMINANT LAND COVERS LEEP.	Paved	Bare ground		•	_	rub/scrut	_	Other	
LAND COVER: LT Ba RT Ba								□: □:	
Invasive Plants:			•			<u> </u>	<u> </u>		
	None	Rare		artial covera			· · · · · · · · · · · · · · · · · · ·	Z unk	•
STREAM SHADE PROVID	DED? No	ne 🗖 Pari	ial (50%) □	Full V	VETLAN	DS PRESE	ENT? No	□ Y	es Unknown
POTENTIAL RESTORATI	ON CANDIDA	_		ion Green	way desi	gn 🗌 N	atural regenerati	on 🗌	Invasives removal
no		Othe	er:						
RESTORABLE AREA		1_		Impacted area			pacted area on eithe		Impacted area on private
Length (ft): $\frac{\sqrt{50'}}{}$	K RT	REFOREST		where the ripa not appear to			blic or private land the esently used for a spe		land where road; building encroachment or other
Length (ft): 301	750	POTENTIAL (Circle #)	L.	specific purpo	se; plenty o	of pu	rpose; available area		feature significantly limits available area for planting
Width (ft):		(4)		area available	ioi pianung	4 Pla	nting adequate		
Dominion 600 100 100 100 100 100 100 100 100 100						•	3	2	•
POTENTIAL CONFLICTS Poor/unsafe access to si				despread inv vere animal i		nts ∐∃ leer. beava	Potential contam er) Dother:	ination	Lack of sun
						,	•., <u> </u>		
NOTES: un know	n 4mo	r use.	- barr	- ``					
					` .				
	•								
•									

ΙB

WATERSHED/SUBSHED: BOW			DATE: 103 / 09	1 ASSESSED BY: CM+B(
SURVEY REACH:	TIME:	<u>; ∞ </u>	Рното ID: (Camera-l	
SITE ID: (Condition-#) START L.	at <u>41 °50 ' 13 "</u> 1	Long 72 ° 43		GPS: (Unit ID)
00/10/100000000000000000000000000000000		LONG°	''' LMK	
<u></u>				
IMPACTED BANK: REASON IN. □ LT □ RT □ Both			o narrow 🗌 Widespread i er: See Gelow	nvasive plants
	Institutional Golf Cou		ther Public	
(Facing downstream) LT Bank			□:	
RT Bank		<u> </u>	:	
DOMINANT Paved	Bare ground Turf/lav		Shrub/scrub Trees	Other
LAND COVER: LT Bank				□: □:
INVASIVE PLANTS: None		Partial coverage	Extensive coverage	
STREAM SHADE PROVIDED? Non			ANDS PRESENT? ☐ No	☐ Yes ☐ Unknown
STREAM SHADE I ROVIDED: [] WOL	L MI attiai L	Jiun WEIL	WINDS I KESENI (T I/O	☐ 168 ☐ UNKROWN
POTENTIAL RESTORATION CANDIDA	TE Active reforestat	ion Greenway d	lesign Natural regener	ration Invasives removal
no	1 Other: Publ	ic course	ia	
RESTORABLE AREA		Impacted area on pul		1 '
LT BANK RT	REFORESTATION	where the riparian are not appear to be used		, ,
Length (ft): \(\frac{\sim 30'}{}{}	POTENTIAL: (Circle #)	specific purpose; pler area available for pla	nty of purpose; available a	
Width (ft):	(5	4 6	2 1
POTENTIAL CONFLICTS WITH REFOR	ESTATION DW	idespread invasive		amination
Poor/unsafe access to site Existing	g impervious cover 🔲 Se	vere animal impact	s (deer, beaver) Other	r:
NOTES: YARD WASTE piled	up an Right	BANK +	home owner :	s drawy their
and disentil intr	head.			
par concerny min	WALLET !			
	•			•
			٠	
·			,	
				9
·		•		

Storm Water Outfalls

\mathbf{O}	\mathbf{T}
U	1

WATERSHED/SUBSHED: 68V	DATE: 12/03 / 09	ASSESSED BY:	cm+66						
SURVEY REACH ID:	TIME: 10 : 00 (M/PM	Рното ID: (Camera-Pic	#) PC0500 /#	18					
SITE ID (Condition-#): OT-	LAT41 °S0 1 16 "LO	ONG 72°43 '19 "	LMK	GPS: (Unit ID)					
BANK: TYPE: LT RT Head FLOW: Trickle	MATERIAL: ☐ Concrete ☑ Metal ☐ PVC/Plastic ☐ Brick ☐ Other:	SHAPE: Single Circular Double Elliptical Triple Other:	DIMENSIONS: Diameter: (in	SUBMERGED: No Partially Fully					
☐ Moderate ☐ Substantial ☐ Other: ☐ Channel	☐ Concrete ☐ Earthen ☐ Other:	Parabolic Wi	pth:(in) dth (Top):(in) (Bottom):(in)						
CONDITION: None Gas Chip/Cracked Peeling Paint Corrosion Other: Other: Odor:	□ None □ Oily	VEGGIE DENSITY: None Normal Inhibited Excessive Other:	PIPE BENTHIC GR Brown Oral Other: POOL QUALITY: Good Odors Suds Algae Other:	nge					
FLOWING TURBIDITY:	None Slight Cloudiness None Sewage (toilet paper, pr/plastic bags) Dumping	□ Cloudy □ Opaque etc.) □ Petroleum (d g (bulk) □ Excessive S	Orange Red oil sheen)						
POTENTIAL RESTORATION CANDIDATE Discharge investigation Stream daylighting Local stream repair/outfall stabilization									
If yes for stormwater: Is stormwater currently controlled? ☐ Yes ☐ No ☐ Not investigated	Land Use de Area availab	•		_					
SEVERITY: strong smell. The amo	unt of normal flow in receiving dischar dischar bears to be having a	discharge; flow mostly clear and odd ge has a color and/or odor, the amo ge is very small compared to the stu d any impact appears to be minor /	ount of discharge	es not have dry weather ; staining; or appearance g any erosion problems.					
SKETCH/NOTES: STORMWATER There is Also An in	tenutent stream/	ARKING FOT (elected streets small	mentary sol	bool). Sheam on re					
		R	EPORTED TO AUTHOR	RITIES: YES NO					

Reach Level Assessment



SURVEY REACHID: 1 WTRSHD/SUBSHD: WS	DATE: 12/1/07 ASSESSED BY:
START TIME: 1:30 AM/M LMK: END TIME:	3_: <u>∞</u> AM/M LMK: GPS ID:
LAT 41°50 '37" LONG 72°44 '33" LAT41°51	106" LONG 72 0 44 127" (CM)
DESCRIPTION: Conversence with WGS-5 DESCRIPTION: CO	Ahone with WEN-7/WEN-6
(Beick condos Along Left Bank)	V V V V V V V V V V V V V V V V V V V
RAIN IN LAST 24 HOURS Heavy rain Steady rain PRESENT CONDITION	•
□ Nonc □ Intermittent □ Trace □ Clear	☐ Trace
SURROUNDING LAND USE:	1
_	H SKETCH AND SITE IMPACT TRACKING
THE PROPERTY OF THE PROPERTY O	ch of survey reach. Track locations and IDs for all site impacts
CHANNEL WIDTH 125-50 % PS-75-100% within the survey	reach (OT, ER, IB,SC, UT, TR, MI) as well as any additional es deemed appropriate. Indicate direction of flow
DOMINANT SUBSTRATE ☐ Silt/clay (fine or slick) ☐ Cobble (2.5 –10") ☐ Sand (gritty) ☐ Boulder (>10") ☐ Gravel (0.1-2.5") ☐ Bed rock	SWAMP FIN
WATER CLARITY Clear □Turbid (suspended matter) □ Stained (clear, naturally colored) □ Opaque (milky) □ Other (chemicals, dyes)	
AQUATIC PLANTS Attached: ☐ none some ☐ lots IN STREAM Floating: none ☐ some ☐ lots	/(
WILDLIFE IN OR AROUND STREAM (Evidence of) NALLWIAS, LT WAND Beaver Beaver Deer Snails Dother: MUSCOS, LAY COON	Swarnb
Mostly shaded (≥75% coverage) STREAM SHADING □ Halfway (≥50%) (water surface) □ Partially shaded (≥25%) □ Unshaded (<25%) □ Unshaded (<25%)	annox bank exosion
CHANNEL Downcutting Bed scour DYNAMICS Widening Bank failure	who will all rest of
Unknown	Doedhy De
CHANNEL Height: LT bank 3 (ft)	- RIP-RAP RITTLE
DIMENSIONS (FACING Width: Bottom IS' (ft)	T
DOWNSTREAM) Width: Hottom 15 (ft) Spec (ft) Friume	-) Small selv
REACH ACCESSIBILITY A	1)
Fair: Forested or Difficult Must cross	(Salet
Good: Open area in public ownership, developed area adjacent to stream.	1
sufficient room to stockpile materials Access requires tree stream. Few areas to	A condos
easy stream channel landscaped areas and/or located a great	A condos start
access for neavy Stockpile areas distance from stream.	START
existing roads or trails. small or distant from stream. Specialized heavy equipment required.	E
5 4 3 2 1	k
NOTES: (biggest problem you see in survey reach) MINOR WANTE IMPA	ds due to residential laurs
	REPORTED TO AUTHORITIES YES NO

	Optimal	Suboptimal	Marginal	Poor		
IN-STREAM HABITAT (May modify criteria based on appropriate habitat regime)	Greater than 70% of substrate favorable for epifaunal colonization and fish cover, mix of snags, submerged logs, undercut banks, cobble or other stable habitat and at stage to allow full colonization potential (i.e., logs/snags that are not new fall and not transient).	40-70% mix of stable habitat; well- suited for full colonization potential; adequate habitat for maintenance of populations; presence of additional substrate in the form of newfall, but not yet prepared for colonization (may rate at high end of scale).	20-40% mix of stable habitat; habitat availability less than desirable; substrate frequently disturbed or removed.	Less than 20% stable habitat; lack of habitat is obvious; substrate unstable or lacking.		
	20 19 18 17 16	15 (4) 13 12 11	10 9 8 7 6	5 4 3 2 1 0		
VEGETATIVE PROTECTION (score each bank, determine sides by facing downstream)	surfaces and immediate riparian zone covered by native vegetation, including trees, understory shrubs, or nonwoody macrophytes; vegetative disruption through grazing or mowing minimal or not evident; almost all plants allowed to covered by native vegetation, but one class of plants is not well-represented; disruption evident but not affecting full plant growth potential to any great extent; more than one-half of the potential plant stubble height remaining.					
	Left Bank 10 9	③ 7 6	5 4 3	2 1 0		
	Right Bank 10 9	8 💋 6	5 4 3	2 1 0		
BANK EROSION (facing downstream)	Banks stable; evidence of erosion or bank failure absent or minimal; little potential for future problems. <5% of bank affected.	Grade and width stable; isolated areas of bank failure/erosion; likely caused by a pipe outfall, local scour, impaired riparian vegetation or adjacent use.	Past downcutting evident, active stream widening, banks actively eroding at a moderate rate; no threat to property or infrastructure	Active downcutting; tall banks on both sides of the stream eroding at a fast rate; erosion contributing significant amount of sediment to stream; obvious threat to property or infrastructure.		
	Left Bank 10 9	(3) 7 6	5 4 3	2 1 0		
	Right Bank 10 9	® 7 6	5 4 3	2 1 0		
FLOODPLAIN CONNECTION	High flows (greater than bankfull) able to enter floodplain. Stream not deeply entrenched.	High flows (greater than bankfull) able to enter floodplain. Stream not deeply entrenched.	High flows (greater than bankfull) not able to enter floodplain. Stream deeply entrenched.	High flows (greater than bankfull) not able to enter floodplain. Stream deeply entrenched.		
	20 19 18 17 16	(15) 14 13 12 11	10 9 8 7 6	5 4 3 2 1 0		
	OVER	ALL BUFFER AND FLOODPLAI	IN CONDITION			
200000000000000000000000000000000000000	Optimal	Suboptimal	Marginal	Poor		
VEGETATED Buffer Width	Width of buffer zone >50 feet; human activities (i.e., parking lots, roadbeds, clear-cuts, lawns, crops) have not impacted zone.	Width of buffer zone 25-50 feet; human activities have impacted zone only minimally.	Width of buffer zone 10-25 feet; human activities have impacted zone a great deal.	Width of buffer zone <10 feet: little or no riparian vegetation due to human activities.		
	Left Bank 10	8 7 6	5 4 3	2 1 0		
	Right Bank 10 9	3 7 6	5 4 3	2 1 0		
FLOODPLAIN VEGETATION	Predominant floodplain vegetation type is mature forest	Predominant floodplain vegetation type is young forest	Predominant floodplain vegetation type is shrub or old field	Predominant floodplain vegetation type is turf or crop land		
	20 19 18 17 (6)	15 14 13 12 11	10 9 8 7 6	5 4 3 2 1 0		
FLOODPLAIN HABITAT	Even mix of wetland and non-wetland habitats, evidence of standing/ponded water	Even mix of wetland and non-wetland habitats, no evidence of standing/ponded water	Either all wetland or all non- wetland habitat, evidence of standing/ponded water	Either all wetland or all non- wetland habitat, no evidence of standing/ponded water		
	20 19 (18) 17 16	15 14 13 12 11	10 9 8 7 6	5 4 3 2 1 0		
FLOODPLAIN	No evidence of floodplain encroachment in the form of fill material, land development, or	Minor floodplain encroachment in the form of fill material, land development, or manmade structures,	Moderate floodplain encroachment in the form of filling, land development, or manmade structures, some	Significant floodplain encroachment (i.e. fill material, land development, or man-made structures). Significant effect on		
ENCROACH- MENT	manmade structures	but not effecting floodplain function	effect on floodplain function	floodplain function 5 4 3 2 1 0		

WATERSHED	DISUBSHED: WYSS			DATE: 12	<u> / 0 </u>	ASSES	SED BY: UV	<u> 70 9</u>
SURVEY REA	ACH ID: O	TIME::_	АМ/РМ	Рното II): (Camera-Pi	c#) PCOIC	0 # 35	
SITE ID: (Cor	ndition-#) SCLAT	0 1	" Long_	0 !	" L	MK	GPS (Unit IE))
3,3,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0	porothy DR.							
TYPE: Ros	· · · · · · · · · · · · · · · · · · ·	ing	Dam Beav	er Dam 🔲	Geological For	mation 🔲 C	ther:	
FOR ROAD/ RAILROAD	SHAPE: Arch Bottomless Box Elliptical Circular Other:	#BARRELS: Single Double Triple Other:	MATERIAL: Concrete Metal Other:	ØKFlo □ No	NMENT: ow-aligned of flow-aligned onot know	Barrel diam	eight: $8'$	(ft) (ft)
CROSSINGS ONLY	CONDITION: (Evidence of) □Cracking/chipping/corrosio ☑ Sediment deposition □ Other (describe):	n Downstrean		☐ Fla	TERT SLOPE: at ght (2° – 5°) ovious (>5°)		ridth: evation:	(ft) (ft)
POTENTIAL I	RESTORATION CANDIDATE	☐ Fish barrier r		-	placement Meytra	•	•	
Is SC ACTING	G AS GRADE CONTROL	□ No □ Y						
	EXTENT OF PHYSICAL BLO	OCKAGE:		BLC	CKAGE SEVE	RITY: (circle	#)	
If yes for fish barrier	Total Partial Unkno		A structure such road culvert on a greater stream bl upstream moven anadromous fish	3rd order or ocking the ent of	A total fish block: tributary that wou significant reach or partial blockag interfere with the	uld isolate a li of stream, t ge that may	A temporary barrier s beaver dam or a bloc he very head of a str very little viable fish h above it; natural barri	kage at eam with abitat
	☐ Flow too shallow Water D☐ Other:		passage device p	present.	anadromous fish 4 3	. 2	s waterfalls.	
NOTES/SKET	CH: ONLY I los	, (RR)	's labor	/a_0	ے ملادر	and carro	ـد ـــــــــــــــــــــــــــــــــــ	
·	chi only 1 ba	Y	12 0000	Heat V	0,700 5.	KCCIA (CT)	MT = T.	
	other bary	is suffic	rient f	òn Re	ch PAS	store.		
	other bay Maybe iv	ivestigate	where	_ Sed	linent	deposi	tion Be	2W1
	•							
						•		
								-
								,
								į
	•							ļ
							•	
					REPOR	TED TO AUTH	ORITIES TYES	□No

IB

WATERSHED/SUBSHED: WBS			DATE:	12/01/09	ASSE	SSED BY: CM+10
SURVEY REACH: O\	TIME: 1	: 45 AM/®	Рното	ID: (Camera-Pic	#)#(_0	100 # 30
SITE ID: (Condition #) START I		Long <u>72 ° 44</u>		LMK		GPS: (Unit ID)
B END LA		LONG°		LMK		, ,
	<u> </u>	LONG		LNIK	_	
IMPACTED BANK: REASON IN	ADEQUATE: Lack of	Europatotion D.To		□ Widomaad inve		·····ta
LT RT Both	☐ Recentl	-		☐ widespread inva	isive pia	ints
	Institutional Golf Cou		ther Public			
(Facing downstream) LT Bank			<u> </u>			
RT Bank			<u> : </u>			
DOMINANT Paved	Bare ground Turf/la	_ <u>~</u>			Other	
LAND COVER: LT Bank				Z ·	∐։	
RT Bank	, 🗆 🕟	ع 🗀	<u>Ц</u>	K	<u> </u>	
INVASIVE PLANTS: None		Partial coverage			unkne	own
STREAM SHADE PROVIDED? Non	e 🖾 Partial 🗌	Full WETL	ANDS PRE	ESENT? 🗌 No	☐ Yes	Unknown
POTENTIAL RESTORATION CANDIDA	TE Active reforestat	ion Greenway o	lesign 🔀	Natural regeneration	on 🔲 In	nvasives removal
no	☐ Other: Win	der buffer				
RESTORABLE AREA		Impacted area on pu	blic land	Impacted area on either	·	mpacted area on private
LT BANK RT	REFORESTATION	where the riparian ar		public or private land the		and where road; building
Length (ft): 100 00	POTENTIAL:	not appear to be use specific purpose; ple		presently used for a spe purpose; available area		ncroachment or other eature significantly limits
Name 1.1 (6)	(Circle #)	area available for pla		planting adequate		vailable area for planting
Width (ft):		5	4	3	2	(1)
POTENTIAL CONFLICTS WITH REFOR Poor/unsafe access to site		idespread invasive		Potential contami	ination	☐ Lack of sun
Notes: -> Impacts to L brook 2 41	B+RB where	residenti	Al W	uns come ,	rb 4	o edge to
brook 2 41	Calla"/720	46 12 44 A	00/244	had haved	J.	,
J50/=(20 2 1 / (*	17 3 1 H	ppiese.	no remo	r	
	•			•		
		•				
		•				
	·					
				•		
						· · · · · · · · · · · · · · · · · · ·
						·

	SURVEY REACH I	D: W1	rshd/Subshd: W	BN	DATE: 12 / 1	/ <u>o</u> g ^	SSESSED BY:	(-
	START TIM	E: 3 : 00 AM/6N	D LMK:	END TIME:	1 : 20 AM PM	LMK:		GPS ID:
			2 · 44 · 27 "	LAT4) . SI .	_	12°43 '		(1)
			•				, ,	
	DESCRIPTION: CO	nthuence wat	1 WBN-7/W65-1	DESCRIPTION:	Hluena wi	th WKN.	5/WM-4	
							<u>'</u>	
	RAIN IN LAST 24 HO	urs 🗆 Heavy rain	Steady rain	PRESENT CONDITIONS	☐ Heavy rain	☐ Steady:	rain 🗆 Interm	ittent
	□ None	☐ Intermittent	t □ Trace	☐ Clear	☐ Trace	☑Overca	st 🗆 Partly	cloudy
	SURROUNDING LAND	D USE: Salndustria	l	☐ Urban/Residential	☐ Suburban/Res	Foreste	d 🛚 Institu	tional
			rse 🗆 Park	☐ Crop	☐ Pasture	Other:		j
		CONDITIONS (che		Dricu	SKETCH AND SI	TE IMBACT	TRACKING	
	AVLIKACI		v. v. 484 - 52 - 41 - 42 - 42 - 42 - 42 - 42 - 42 - 4		an National Committee of the Committee o	ntrataranani	119941935-14954195-1455	
	BASE FLOW AS %	□ 0-25%	□ 50%-75%	Simple planar sketch	oj survey reach. Tre each (OT, ER, IB,SC,			
	CHANNEL WIDTH	□25-50 %	₹ 75-100%		deemed appropria			······································
	DOMINANT SUBSTR	ATE	*		75	L	\(\frac{1}{2}\)	. 6
	☐ Silt/clay (fine or		obble (2.5 –10")		P.	Ţ	ar j	37
	Æ Sand (gritty)		oulder (>10")		: چ	Ŧ	2.	1. On
	☐ Gravel (0.1-2.5	3") ⊔ Be	ed rock		*	‡	FIN	3/4
	WATER CLARITY	M Clear □Turbi	A (evenanded matter)		٢-	t	•	Le dulo
	Stained (clear, no				-	ł , ,	اه جمع	
	☐ Other (chemicals,	•	Opaquo (mms)				ER E	
				-	4			The Early
	AQUATIC PLANTS		e □ some □ lots			<u>.</u>	-	\mathcal{L} $\left[\cdot \right]$
	IN STREAM		e □ some □ lots	_	- 1	-	1 1	reighter
	WILDLIFE IN OR	(Evidence of)				<u>.</u> ,	71 - A	TYANG A
	AROUND STREAM	☐ Fish ☐ Beav					<i>[]</i>	aun ping
•		☐ Snails ☑ Othe		+	7	MARSH	A.	4
		Mostly shaded			1	: ✓	A CONTRACTOR	< \ L /
	STREAM SHADING (water surface)	☐ Halfway (≥50% ☐ Partially shaded				[/	Charles of	0
ļ	("2101 5311200)	☐ Unshaded (< 2:			4			Ferces C
ı					1			* '
	CHANNEL	☐ Downcutting	Bed scour		1	: /		
	DYNAMICS	Widening	Bank failure Bank scour		7	- /		
		☐ Headcutting ☐ Aggrading	Slope failure		- 1			
	Unknown	Sed. depositio	ı = ·		4	/		
	BANGULL	<u> </u>	Channenzed	-	• 1			
	CHANNEL	Height: LT bank	<u> </u>		11	1		
	DIMENSIONS	RT ba nk	(40)		. 1	MARSH		
	(FACING	Width: Bottom	/O (ft)		17	4		1
	DOWNSTREAM)	Tóp	(ft)		MARSh +	MARSH	€ ~	
		-			V +1	L. CLAW.		
		REACH ACCESSIBILE Fair: Forested or	TY Difficult. Must cross		#	11.0	lla -rocci-	
	Good: Open area in	developed area	wetland, steep slope, or		CUMP ->	CUNCLY	IN JAN 2100	Signt-of-rom
	public ownership, sufficient room to	adjacent to stream.	sensitive areas to get to		T. 1	Culdan		
	stockpile materials,	Access requires tree removal or impact to	stream. Few areas to stockpile available	·	2 south	1		
	easy stream channel	landscaped areas.	and/or located a great		~ // !	Singer	v./ (*	
	access for heavy equipment using	Stockpile areas	distance from stream.		<i>1</i> F	*		
	existing roads or trails.	small or distant from stream.	Specialized heavy equipment required.		WEV-7			}
	5		2 1	†	-X-	START		
	NOTES: (biggest prof	blem you see in survey	reach)		<i> </i>			
	stone Toe	of railroad	teaches—		\begin{aligned}			
					1,50			
					Depo	ወጥሮስ ፕ ፖስ አመጥ	HORITIES 🔲	YES IT NO
	•				REPU.	KLEV IVAUL	THE PROPERTY OF THE PARTY OF TH	L 1170

	Optimal	Suboptimal	Marginal	Poor
IN-STREAM HABITAT (May modify criteria based on appropriate habitat regime)	Greater than 70% of substrate favorable for epifaunal colonization and fish cover; mix of snags, submerged logs, undercut banks, cobble or other stable habitat and at stage to allow full colonization potential (i.e., logs/snags that are <u>not</u> new fall and <u>not</u> transient).	40-70% mix of stable habitat; well- suited for full colonization potential; adequate habitat for maintenance of populations; presence of additional substrate in the form of newfall, but not yet prepared for colonization (may rate at high end of scale).	20-40% mix of stable habitat; habitat availability less than desirable; substrate frequently disturbed or removed.	Less than 20% stable habitat; lact of habitat is obvious; substrate unstable or lacking.
	20 (19) 18 17 16	15 14 13 12 11	10 9 8 7 6	5 4 3 2 1 0
VEGETATIVE PROTECTION (score each bank, determine sides by facing downstream)	More than 90% of the streambank surfaces and immediate riparian zone covered by native vegetation, including trees, understory shrubs, or nonwoody macrophytes; vegetative disruption through grazing or mowing minimal or not evident; almost all plants allowed to grow naturally.	70-90% of the streambank surfaces covered by native vegetation, but one class of plants is not well-represented; disruption evident but not affecting full plant growth potential to any great extent; more than one-half of the potential plant stubble height remaining.	50-70% of the streambank surfaces covered by vegetation; disruption obvious; patches of bare soil or closely cropped vegetation common; less than one-half of the potential plant stubble height remaining.	Less than 50% of the streambank surfaces covered by vegetation; disruption of streambank vegetation is very high; vegetation has been removed to 5 centimeters or less in average stubble height.
	Left Bank 10 9	8 7 6	5 4 3	2 1 0
	Right Bank 10 9	(8) 7 6	5 4 3	2 1 0
BANK EROSION (facing downstream)	Banks stable; evidence of erosion or bank failure absent or minimal; little potential for future problems. <5% of bank affected.	Grade and width stable; isolated areas of bank failure/erosion; likely caused by a pipe outfall, local scour, impaired riparian vegetation or adjacent use.	Past downcutting evident, active stream widening, banks actively eroding at a moderate rate; no threat to property or infrastructure	Active downcutting; tall banks on both sides of the stream eroding a a fast rate; erosion contributing significant amount of sediment to stream; obvious threat to property or infrastructure.
	Left Bank 10	8 7 6	5 4 3	2 1 0
	Right Bank 10 🕥	8 7 6	5 4 3	2 1 0
FLOODPLAIN CONNECTION	High flows (greater than bankfull) able to enter floodplain. Stream not deeply entrenched.	High flows (greater than bankfull) able to enter floodplain. Stream not deeply entrenched.	High flows (greater than bankfull) not able to enter floodplain. Stream deeply entrenched.	High flows (greater than bankfull) not able to enter floodplain. Stream deeply entrenched.
		ALL BUFFER AND FLOODPLA		
Vegetated Buffer Width Skeep t when	Optimal Width of buffer zone >50 feet; human activities (i.e., parking lots, roadbeds, clear-cuts, lawns, crops) have not impacted zone.	Suboptimal Width of buffer zone 25-50 feet; human activities have impacted zone only minimally.	Marginal Width of buffer zone 10-25 feet; human activities have impacted zone a great deal.	Poor Width of buffer zone <10 feet: little or no riparian vegetation due to human activities.
advacent to	Left Bank 10 (9)	8 7 6	5 4 3	2 1 0
TRAIN TRAD	Right Bank 10 9	8 7 6	5 4 3	2 1 0
FLOODPLAIN VEGETATION	Predominant floodplain vegetation type is mature forest	Predominant floodplain vegetation type is young forest	Predominant floodplain vegetation type is shrub or old field	Predominant floodplain vegetation type is turf or crop land
	20 19 (18) 17 16	15 14 13 12 11	10 9 8 7 6	5 4 3 2 1 0
FLOODPLAIN HABITAT	Even mix of wetland and non-wetland habitats, evidence of standing/ponded water	Even mix of wetland and non-wetland habitats, no evidence of standing/ponded water	Either all wetland or all non- wetland habitat, evidence of standing/ponded water	Either all wetland or all non- wetland habitat, no evidence of standing/ponded water
	20 19 18 17 16	15 14 13 12 11	10 9 8 7 6	5 4 3 2 1 0
FLOODPLAIN ENCROACH- MENT DIC-10	No evidence of floodplain encroachment in the form of fill material, land development, or manmade structures	Minor floodplain encroachment in the form of fill material, land development, or manmade structures, but not effecting floodplain function 15 14 (13) 12 11	Moderate floodplain encroachment in the form of filling, land development, or manmade structures, some effect on floodplain function	Significant floodplain encroachment (i.e. fill material, land development, or man-made structures). Significant effect on floodplain function
MAMM	20 19 18 17 16	15 14 (13) 12 11	10 9 8 7 6 1	5 4 3 2 1 0

SUBJECT REACH ID: 6 TIME: 3 SAM/ POTO ID: (Camerae-Pice I) PCAD H CHS STREID: Goodifferit SC	WATERSHED	/SUBSHED: WBN			DA'	те: <u>}</u> 2	101/09	ASSE	ESSED BY: CM+BG
TYPE: Road Crossing Railroad Crossing Mannade Dum Beaver Dam Geological Formation Softer. Parker, Link March Share	SURVEY REA	SURVEY REACH ID: 6 TIME: 3:30 AM/60 PHOTO ID: (Camera-Pic #) PCO10 /# 045							
SHAPE:	SITE ID: (Con	dition#) SC-A LAT	41° 51 · 1	<u>} " Long ∅</u>	<u>}}•</u>	44 .	<u> 23 " L</u>	MK	GPS (Unit ID)
SHAPE:	TYPE: Roa	ad Crossing Railroad Cross	ng Manmade	Dam Beav	er Da	am 🗌	Geological For	nation 🗹	LOther: Power line
ONLY Cracking/chipping/corrosion Downstream scour hole Slight (2° -5°) Cracking/chipping/corrosion Downstream scour hole Slight (2° -5°) Roadway elevation: (ft) Chief (describe): Failing embankment Other: Slight (2° -5°) Roadway elevation: (ft) Chief (describe): Chief (describe		☐ Arch ☐ Bottomless ☐ Box ☐ Elliptical ☐ Circular	Single ¥3 Double Triple	MATERIAL: Concrete Metal		ALIG ☐ Flo	NMENT: ow-aligned of flow-aligned	DIMENS Barrel dia	Height: (if variable, sketch) (ft) (ft)
Secretary of Physical Blockage: Blockage Severity: (circle #) Ferrial Partial Partial Total Partial Property Unknown Flow too shallow Water Drop: (in) Other: Total Propose Property Unknown Flow too shallow Water Drop: (in) Other: Total Propose Property Unknown Flow too shallow Water Depth: (in) Other: Total Propose Property Unknown Flow too shallow Water Depth: (in) Other: Sacration Total Propose Propose (in) Flow too shallow Water Depth: (in) Other: Sacration Sacration Sacration Sacration Sacration Sacration Sacration Sacration Sacration Sacration Sacration Sacration Sacration Sacration Sacration Sacration Sacration Sacration Sacration Sacration Sacration Sacration Sacration Sacration Sacration Sacration Sacration Sacration Sacration Sacration Sacration Sacration Sacration Sacration Sacration Sacration Sacration Sacration Sacration Sacration Sacration Sacration Sacration Sacration Sacration Sacration Sacration Sacration Sacration Sacration Sacration Sacration Sacration Sacration Sacration Sacration Sacration Sacration Sacration Sacration Sacration Sacration Sacration Sacration Sacration Sacration Sacration Sacration Sacration Sacration Sacration Sacration Sacration Sacration Sacration Sacration Sacration Sacration Sacration Sacration Sacration Sacration Sacration Sacration Sacration Sacration Sacration Sacration Sacration Sacration Sacration Sacration Sacration Sacration Sacration Sacration Sacration Sacration Sacration Sacration Sacration Sacration Sacration Sacration Sacration Sacration Sacration Sacration Sacration Sacration Sacration Sacration Sacration Sacrati		☐ Cracking/chipping/corrosio☐ Sediment deposition				☐ Fla	t ght (2° – 5 ⁰)		Width:(ft)
EXTENT OF PHYSICAL BLOCKAGE: Total Partial Temporary Unknown Todal or road cubert on a 3rd order or greater steam blocking the upstream movement of shaper of prop too high Water Drop: (in) Flow too shallow Water Depth: (in) Other: NOTES/SKETCH: 3 cul wuts 2 interest of continued of the partial steam blocking present. S cul wuts 2 interest of continued of the partial shows the migration of anadromous fish. S cul wuts 2 interest of continued of the partial shows the migration of anadromous fish. S cul wuts 2 interest of continued of steam with the migration of anadromous fish. S cul wuts 2 interest of continued of the partial shows the migration of anadromous fish. S cul wuts S cu		RESTORATION CANDIDATE		<u> </u>		epair/rej	olacement 🔲 🛚	Jpstream st	torage retrofit
Total Partial Temporary Unknown A structure such as a dam or road culvert on a 3rd order or greater stream blocking the period of between the organization of partial blockage that may interfere with the migration of anadromous fish, no fish passage device present. A 3 2 1 NOTES/SKETCH:	Is SC ACTING	G AS GRADE CONTROL	□ No □ Y	es 🔲 Unk	nowr		· 		
NOTES/SKETCH: 3 cultruits D intersection of the stream elequal with the privarlines Right-of-why + the railroad teacher: 1 culvent under Right-of-way + west of RR tracks is 36" Round Concrete 1 culvent under RR tracks is open bottom box culvent is widex 6' high 2 culvent under power line R-o-w on east side of RR tracks is open, concrete + 10'x3'		☐ Total ☐ Partial ☐ Temporary ☐ Unknow CAUSE: ☐ Drop too high ☐ Water Down of the Down o	wn rop:(in)	road culvert on a greater stream bl upstream movem anadromous fish;	3rd or ocking nent of no fis	am or der or the	A total fish blocka tributary that wou significant reach or partial blockag interfere with the	ige on a Id isolate a of stream, e that may migration of	A temporary barrier such as a beaver dam or a blockage at the very head of a stream with very little viable fish habitat above it; natural barriers such
Delivert under Right-of-way + west of RR tracks is open bottom box culvert 15' widex 6' high Culvert under RR tracks is open bottom box culvert 15' widex 6' high Culvert under power live R-o-w on east side of RR tracks is open, concrete + 10' x 3'	NOTES/SKET			5		-	3		

WATERSHED	WATERSHED/SUBSHED: WKN DATE: 12/01/09 ASSESSED BY: OW + BUT								
	Survey Reach ID: 6 Time: 4:15 AM/PM PHOTO ID: (Camera-Pic #) PLOI 0 0 /# 54,55 + 56								
		<u> 141 ° 51 , 3</u>	" Long]	<u></u> 2 °	<u>43 ·</u>	<u>56 " L</u> 1	мк	GPS (U	Init ID)
1 .	eters Road							<u>.</u>	
TYPE: X Ros	ad Crossing Railroad Cros	1		1		-			
FOR ROAD/ RAILROAD	SHAPE: Arch Bottomless Box Elliptical Circular Other:	# BARRELS: Single Double Triple Other:	MATERIAL: Concrete Metal Other:		KFlo □ No	NMENT: w-aligned t flow-aligned not know	Barrel dia	IONS: (if varia	(ft)(ft)
CROSSINGS	CONDITION: (Evidence of)			ľ	CULVERT SLOPE:		Culvert le	•	(ft)
ONLY	☐ Cracking/chipping/corrosion ☐ Downstream scour hole ☐ Sediment deposition ☐ Failing embankment ☐ Other (describe):				☐ Flat ☐ Slight (2° - 5°) ☐ Obvious (>5°) Ro			Width:	(ft)
Downwar I	DECEMBER OF CAMPUS AND		1 🗆 🔾 1		• (1	T4		
no	RESTORATION CANDIDATE	☐ Fish barrier re☐ Local stream			еранитер	oracement	pstream st	torage retroin	, ,
IS SC ACTING	G AS GRADE CONTROL	□No □Y	es 🔲 Unk	nowr					
	EXTENT OF PHYSICAL BI				BLO	CKAGE SEVE	RITY: (circ	le #)	
If yes for fish barrier	Total Particular Parti	Orop: (in)	A structure such road culvert on a greater stream b upstream moven anadromous fish passage device	3rd or locking nent of no fis	der or I the h	A total fish blocka tributary that wou significant reach or or partial blockag interfere with the anadromous fish.	ld isolate a of stream, e that may migration of	beaver dam or the very head very little viable	arrier such as a a blockage at of a stream with e fish habitat al barriers such
Nome of Green		<u> </u>	5			3		2	1
NOTES/SKET	ch: There is A And the 20' fun	concrete.	Round	a	ilve	it ind	er p	etus	lavel,
	and H	ر احماد مده	· Pasa co	x A.C.	i ofe	Paund	cut	vert A	4DPNOX
	2000	(a	took co) · · ·		icted	· ·
	30 tm	ther ups	, tream	٠ _	Then	ce is c	-01/2 M) A	- ∢
	flow (these Mi	sol tex	Ĭ,	nsut	Rivent	877	e), v.	7
	معلیمیں	pools.	cae idho	toʻ	٤			•	
ļ	. WA+ → (poors.	2001 P		-				
			•						
									•
		v							
7									
						Repor	TED TO AU	THORITIES 🗌	YES 🔲 No

_	
7	
	к
-	
_	 _

WATERSHED/SUBSHED: WG N			DATE: 12	101/09 AS	SSESSED BY: OMIBLE
SURVEY REACH: 6	TIME:		Рното ID	: (Camera-Pic #)	PCO10/# 045
SITE ID: (Condition-#) START LAT	see belong	ONG	1 11	LMK	GPS: (Unit ID)
B- END LAT	°'_" L	ONG°	t tt	LMK	
IMPACTED BANK: REASON INADE	EQUATE: Lack of Recently	-			plants d with RR+RAX
	itutional Golf Cour	rse Park O	ther Public	1	
(Facing downstream) LT Bank			_: :		
RT Bank DOMINANT Paved E	Bare ground Turf/law	n Tall grass	Shrub/scrub	Trees Othe	r ·
LAND COVER: LT Bank					
RT Bank		_			
INVASIVE PLANTS: None	☐ Rare ☐ Pa	artial coverage	Extensi	ve coverage ur	nknown
STREAM SHADE PROVIDED? None	Partial 🔀	Full WET	ANDS PRESE	NT?□No 🏻	Yes Unknown
				 _	
POTENTIAL RESTORATION CANDIDATE			-	-	Invasives removal
10 no where next to RR bed	Other: Plan A	e educati	anal doc	uments to	residential
RESTORABLE AREA		Impacted area on pu		eacted area on either	Impacted area on private land where road; building
LI DANK IXI	EFORESTATION OTENTIAL:	where the riparian a not appear to be use	ed for any pre	lic or private land that is sently used for a specific	encroachment or other
20.1g (1.).	Circle #)	specific purpose; ple area available for pla		pose; available area for nting adequate	feature significantly limits available area for planting
Width (ft):	,	5	4	3	2
POTENTIAL CONFLICTS WITH REFOREST	TATION TOW.	· ·	nlants 🗆 I	Potential contamination	on D lack of sun
Poor/unsafe access to site Existing im	pervious cover 🔲 Sev	ere animal impac	ts (deer, beave	er) 🔲 Other:	
Notes: There are 4 area there are Are	s of note	where t	outfor 1	nas locer	moreteal.
Le Ale All	included	on the	uis f	dun:	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
These man	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,				
O Let	BANK (LIS)	2 41 51 1	0 / 43	44'23" une	to peoloous)
Maria No V	estolation	STREAM	butter	- (see pho	to peoloous)
D 0 1	dase to -t	10 - COA	TVS 1	_ 0. Q_n al	tian motern to
@ RB due to tenin tracks. No restoration potentia					
BIK had in secret autice has a section to					
Les late of words that floor of the children					
B US believed residential have there is a washout brown lack of vegetation / buffer. 2 41°51'20"/72'44'09" No photo.					
	(,	ماليم		within the so photo by information
(9) YARD U	nazze griwb	alour Alour), raye	6 LB+	within the
Chanr	iel itself.	J 41" ST	22"/7	7 44' B" A	so photo
Poten	tial restorat	tidh cand	id Ate	by plandi	information
OR &	macemen	d ,		I_{ij}^{-1}	
Ų.		•			



1	SURVEY REACH ID: BYR-01 WTRSHD/SUBSHD: BU	UE HILLS RES. DATE: 18/8//09 ASSESSED BY:
	START TIME: : OS ATO/PM LMK:	END TIME: 2 : 00 AM/M LMK: GPS ID:
	LAT 41 . 51 . 25" LONG 072 . 42 . 39 .	1, 11,001,000,000,000,000,000,000,000,00
	DESCRIPTION: ASOVE CATTALL POND	DESCRIPTION: NONTHEND POUR, N. OF NIE 18
ļ	B	5
ĺ	RAIN IN LAST 24 HOURS Heavy rain Steady rain	PRESENT CONDITIONS Heavy rain Steady rain Intermittent
	None ☐ Intermittent ☐ Trace	☐ Clear ☐ Trace ☐ Overcast ☐ Partly cloudy
	SURROUNDING LAND USE: Industrial	
	☐ Golf course ☐ Park	☐ Crop ☐ Pasture ☐ Other:
	AVERAGE CONDITIONS (check applicable)	REACH SKETCH AND SITE IMPACT TRACKING
	BASE FLOW AS % □ 0-25% □ 50%-75%	Simple planar sketch of survey reach. Track locations and IDs for all site impacts
	Channel Width □25-50 % □ 75-100%	within the survey reach (OT, ER, IB,SC, UT, TR, MI) as well as any additional features deemed appropriate. Indicate direction of flow
	DOMINANT SUBSTRATE]
1	☐ Silt/clay (fine or slick) ☐ Cobble (2.5 –10")	
	✓ Sand (gritty) ☐ Boulder (>10")	72-114
	☐ Gravel (0.1-2.5") ☐ Bed rock	NO STAFAM HAS NO
ſ	WATER CLARITY Clear Turbid (suspended matter)	E. OF 187 P STREAM ENTERNO
1	, -	E MEN L
	☐ Other (chemicals, dyes) ☐ Opaque (milky)	2010400
ļ	14018 181	
	AQUATIC PLANTS Attached: none some lots	
	IN STREAM Floating: ☐ frome ☐ some ☐ lots	
	WILDLIFE IN OR (Evidence of) CAROLINA WEEN	X_
	AROUND STREAM Snails Other: AFCEON	PANATE OF THE PROPERTY OF THE
4		T/V/VS(****
		MEMORY NO.
	STREAM SHADING ☐ Halfway (≥50%) (water surface) ☐ Partially shaded (≥25%)	Waster)
	☐ Unshaded (< 25%)	
	CHANNEL Downcutting Bed scour	- \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \
	Widening Rank failure	
	DYNAMICS Headcutting Bank scour	4 CLEANING A
	Aggrading Slope failure	
İ	Unknown Sed. deposition Channelized	The second secon
	MANKAULL	
	CHANNEL Height: LT bank (ft)	WOODED WOODED
	DIMENSIONS RE bank 0.5 (ft)	SCOUMBE CANT WOODED WOODED
	(FACING Width: Fottom <u>5</u> (ft)	
	top(ft)	MCOOKS AND AND WILL
	REACH ACCESSIBILITY	The letter of th
İ	Good: Open area in Fair: Forested or Difficult. Must cross	
	public ownership, adjacent to stream. wetland, steep slope, or sensitive areas to get to	
	Sufficient room to Access requires tree stream Four areas to	9(31) Store
	stockpile materials, easy stream channel removal or impact to stockpile available	CONENES WITH STANDED CHANGE
	access for heavy Stocknile areas distance from stream	MASH CONCRETE, APPLANCES PRIMARY
	equipment using existing roads or trails.	ASMALT, APRIMILES CARTAIL
1	stream. equipment required.	(Pour)
l	NOTES: (higgest problem you see in survey reach)	
ì	NOTES: (biggest problem you see in survey reach) DUM PING + THASH BEHIND A	ALVIN BLDG.
'	SANDY SEDIMENT DEPOSITIO	N FROM POUTE 187 AND DUDLEY TOWN NOAD
		REPORTED TO AUTHORITIES YES NO

	•	OVERALL STREAM CONDITION						
	Optimal	Suboptimal	Marginal	Poor				
IN-STREAM HABITAT (May modify criteria based on appropriate habitat regime)	Greater than 70% of substrate favorable for epifaunal colonization and fish cover, mix of snags, submerged logs, undercut banks, cobble or other stable habitat and at stage to allow full colonization potential (i.e., logs/snags that are <u>not</u> new fall and <u>not</u> transient).	40-70% mix of stable habitat; well- suited for full colonization potential; adequate habitat for maintenance of populations; presence of additional substrate in the form of newfall, but not yet prepared for colonization (may rate at high end of scale).	20-40% mix of stable habitat; habitat availability less than desirable; substrate frequently disturbed or removed.	Less than 20% stable habitat; lack of habitat is obvious; substrate unstable or lacking.				
	20 19 18 17 16	15 14 (13) 12 11	10 9 8 7 6	5 4 3 2 1 0				
PROTECTION (score each bank, determine sides by facing downstream)	More than 90% of the streambank surfaces and immediate riparian zone covered by native vegetation, including trees, understory shrubs, or nonwoody macrophytes; vegetative disruption through grazing or mowing minimal or not evident; almost all plants allowed to grow naturally.	70-90% of the streambank surfaces covered by native vegetation, but one class of plants is not well-represented; disruption evident but not affecting full plant growth potential to any great extent; more than one-half of the potential plant stubble height remaining.	50-70% of the streambank surfaces covered by vegetation; disruption obvious; patches of bare soil or closely cropped vegetation common; less than one-half of the potential plant stubble height remaining.	Less than 50% of the streambank surfaces covered by vegetation; disruption of streambank vegetation is very high; vegetation has been removed to 5 centimeters or less in average stubble height.				
	Left Bank 10 (9)	8 7 6	5 4 3	2 1 0				
	Right Bank 10	8 7 6	5 4 3	2 1 0				
BANK EROSION (facing downstream)	Banks stable; evidence of erosion or bank failure absent or minimal; little potential for future problems. <5% of bank affected.	Grade and width stable; isolated areas of bank failure/erosion; likely caused by a pipe outfall, local scour, impaired riparian vegetation or adjacent use.	Past downcutting evident, active stream widening, banks actively eroding at a moderate rate; no threat to property or infrastructure	Active downcutting; tall banks on both sides of the stream eroding at a fast rate; erosion contributing significant amount of sediment to stream; obvious threat to property or infrastructure.				
	Left Bank 10 9	<u>®</u> 7 6	5 4 3	2 1 0				
	Right Bank 10 9	(8) 7 6	5 4 3	2 1 0				
FLOODPLAIN CONNECTION	High flows (greater than bankfull) able to enter floodplain. Stream not deeply entrenched.	High flows (greater than bankfull) able to enter floodplain. Stream not deeply entrenched.	High flows (greater than bankfull) not able to enter floodplain. Stream deeply entrenched.	High flows (greater than bankfull) not able to enter floodplain. Stream deeply entrenched.				
	20 (19) 18 17 16	15 14 13 12 11 ALL BUFFER AND FLOODPLAI	10 9 8 7 6	5 4 3 2 1 0				
	Optimal	Suboptimal	Marginal	Poor				
VEGETATED BUFFER WIDTH	Width of buffer zone >50 feet; human activities (i.e., parking lots, roadbeds, clear-cuts, lawns, crops) have not impacted zone.	Width of buffer zone 25-50 feet; human activities have impacted zone	Width of buffer zone 10-25 feet; human activities have impacted zone a great deal.	Width of buffer zone <10 feet: little or no riparian vegetation due to human activities.				
	Left Bank 10	8 7 6	5 4 3	2 1 0				
FLOODPLAIN VEGETATION	Predominant floodplain vegetation type is mature forest	8 7 6 Predominant floodplain vegetation type is young forest	5 4 3 Predominant floodplain vegetation type is shrub or old field	2 1 0 Predominant floodplain vegetation type is turf or crop land				
	20 (19) 18 17 16	15 14 13 12 11	10 9 8 7 6	5 4 3 2 1 0				
FLOODPLAIN HABITAT	Even mix of wetland and non-wetland habitats, evidence of standing/ponded water	Even mix of wetland and non-wetland habitats, no evidence of standing/ponded water	Either all wetland or all non- wetland habitat, evidence of standing/ponded water	Either all wetland or all non- wetland habitat, no evidence of standing/ponded water				
	20 19 18 17 16	15 14 13 12 11	10 9 8 7 6	5 4 3 2 1 0				
FLOODPLAIN	No evidence of floodplain encroachment in the form of fill	Minor floodplain encroachment in the form of fill material, land development, or manmade structures,	Moderate floodplain encroachment in the form of filling, land development, or	Significant floodplain encroachment (i.e. fill material, land development, or man-made structures). Significant effect on				
ENCROACH- MENT	material, land development, or manmade structures 20 19 18 17 16	but not effecting floodplain function (15) 14 13 12 11	manmade structures, some effect on floodplain function	floodplain function 5 4 3 2 1 0				

WATERSHED/SUBSHED: BHR			DATE: 12 /0	<u>8/09</u>	ASSESSED BY: CM +BG	
SURVEY REACH I	D: 01	TIME:	<u>: 40 (0</u> 01/PM	Рното ID: (Са	mera-Pic #) PCDE	30 /# 086
SITE ID: (Condition	-#) TR- _Å	LAT410SI	2 ⁄ω " Lονο	372 042 . 41	_" LMK_	GPS: (Unit ID)
TYPE: Industrial Commercial Residential	MATERIAL: ☐ Plastic ☐ Tires ☐ Appliances ☐ Automotive	☑ Paper ☑ Construction ☑ Yard Waste ☐ Other:	☑ Metal ☐ Medical	SOURCE: Unknown Flooding Illegal dump Local outfall	LOCATION: Stream Riparian Ar Lt bank	
POTENTIAL REST	ORATION CANDII		eanup ⊠ Strea en falcen		⊠ Removal/pr	revention of dumping
If yes for trash or debris removal	EQUIPMENT NEED WHO CAN DO IT:	ED: 🔼 Heavy e	quipment 🔼 T	rash bags 🔲 Unkno Gov 🔲 Hazmat Te		DUMPSTER WITHIN 100 FT: ☐ Yes ☐ No ☐ Unknown
CLEAN-UP POTENTIAL:	than two nickun truck loads) located 1 with 300 accept a rea, where access is very difficult. Or presence of drums					ccess is very difficult. Or presence of drums
(Circle #)	5		4	(3)	2	1
NOTES: Very good candidate for Restoration/deanup. Prevention should be emphasized trash included (Among other Huving): WAShing Machine, ac units, chunks of concrete + Asphalt, chunks of metal pipe, old telephone poles, styrofarm, sheets of plastic, Rolls of plastic, etc.						
					REPORTE	D TO AUTHORITIES 🔲 YES 🖄 NO

Trash and Debris



WATERSHED/SUBSHED: BHR			DATE: 12/08/09 ASSESSED BY: CM + BG			
SURVEY REACH I	SURVEY REACH ID: O\ TIME::AM/PM			mera-Pic #) PC080	/# 090 ·	
SITE ID: (Condition	ITE ID: (Condition #) TR- B LAT 41 ° 51 ' 32 "LONG 72 ° 47 ' 50 " LMK GPS: (Unit ID)					
TYPE: Industrial Commercial Residential	<u> </u>	struction	SOURCE: Unknown Flooding Illegal dump Local outfall	LOCATION: Stream Riparian Area Lt bank Rt bank	LAND OWNERSHIP: ☐ Public ☑ Unknown ☐ Private AMOUNT (# Pickup truck toads):	
POTENTIAL REST	POTENTIAL RESTORATION CANDIDATE ☐ Stream cleanup ☐ Stream adoption segment ☐ Removal/prevention of dumping ☐ Other:					
If yes for trash or debris removal						
CLEAN-UP POTENTIAL:	CLEAN-UP POTENTIAL: A small amount of trash (i.e., less than two pickup truck loads) located inside a park with easy access A large amount of trash, or bulk items, in a small area with easy access. Trash may have been dumped over a long period of time but it could be cleaned up in a long period of time but it could be cleaned up in a long period of time but it could be cleaned up in a long period of time but it could be cleaned up in a long period of time but it could be cleaned up in a long period of time but it could be cleaned up in a long period of time but it could be cleaned up in a long period of time but it could be cleaned up in a long period of time but it could be cleaned up in a long period of time but it could be cleaned up in a long period of time but it could be cleaned up in a long period of time but it could be cleaned up in a long period of time but it could be cleaned up in a long period of time but it could be cleaned up in a long period of time but it could be cleaned up in a long period of time but it could be cleaned up in a long period of time but it could be cleaned up in a long period of time but it could be cleaned up in a long period of time but it could be cleaned up in a long period of time but it could be cleaned up in a long period of time but it could be cleaned up in a long period of time but it could be cleaned up in a long period of time but it could be cleaned up in a long period of time but it could be cleaned up in a long period of time but it could be cleaned up in a long period of time but it could be cleaned up in a long period of time but it could be cleaned up in a long period of time but it could be cleaned up in a long period of time but it could be cleaned up in a long period of time but it could be cleaned up in a long period of time but it could be cleaned up in a long period of time but it could be cleaned up in a long period of time but it could be cleaned up in a long period of time but it could be cleaned up in a long period of time but it could be cleaned					
(Circle #)	5	(4)	3	2	1	
NOTES: Auto	o located in s	tream on up	stream si	de of cu	lvert.	
			****	REPORTED TO	AUTHORITIES YES NO	

Trash and Debris

TR

WATERSHED/SUBSHED: RHP			DATE: 108/09 ASSE		Assessed by: OM + BG	
SURVEY REACH I	D: 0 /	TIME::AM/PM	РНОТО ID: (Са	PHOTO ID: (Camera-Pic #) PC 080 /# 09) , 092		
SITE ID: (Condition	#) TR- C	11 • 51 • 37 "LONG	72 . 42 . 52	" LMK	GPS: (Unit 1D)	
TYPE: Industrial Commercial Residential	Appliances 🔀 Y	aper Metal onstruction Medical ard Waste ther: Sedwinent Jaw	SOURCE: Unknown Flooding Ullegal dump Local outfall	LOCATION: Stream Riparian Area Lt bank Rt bank	LAND OWNERSHIP: Public Unknown Private AMOUNT (# Pickup truck loads): Needs welland	
POTENTIAL REST		Stream cleanup Stream Stream Cleanup Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream Stream				
If yes for trash or debris removal	EQUIPMENT NEEDED: WHO CAN DO IT:	☐ Heavy equipment ☑ Tr	<u>_</u> _		DUMPSTER WITHIN 100 FT: ☐ Yes ☐ No ☐ Unknown	
CLEAN-UP POTENTIAL:	POTENTIAL: than two pickup truck loads) located inside a park with easy access a long period of time but it could be cleaned up in a or indications of hazardous materials					
(Circle #)	, 5			2	1	
NOTES: sedur Tires hand		tran const	euction A ent Show	ictivities and be a	plus trash, enhanced by	
			···	REPORTED	TO AUTHORITIES YES 🗷 NO	

VATERSHED/SUBSHED: BHR			DATE: 12/08/09 ASSESSED BY: UM + B			
SURVEY REACH I	D: Ol	TIME::AM/PM	Рното Ю: (Са	PHOTO ID: (Camera-Pic #) /# More		
SITE ID: (Condition	#) TR- 0 LAT4	1 . 51 . 41 "LON	:72·42·51	_" LMK	GPS: (Unit ID)	
TYPE: ☐ Industrial ☑-Commercial ☐ Residential		onstruction	SOURCE: Unknown Flooding Illegal dump Local outfall	LOCATION: Stream Riparian Area Lt bank Rt bank	LAND OWNERSHIP: Public Unknown Private AMOUNT (# Pickup truck loads):	
POTENTIAL REST	POTENTIAL RESTORATION CANDIDATE Stream cleanup Stream adoption segment Removal/prevention of dumping Other: experience 7					
If yes for trash or debris removal	ash or EQUIPMENT NEEDED: Heavy equipment Trash bags Unknown DUMPSTER WITHIN 100 FT				DUMPSTER WITHIN 100 FT: ☐ Yes ☐ No ☐ Unknown	
CLEAN-UP POTENTIAL:	A small amount of trash (i.e., less than two pickup truck loads) located with easy access. Trash may have been dumped over a large amount of trash or debris scattered over a large with easy access. Trash may have been dumped over area, where access is very difficult. Or presence of drums					
(Circle #)	5	(4)	3	2	1	
Notes: Mostly yard waste, but also metal scraps private property - some kind of store.						
				REPORTED	TO AUTHORITIES 🗌 YES 🔼 NO	

Storm Water Outfalls

		4	J.	- 1
	•	7	•	ĸ.
- 4	1	ľ	1	v.
•	. ,		1	ļ.
	_			

WATERSHED/SUBSHED: BH		DATE: 12/08/09 ASSESSED BY: 0M + 86				
SURVEY REACH ID: 0	TIME::AM/PM	PHOTO ID: (Camera-Pic #) PC A				
SITE ID (Condition:#): OT-	LAT . Sel, REVERY	ong'" LM				
BANK: LT RT Head FLOW: None Trickle TYPE: Closed pipe	MATERIAL: Concrete Metal PVC/Plastic Brick Other:	☐ Circular ☐ Double	SUBMERGED: No eter: (in) Partially Fully			
☐ Moderate ☐ Substantial ☐ Other: ☐ Other: ☐ Other:	☐ Concrete ☐ Earthen ☐ Other:	☐ Trapezoid Depth: ☐ Parabolic Width (Top ☐ Other: " (Bottom)	(in) (in) NOT APPAGABLE (in)			
CONDITION: ☐ None ☐ Chip/Cracked ☐ Peeling Paint ☐ Chip/Cracked ☐ Peeling Paint ☐ Chip/Cracked ☐ Rancid/So	□ None □ Oily (×1)	None □ Bro □ Normal □ Othe	<u> </u>			
☐ Corrosion ☐ Sulfide ☐ Other:	Paint Other:	Excessive Goo	QUALITY: No pool d Odors Colors Oils s Algae Floatables			
FOR GOLOR: Grey Grey Grey Green Orange Red Other: FLOWING TURBIDITY: None Slight Cloudiness Gloudy Opaque ONLY FLOATABLES: None Sewage (toilet paper, etc.) Petroleum (oil sheen) OTHER GEXCESS Trash (paper/plastic bags) Dumping (bulk) Excessive Sedimentation CONCERNS: Needs Regular Maintenance Bank Erosion Other:						
POTENTIAL RESTORATION CANDID	POTENTIAL RESTORATION CANDIDATE ☐ Discharge investigation ☐ Stream daylighting ☐ Local stream repair/outfall stabilization ☐ no ☐ Storm water retrofit ☐ Other:					
If yes for stormwater: Is stormwater currently controlled? Yes No Not investigated	Land Use de Area availabi					
SEVERITY: strong smell. The amo	nt of normal flow in receiving dischargers to be having a	lischarge; flow mostly clear and odorless. If the ge has a color and/or odor, the amount of ge is very small compared to the stream's based d any impact appears to be minor / localized.	Outrail does not have dry weather			
SKETCH/NOTES:	s everse side	3	2			
	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	Reported	TO AUTHORITIES: YES NO			

- Of A "Y" shaped split or trabularly or stormwater input to US as the northern end of the building + parking lot AREA is 41°51'28"/ see photo PCO80088 apen channel.
- Durshout from construction site that has resulted in significant of soil movement. Potential site for sectiment removal/cleanyp/enforcement on RB 2 41051'37"/72"42'52". See photos pc080091 + 092.

Manuer and State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State of the State o

Marie Cate and

19.00 J. 100

Burgara Stromanos

C	
D	U

WATERSHEL	D/SUBSHED: BHK		,	Date: 🗦	<u> 108 109</u>	ASSE	SSED BY:	OM+BG
SURVEY REA		TIME::_			: (Camera-Pi			
SITE ID: (Cor	ndition#) SC- <u>A</u> LAT	41.51.3	2 " Long <u>7</u>)	042	<u> 50 "</u> ΓΙ	мк	GPS	(Unit ID)
	old FARM ROAD U	Yno nAMe						
TYPE: 🔀 Ro	ad Crossing Railroad Crossi	ng Manmade	Dam Beave	Dam 🔲	Geological Fon	nation 🔲	Other:	
	SHAPE:	#BARRELS:	MATERIAL:		NMENT:			ariable, sketch)
	☐ Arch ☐ Bottomless ☐ Box ☐ Elliptical	Single	Concrete	1	w-aligned	Barrel dia	meter:	<u> </u>
FOR ROAD/	Circular	☐ Double ☐ Triple	Metal		t flow-aligned		Height:	(ft)
RAILROAD	Other:	Other:	Other:		not know			
CROSSINGS	CONDITION: (Evidence of)				ERT SLOPE:	Culvert le	-	(ft)
ONLY	Cracking/chipping/corrosion	n Downstrear	n scour hole	☐ Fla			Width:	(ft)
	Sediment deposition	☐ Failing emb	ankment		ght (2° – 5°) vious (>5°)	ъ.,		(0)
	Other (describe):				vious (>3)	Roadway	elevation:	(ft)
POTENTIAL	RESTORATION CANDIDATE	Fish barrier re	emoval	rt renair/rei	Jacement I	Instream et	orage retro	fit
√⊠ no	RESTORATION CANDIDATE	Local stream		•	nacement	opsiream si		,111
	G AS GRADE CONTROL	□ No □ Y					· ·	
ISSC ACTIN			es 🗀 Clikir		CKAGE SEVER	DITV: (circ	lo #)	
	EXTENT OF PHYSICAL BLO	CKAGE:		<u> </u>			•	
	☐ Temporary ☐ Unknow	vn	A structure such as road culvert on a 3		A total fish blocka tributary that wou			y barrier such as a or a blockage at
If yes for	CAUSE:		greater stream bloc	king the	significant reach of	of stream,	the very hea	ad of a stream with
fish barrier	Drop too high Water Dr	rop:(in)	upstream movement anadromous fish; n		or partial blockage interfere with the			able fish habitat tural barriers such
	☐ Flow too shallow Water De	epth: (in)	passage device pre	esent.	anadromous fish.		as waterfall	S.
	Other:		5	4	3		2	1
NOTES/SKET	CH:							
				4	-			
					•			
			•					
	•	•						
						4		
								•
N .								
					٠			

WATERSHEI	D/SUBSHED: BHR	1		DATE: 12		1 110010			1+BG
SURVEY REA		TIME::_	_AM/PM): (Camera-Pi	ic#) PC08	6 /#	093,	094,0
SITE ID: (Co	ndition #) SC-K LAT	41 051 4	<u>" Long 7</u>	<u>2 ° 42 '</u>	<u> </u>	MK	GPS	(Unit ID))
TYPE: 🛛 Ro	oad Crossing	ing Manmade	Dam Beav	er Dam 🔲	Geological For	mation 🔲 🤇	Other:		
For Road/ Railroad	SHAPE: Arch Bottomless Box Elliptical Circular Other:	#BARRELS: Single Double Triple Other:	MATERIAL: Concrete Metal Other:	⊠ Flo	NMENT: ow-aligned of flow-aligned o not know		neter: leight:	ariable, s	(ft)
Crossings Only	CONDITION: (Evidence of) Cracking/chipping/corrosion Sediment deposition Other (describe):	n Downstrean Failing emb		☐ Fla	VERT SLOPE: at ght $(2^{\circ} - 5^{\circ})$ evious $(>5^{\circ})$	Culvert len V Roadway e	Vidth:		(ft) (ft)
POTENTIAL :	RESTORATION CANDIDATE	Fish barrier re		•	placement	Upstream sto	rage retr	ofit	
Is SC actin	G AS GRADE CONTROL	□ No □ Yo	es Unk						
	EXTENT OF PHYSICAL BLO	OCKAGE:		BLO	CKAGE SEVE	RITY: (circle	#)		
If yes for fish barrier	☐ Temporary ☐ Unkno CAUSE: ☐ Drop too high Water D ☐ Flow too shallow Water D	rop:(in)	A structure such a road culvert on a greater stream ble upstream movem anadromous fish; passage device p	3rd order or ocking the ent of no fish resent.	A total fish block tributary that wo significant reach or partial blocka- interfere with the anadromous fish	uld isolate a of stream, ge that may migration of l.	A temporal beaver dan the very he very little v above it; no as waterfal	n or a bloc ead of a str iable fish h atural barri	kage at eam with abitat
Nomes/Sizes	Other: Soil Moveme	nt/ clonkar	. 5		4 3	. (<u> </u>	1	



SURVEY REACH	D; 🔼 💮 w	rrshd/Subshd: W	35	DATE: 12/3/09	Assessed by:	ś
START TIM	IE:12 : 00 AM/0	b LMK:			IK;	GPS ID:
LAT4 . 50	27 " LONG 7	12. 45.04"	LAT 41 . 50 .	10 " LONG 72 . 44	1 57 "	CONO
DESCRIPTION: CC		,	DESCRIPTION:	· ^ · · · · · · · · · · · · · · · · · ·	, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	Washington Comments
[CALCAL A CYCLE	Na nativ	<u> </u>	Atthence w/Th	2 harbary	<u>. </u>
RAIN IN LAST 24 HO	DURS A Heavy rain	☐ Steady rain	PRESENT CONDITIONS	☐ Heavy rain ☐ Stea	ndy rain Intern	nittent
□ None	☐ Intermitten	•	☐ Clear	☐ Trace ☐ Ov	•	ı
	D USE: Industria		· · · · · · · · · · · · · · · · · · ·	Suburban/Res SFore		utional Along
SURROUNDING EAR			and the second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second s		er: Wed mea	Hara Car
AVEDACI	CONDITIONS (che			SKETCH AND SITE IMPA	CT TRACKING	
			(i stannig Darust kingdomberkethildfortbelegistoverses	f survey reach. Track location		ita imparta
BASE FLOW AS % CHANNEL WIDTH	□ 0-25% □ 25-50 %	□ 50%-75% ■ 75-100%	within the survey rea	survey reach: Track locality och (OT, ER, IB,SC, UT, TR, I leemed appropriate. Indicato	MI) as well as any a	
DOMINANT SUBSTR					1	
☐ Silt/clay (fine or		obble (2.5 –10")		al	MAN	
Sand (gritty) Gravel (0.1-2.5		oulder (>10") ed rock		Visi	500×2	
□ O14701 (0.1°2.0	,			1	4	
	□ Clear Turbi				TOH	
☐ Stained (clear, n		Opaque (milky)	•) JE	
Other (chemicals,	dyes)			\circ		المامعين
AQUATIC PLANTS	Attached: nor	ne ⊠ some □ lots		\		103-1-
IN STREAM	Floating: 🗆 non	e 🖊 some 🗆 lots		11	TAK.	749 da.
WILDLIFE IN OR	(Evidence of)				- H	My Aceut
AROUND STREAM	☐ Fish ☐ Beav		(to A	old	START
	☐ Snails 🖼 Othe			2	FARM	, mark %, 7
Constant Control	☐ Mostly shaded		FWODEN Y	Suesteen PALMA	ychasing	
STREAM SHADING (water surface)	➡Halfway (≥50%☐ Partially shade		*	CONTRACTOR CONTRACTOR	ars 📐	ł
,	☐ Unshaded (< 2		Su	Marine 1	17	
	Downcutting	Bed scour		1	•	
CHANNEL	Widening	Bank failure		1		
DYNAMICS	Headcutting	Bank scour	1	asce !		
Unknown	Aggrading	Slope failure	77/5	NEVE	Δ	1. 20
	Sed. depositio	n Channelized	9"		[] ROGEN	march and
BAY)KFULL	Height: LT-bank	2 ′ (ft)			NEW .	THE STATE OF CHECKER,
CHANNEL " DIMENSIONS	RT bank	(ft)		1	A	
(FACING	Width: Bottom			ملامر ،		.
DOWNSTREAM)		'		mendani		
	Дор— Сами по на Съста и по на Съгда и по на Съгда и по на Съста и по на Съгда и по на Съгда и по на Съгда и по на С	(ft)	<u> </u>	thin &		
	REACH ACCESSIBILI	24/160 per second 2012/19/19/19/19/19/19/19/19/19/19/19/19/19/	CALL	Toxest	•	
Good: Open area in	Fair: Forested or developed area	Difficult. Must cross wetland, steep slope, or		IN ILETON	- carlvert	.
public ownership, sufficient room to	adjacent to stream.	sensitive areas to get to			Commence of the second second	
stockpile materials,	Access requires tree removal or impact to	stream. Few areas to stockpile available		DIKE	2111-1111-1111	
easy stream channel access for heavy	landscaped areas.	and/or located a great		The same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the sa		
equipment using	Stockpile areas small or distant from	distance from stream. Specialized heavy		forded.	\	
existing roads or trails.	stream.	equipment required.		\ AREA		
5	4 3	2 1		1.		
NOTES: (biggest prob	oiem you see in survey	reach)		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		6 Maria
Some a	esideutial	areas oweld	has brilling h	h to make a		THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE S
(partio, lav	ms, etc) o	therwise this	is beautifu	of to bank or II - MIX of for REPORTED TO	AUTHORITIES ☐	YES NO
WC+ ME	icians 4	and other man				

	Optimal	Suboptimal	Marginal	Poor
T- 4	<u> </u>	-	MINISHMI	rour
IN-STREAM HABITAT (May modify criteria based on appropriate habitat regime)	Greater than 70% of substrate favorable for epifaunal colonization and fish cover, mix of snags, submerged logs, undercut banks, cobble or other stable habitat and at stage to allow full colonization potential (i.e., logs/snags that are not new fall and not transient).	40-70% mix of stable habitat; well- suited for full colonization potential; adequate habitat for maintenance of populations; presence of additional substrate in the form of newfall, but not yet prepared for colonization (may rate at high end of scale).	20-40% mix of stable habitat; habitat availability less than desirable; substrate frequently disturbed or removed.	Less than 20% stable habitat; lact of habitat is obvious; substrate unstable or lacking.
	20 19 18 17 16	(15) 14 13 12 11	10 9 8 7 6	5 4 3 2 1 0
VEGETATIVE PROTECTION (score each bank, determine sides by facing downstream)	More than 90% of the streambank surfaces and immediate riparian zone covered by native vegetation, including trees, understory shrubs, or nonwoody macrophytes; vegetative disruption through grazing or mowing minimal or not evident; almost all plants allowed to grow naturally.	70-90% of the streambank surfaces covered by native vegetation, but one class of plants is not well-represented; disruption evident but not affecting full plant growth potential to any great extent; more than one-half of the potential plant stubble height remaining.	50-70% of the streambank surfaces covered by vegetation; disruption obvious; patches of bare soil or closely cropped vegetation common; less than one-half of the potential plant stubble height remaining.	Less than 50% of the streambank surfaces covered by vegetation; disruption of streambank vegetation is very high; vegetation has been removed to 5 centimeters or less in average stubble height.
	Left Bank 10 🕥	8 7 6	5 4 3	2 1 0
	Right Bank 10 9	8 7 6	- 5 4 3	2 1 0
BANK EROSION (facing downstream)	Banks stable; evidence of erosion or bank failure absent or minimal; little potential for future problems. <5% of bank affected.	Grade and width stable; isolated areas of bank failure/erosion; likely caused by a pipe outfall, local scour, impaired riparian vegetation or adjacent use.	Past downcutting evident, active stream widening, banks actively eroding at a moderate rate; no threat to property or infrastructure	Active downcutting; tall banks on both sides of the stream eroding a fast rate; erosion contributing significant amount of sediment to stream; obvious threat to properly or infrastructure.
	Left Bank 10	8 7 6	5 4 3	2 1 0
	Right Bank 10	8 7 6	5 4 3	2 1 0
FLOODPLAIN CONNECTION	High flows (greater than bankfull) able to enter floodplain. Stream not deeply entrenched.	High flows (greater than bankfull) able to enter floodplain. Stream not deeply entrenched.	High flows (greater than bankfull) not able to enter floodplain. Stream deeply entrenched.	High flows (greater than bankfull) not able to enter floodplain. Stream deeply entrenched.
	(20) 19 18 17 16	15 14 13 12 11	10 9 8 7 6	5 4 3 2 1 0
	OVER	ALL BUFFER AND FLOODPLA	N CONDITION	
32.00. 101-1016.000 3	Optimal	Suboptimal	Marginal	Poor
VEGETATED Buffer Width	Width of buffer zone >50 feet; human activities (i.e., parking lots, roadbeds, clear-cuts, lawns, crops) have not impacted zone.	Width of buffer zone 25-50 feet; human activities have impacted zone only minimally.	Width of buffer zone 10-25 feet; human activities have impacted zone a great deal.	Width of buffer zone <10 feet: little or no riparian vegetation due to human activities.
	Left Bank 10	8 7 6	5 4 3	2 1 0
	Right Bank 10 9	8 7 🕖	5 4 3	2 1 0
FLOODPLAIN VEGETATION	Predominant floodplain vegetation type is mature forest	Predominant floodplain vegetation type is young forest	Predominant floodplain vegetation type is shrub or old field	Predominant floodplain vegetation type is turf or crop land
	20 19 18 17 16	15 14 13 12 11	10 9 8 7 6	5 4 3 2 1 0
FLOODPLAIN HABITAT	Even mix of wetland and non-wetland habitats, evidence of standing/ponded water	Even mix of wetland and non-wetland habitats, no evidence of standing/ponded water	Either all wetland or all non- wetland habitat, evidence of standing/ponded water	Either all wetland or all non- wetland habitat, no evidence of standing/ponded water
	9 18 17 16	15 14 13 12 11	10 9 8 7 6	5 4 3 2 1 0
FLOODPLAIN ENCROACH- MENT	No evidence of floodplain encroachment in the form of fill material, land development, or manmade structures	Minor floodplain encroachment in the form of fill material, land development, or manmade structures, but not effecting floodplain function	Moderate floodplain encroachment in the form of filling, land development, or manmade structures, some effect on floodplain function	Significant floodplain encroachment (i.e. fill material, land development, or man-made structures). Significant effect on floodplain function
	20 19 18 17 16	(13) 14 13 12 11		

Sub Total In-stream: 68 /80

Buffer/Floodplain:

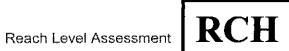
5] /80

Total Survey Reach ______/160

WATERSHED	DISUBSHED: WBS			DATE	e: <u>19</u>	<u>/ 03 /09</u>	ASSE	SSED BY: (36/cv
SURVEY REA		Time: <u> </u> 2 :∞				: (Camera-Pic	#) ^ane	/#	•
SITE ID: (Con	ndition#) SCLAT	41050 B				<u>04</u> " LM	K	GPS (Unit ID)
		A FI	oool-course	ol di	KC.			5	
TYPE: Ros	ad Crossing Railroad Crossi	ng 🏿 Manmade	Dam Beav	er Dan	<u> </u>	Geological Form	ation 🔲	Other:	
	SHAPE:	#Barrels:	MATERIAL:	A	ALIGN				iable, sketch)
	Arch Bottomless	Single	Concrete			· ·	Barrel dia	meter: _	<u>5 </u>
FOR ROAD/	☐ Box ☐ Elliptical ☑ Circular	Double Triple	Metal			flow-aligned		Height: _	(ft)
RAILROAD	Other:	Other:	Other:	L	Do	not know			
CROSSINGS	CONDITION: (Evidence of)		•	(CULV	ERT SLOPE:	Culvert le	*	(ft)
ONLY	Cracking/chipping/corrosion	Downstream	n scour hole		_ Flat	I .		Width: _	(ft)
	Sediment deposition	Failing emb	ankment			tht $(2^{\circ} - 5^{\circ})$			
	Other (describe):			L	Ob	/ious (>5°)	Roadway	elevation:_	(ft
Document	Droman (mrs.: C					, , ,		-	•.
	RESTORATION CANDIDATE	Fish barrier re		•	air/rep	iacement Up	stream st	orage retrof	1 t
Ø no		Local stream							
Is SC ACTING	G AS GRADE CONTROL	□ No □ Ye	es Unk	nown					
	EXTENT OF PHYSICAL BLO	CKAGE:			BLO	CKAGE SEVERI	TY: (circ	le #)	
	☐ Total ☐ Partial ☐ Temporary ☐ Unknow	vn	A structure such	as a dam	ı or	A total fish blockage			barrier such as a
If yes for		•••	road culvert on a greater stream bi			tributary that would significant reach of			or a blockage at d of a stream with
fish barrier	CAUSE:	()	upstream movem	ent of		or partial blockage	hat may	very little vial	ole fish habitat
	☐ Drop too high Water Dr☐ Flow too shallow Water Do	rop: (in) epth: (in)	anadromous fish; passage device p			interfere with the m anadromous fish.	gration of	above it; natu as waterfalls.	ıral barriers such
	Other:	sptn (m <i>)</i>							
NOTES/SKET	•		5		4	3		2	1
TOTESISKET	CII.								
	•								
						,			
								,	
		1							
							·		
N.									
								THORITIES [

T	
	К.
▂	_

WATERSHED/SUBSHED: WBS		-	DATE: 12/05/09	ASSESSED BY: W//6
SURVEY REACH: 3	Тіме: 2	.: <u>30_</u> am/ @	Рното ID: (Camera-Pie	
SITE ID: (Condition-#) START L.	лт <u>41 °50 '40</u> " L	ong <u>72°45</u> '		GPS: (Unit ID)
R END LA	T°_'L	ONG'	" LMK	
				·
LT KRT Both	ADEQUATE: Lack of v	vegetation Too: planted Other		asive plants
<u> </u>	Institutional Golf Cour		er Public	•
(Facing downstream) LT Bank RT Bank			□: □:	1
DOMINANT Paved	Bare ground Turf/law	n Tall grass S		Other
LAND COVER: LT Bank		. 🗆	Z L 🗆	□:
RT Bank 🔲		\ <u></u>		□ :
INVASIVE PLANTS: None	Rare Pa	artial coverage	Extensive coverage	unknown
STREAM SHADE PROVIDED? Non	e 🛚 Partial 📗	Full WETLA	NDS PRESENT? ☐ No	☐ Yes ☐ Unknown
POTENTIAL RESTORATION CANDIDA	TE Active referestativ	on Creenway de	sign Natural regenerati	on Tinyagiyag ramayal
DINO CANDIDA	Other:	onoreenway de	sign	on invasives removar
RESTORABLE AREA		Impacted area on public	c land Impacted area on eithe	r Impacted area on private
LT BANK RT, Length (ft): 20 へ 50	REFORESTATION POTENTIAL: (Circle #)	where the riparian area not appear to be used f specific purpose; plenty area available for planti	does public or private land the presently used for a sport of purpose; available area	eat is land where road; building ecific encroachment or other
Width (ft):		5	4 3	2 1
POTENTIAL CONFLICTS WITH REFOR Poor/unsafe access to site Existing		despread invasive plere animal impacts		ination Lack of sun
NOTES: Concrete or ASPW				
·				
			•	•
			•	



SURVEY REACH	1D:1405-04 WI	rrshd/Subshd: WAS	H Brodic Soum	DATE: 12/3	109 ASSESSE	PHCM
START TIM	ie: <u>12 : 30</u> am/ 6 5	LMK:	END TIME:_	: 00 AM/N	LMK:	GPS ID:
LAT 41 . 50 .	40 " LONG	20 44 · 599"	LAT41 . 50 '3		2 . 44 . 41	11
· 	OM ONFWE					
DESCRIPTION: PR	on gorwa	DOE ON C	DESCRIPTION: CV	rvery letur	Trumens be	74-12
D	rung Til	□ Standeri-	Precent conditions	D Hanry main	☐ Stoody win ☐	Intermittant
RAIN IN LAST 24 HO		☐ Steady rain	PRESENT CONDITIONS Clear	☐ Heavy rain	☐ Steady rain ☐ ☐ Overcast ☐	_
□ None	☐ Intermittent			☐ Trace		Partly cloudy
SURROUNDING LAN		il ☐ Commercial urse ☐ Park		☑ Suburban/Res ☑ Pasture	Forested □ □ Other:	Institutional
Averagi	CONDITIONS (che	ck applicable)	REACH S	SKETCH AND SIT	E IMPACT TRAC	KING
BASE FLOW AS % CHANNEL WIDTH	□ 0-25% □25-50 %	□ 50%-75% □ 75-100 %	Simple planar sketch o within the survey rea features a	ch (OT, ER, IB,SC,		as any additional
DOMINANT SUBSTR ☐ Silt/clay (fine or Sand (gritty) ☐ Gravel (0.1-2.5)	slick) \square C	obble (2.5 –10") oulder (>10") ed rock	OMIBUTAN (END)	1	·	
		Opaque (milky)	Lysun +			TEAN AND
AQUATIC PLANTS IN STREAM	Attached: In non-	e ⊠some □ lots e I⊒some □ lots	Puo L	O OLAF	AM SOLL ST	NEW SHASS
WILDLIFE IN OR AROUND STREAM	(Evidence of) ☐ Fish ☐ Beav ☐ Snails ☑ Othe	rer □ Deer r: HAWK GNEGNE	TIASH	1	一大	ر ا ۲۰۰۸رین عدر ا
STREAM SHADING (water surface)	☐ Mostly shaded ☐ Halfway (≥50% ☐ Partially shaded ☐ Unshaded (< 25	%) d (≥25%)	UN MOTEOR BE ZMIDOUS	POND POND	OPEN FIE	
CHANNEL DYNAMICS Unknown	Downcutting Widening Headcutting Aggrading Sed. depositio	Bed scour Bank failure Bank scour Slope failure Channelized			D D	E RUIPMENT
CHANNEL DIMENSIONS (FACING DOWNSTREAM)	Height: LT bank HT bank Width: Boylom Top	7' (ft) 3AUKFUW (ft)				/ ~~ vs
	REACH ACCESSIBILI	r	State of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state			
Good: Open area in public ownership,	Fair: Forested or developed area adjacent to stream.	Difficult. Must cross wetland, steep slope, or sensitive areas to get to				
sufficient room to stockpile materials,	Access requires tree	stream. Few areas to				
easy stream channel	removal or impact to landscaped areas.	stockpile available and/or located a great				
access for heavy equipment using	Stockpile areas	distance from stream.			•	
existing roads or trails.	small or distant from	Specialized heavy				
5 (equipment required. 2 I	7			
			DOLLN FUEL LA	Trong (a) Fr	WEALL DA	MA FRACION
+ RDIMENT	CONTROL,	PUTTING SEDI	MOND EXCAUA MONT INTO SEP UT, MODING;	SEAM. AC	SO EXTER	JSIVE
		-") CHOUPPIST	ין שטווטוטויון ויי	REPOR	ΤΕΌ ΤΟ ΑΠΤΗΘΡΙΤΙ	ies 🗌 Yes 🔲 No
i				ACI OR	COLINONIII	

	Optimal	Suboptimal	Marginal	Poor	
IN-STREAM HABITAT (May modify criteria based on appropriate habitat regime)	Greater than 70% of substrate favorable for epifaunal colonization and fish cover; mix of snags, submerged logs, undercut banks, cobble or other stable habitat and at stage to allow full colonization potential (i.e., logs/snags that are not new fall and not transient).	40-70% mix of stable habitat; well- suited for full colonization potential; adequate habitat for maintenance of populations; presence of additional substrate in the form of newfall, but not yet prepared for colonization (may rate at high end of scale).	20-40% mix of stable habitat; habitat availability less than desirable; substrate frequently disturbed or removed.	Less than 20% stable habitat; lack of habitat is obvious; substrate unstable or lacking.	
	20 19 18 17 16	15 14 13 12 11	10 9 8 7 6	5 4 3 2 1 0	
VEGETATIVE PROTECTION (score each bank, determine sides by facing downstream)	More than 90% of the streambank surfaces and immediate riparian zone covered by native vegetation, including trees, understory shrubs, or nonwoody macrophytes; vegetative disruption through grazing or mowing minimal or not evident; almost all plants allowed to grow naturally.	70-90% of the streambank surfaces covered by native vegetation, but one class of plants is not well-represented; disruption evident but not affecting full plant growth potential to any great extent; more than one-half of the potential plant stubble height remaining.	50-70% of the streambank surfaces covered by vegetation; disruption obvious; patches of bare soil or closely cropped vegetation common; less than one-half of the potential plant stubble height remaining.	Less than 50% of the streambank surfaces covered by vegetation; disruption of streambank vegetation is very high; vegetation has been removed to 5 centimeters or less in average stubble height.	
	Left Bank 10 9	8 7 6	3 4 3	2 1 0	
	Right Bank 10 9	8 7 6	5 4 3	2 1 0	
BANK EROSION (facing downstream) Banks stable; evidence of erosion or bank failure absent or minimal; little potential for future problems. <5% of bank affected.		or bank failure absent or minimal; little potential for future problems.		Active downcutting; tall banks on both sides of the stream eroding a a fast rate; erosion contributing significant amount of sediment to stream; obvious threat to property or infrastructure.	
	Left Bank 10 9	8 7 6	5 4 3	2 1 0	
	Right Bank 10 9	8 7 6	5 4 3	2 1 0	
FLOODPLAIN CONNECTION	High flows (greater than bankfull) able to enter floodplain. Stream not deeply entrenched.	High flows (greater than bankfull) able to enter floodplain. Stream not deeply entrenched.	High flows (greater than bankfull) not able to enter floodplain. Stream deeply entrenched.	High flows (greater than bankfull) not able to enter floodplain. Stream deeply entrenched.	
	20 19 18 17 16	15 14 13 12 (11)	10 9 8 7 6	5 4 3 2 1 0	
	OVER	ALL BUFFER AND FLOODPLA	N CONDITION		
***************************************	Optimal	Suboptimal	Marginal	Poor	
VEGETATED BUFFER WIDTH	Width of buffer zone >50 feet; human activities (i.e., parking lots, roadbeds, clear-cuts, lawns, crops) have not impacted zone.	Width of buffer zone 25-50 feet; human activities have impacted zone only minimally.	Width of buffer zone 10-25 feet; human activities have impacted zone a great deal.	Width of buffer zone <10 feet: little or no riparian vegetation due to human activities.	
	Left Bank 10 9	8 7 6	5 4 3	2 1 0	
FLOODPLAIN VEGETATION	Predominant floodplain vegetation type is mature forest	8 7 6 Predominant floodplain vegetation type is young forest	5 4 3 Predominant floodplain vegetation type is shrub or old field	Predominant floodplain vegetation type is turf or crop land	
	20 19 18 17 16	. 15 14 13 12 11	10 9 8 7 6	5 4 3 (2) 1 0	
FLOODPLAIN HABITAT	Even mix of wetland and non-wetland habitats, evidence of standing/ponded water	Even mix of wetland and non-wetland habitats, no evidence of standing/ponded water	Either all wetland or all non- wetland habitat, evidence of standing/ponded water	Either all wetland or all non- wetland habitat, no evidence of standing/ponded water	
	20 19 18 17 16	15 14 13 12 11	10 9 8 7 6	5 4 3 2 1 0	
FLOODPLAIN ENCROACH- MENT	No evidence of floodplain encroachment in the form of fill material, land development, or manmade structures	Minor floodplain encroachment in the form of fill material, land development, or manmade structures, but not effecting floodplain function	Moderate floodplain encroachment in the form of filling, land development, or manmade structures, some effect on floodplain function	Significant floodplain encroachment (i.e. fill material, land development, or man-made structures). Significant effect on floodplain function	
	20 19 18 17 16	15 14 13 12 11	10 9 (8) 7 6	5 4 3 2 1 0	

Sub Total In-stream: 43/80 + Buffer/Floodplain: 8/80 = Total Survey Reach 6/1/160

Trash and Debris

TR

WATERSHED/SUI	BSHED: WKS		DATE: 12_/0	3/09	ASSESSED BY: B6+cm				
SURVEY REACH]	ID: 04	TIME: 12 : 30 AM/6	Рното ID: (Са	imera-Pic#)fC63/	00 # 38,39,41,43				
SITE ID: (Condition	1.#) TR-one LAT_	* See below *		" LMK	GPS: (Unit ID)				
TYPE: Industrial Commercial Residential	Appliances Y	aper	SOURCE: Unknown Flooding Illegal dump Local outfall	LOCATION: Stream Riparian Are Lt bank Rt bank	AMOUNT (# Pickup truck loads):				
POTENTIAL REST	POTENTIAL RESTORATION CANDIDATE Stream cleanup Stream adoption segment Removal/prevention of dumping Other:								
If yes for trash or	EQUIPMENT NEEDED:	Heavy equipment T	rash bags 🔲 Unkno	own	DUMPSTER WITHIN 100 FT:				
debris removal	WHO CAN DO IT:		Gov 🔲 Hazmat Te		Yes 🐔 No 🔲 Unknown				
CLEAN-UP POTENTIAL: (Circle #)	A small amount of trash (i.e., than two pickup truck loads) loc inside a park with easy access	I WITH ASSIV SAMES I I I I I I I	nay have been dumped of it could be cleaned up it	ver A large amount	of trash or debris scattered over a large cess is very difficult. Or presence of drums hazardous materials				
	5	4	3	2	1				
stone grust Retween PariAle Re	mill wheels place 41°50'35"/72° Sidence these	red in the st	REAM CLAR 1 41°50'34 have sent	mnel 0"/72°44'4 Mental	a tractor tries of 1" UARUR + MAY WAVE TO AUTHORITIES YES ANO				

+ channel
Modifica
Impacted Buffer

IB

MATERIAL SUBSHED WE S TIME: Antimy PHOTO ID: (Camera-Pic ti)PROZOC # 31, 32, 34, 35 STEED! (Condition*) STAF LAT						· · · ·			
END LAT	WATERSHED/SUBSHED:	WBS				DATE	12/3/09	Ass	Sessed by: BG+CM
END LAT	SURVEY REACH:	ay				Рноте	o ID: (Camera-P	ic #) ρ ο	0700 #31,32,34
IMPACTED BANK: REASON INADEQUATE: Lack of vegetation Too narrow Widespread invasive plants	go cisque lincia e coralista de la como como contra el como contra en como como como como como como como com	START LA	ΛΤ <u>°</u> *	see so	LONG	•	LMK_		GPS: (Unit ID)
Recently planted Other: Recent Exception Nobolk + No	Beile Kingmer auch einer	END LA	ΛΤ°	<u>'"</u> " I	LONG°	* *	LMK		
Recently planted Other: Recent Exception Nobolk + No									
LAND USE: Private Institutional Golf Course Park Other Public Cfacing downstream LT Bank Charles Ch		REASON IN							
Continued downstream LT Bank Continued area on private and sheer to planting adequate Continued area for planting equate		Private						4 6 2 42 42 8	plant
DOMINANT LAND COVER: LT Bank Paved Bare ground Turt/Tawn Tall grass Shrub/scrub Trees Other LAND COVER: LT Bank Partial		nk 🔼					:		'See \
DOMINANT LAND COVER: LT Bank Paved Bare ground Turt/Tawn Tall grass Shrub/scrub Trees Other LAND COVER: LT Bank Partial	RT Bar	nk 🔼					:		
RT Bank	DOMINANT	<u> </u>	Bare ground	Turf/lav	wn Tall grass	Shrub/s	crub Trees	Other	
INVASIVE PLANTS: None Rare Partial coverage Extensive coverage unknown STREAM SHADE PROVIDED? None Partial Full WETLANDS PRESENT? No Yes Unknown POTENTIAL RESTORATION CANDIDATE Active reforestation Greenway design Natural regeneration Invasives removal Invasives removal Invasives removal Invasives removal Invasives removal Invasives removal Invasives removal Invasives removal Invasives removal Invasives removal Invasives removal Invasives removal Invasives removal Invasives removal Invasives removal Invasives removal Invasives removal Invasive plants Invasive processing used for a specific purpose, plenty of area available area for planting encochment or other public or private land that is presently used for a specific purpose, plenty of area available area for planting encochment or other propose, plenty of area available for planting of area available for planting adequate Width (fit): S 4 3 2 1 POTENTIAL CONFLICTS WITH REFORESTATION Severe animal impacts (deer, beaver) Other: NOTES: Dumping (Mchading Ac unit, ports, beacks bothles, insulation, pacts of An Abare - gland swimming pool) Described the same plants of the same plants of the same plants of the same plants of the same plants of the same plants of the same plants of the same plants of the same plants of the same plants of the same plants of the same plants of the same plants of the same plants of the same plants of the same plants of the same plants of the same plants of the same plants of the same plants of the same plants of the same plants of the same plants of the same plants of the same plants of the same plants of the same plants of the same plants of the same plants of the same plants of the same plants of the same plants of the same plants of the same plants of the same plants of the same plants of the same plants of the same plants of the same plants of the same plants of the same plants of the same plants of the same plants of the same plants of the same plants of the same plants of the same plants of the same plants of the same plant	LAND COVER: LT Ba	nk 🔲						□:	
STREAM SHADE PROVIDED? None Partial Full WETLANDS PRESENT? No Yes Unknown POTENTIAL RESTORATION CANDIDATE Active reforestation Greenway design Natural regeneration Invasives removal	RT Ba	nk 🗌	<u> </u>					<u>:</u>	
POTENTIAL RESTORATION CANDIDATE Active reforestation Greenway design Natural regeneration Invasives removal	Invasive Plants:	✓ None	☐ Rare	☐ P	artial coverage	☐ Ex	tensive coverage	unl	known
RESTORABLE AREA Length (ft): 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t	STREAM SHADE PROVII	DED? 🗖 Non	e 🔲 Part	ial 🗆] Full WET	LANDS PI	RESENT? 🗌 No	□ Y	es Unknown
RESTORABLE AREA Length (ft): 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t 200' t									
RESTORABLE AREA Length (ft):	POTENTIAL RESTORATI	ON CANDIDA	TE Activ	e reforestati	ion Greenway	design (2	Natural regenera	tion 🗀	Invasives removal
RESTORABLE AREA Length (ft): \(\frac{\text{LT}}{\text{BANK}} \) RT Length (ft): \(\frac{\text{V200'}}{\text{5}} \) \(\frac{\text{V300'}}{\text{5}} \) EXECUTE POTENTIAL: (Circle #) REFORESTATION POTENTIAL: (Circle #) REFORESTATION POTENTIAL: (Circle #) REFORESTATION POTENTIAL: (Circle #) REFORESTATION POTENTIAL: (Circle #) REFORESTATION POTENTIAL: (Circle #) REFORESTATION POTENTIAL: (Circle #) REFORESTATION POTENTIAL: (Circle #) REFORESTATION POTENTIAL: (Circle #) REFORESTATION POTENTIAL: (Circle #) REFORESTATION POTENTIAL: (Circle #) REFORESTATION POTENTIAL: (Circle #) Widespread invasive plants Potential contamination Lack of sun Potential contamination Potential	no ·		☑ Othe	r:enfa	e coment	?			
Length (ft): Name Potential RESTORABLE AREA				1		Impacted area on eith	ner	Impacted area on private	
Width (fi): Circle #) area available for planting planting adequate available area for planting	IT PA	r RT	REFOREST	ATION	where the riparian	area does	public or private land	that is	land where road; building
Width (ft): Circle #) area available for planting planting adequate available area for planting	Length (ft): ~200 ±	~300' ±	POTENTIAL	<i>.</i> :					
POTENTIAL CONFLICTS WITH REFORESTATION Widespread invasive plants Potential contamination Lack of sun Poor/unsafe access to site Existing impervious cover Severe animal impacts (deer, beaver) Other: NOTES: - Dumping (Mchoding Ac unit, pots, bricks, bottles, insulation, parts of An Albane - glaund swimming pool) a 41°50′32″/72°44′56″ - Frether damsteam from dumpsite (T) + possibly the same property, there is a recently excampted pand, there is trash, sediment, excess intrients, no shade cover, Rumoff + no Mulch seed dam on topsoil - SMALL dam + waterball with Rootbridge here is well	миниции и и и и и и и и и и и и и и и и и		(Circle #)			•	1	50 101	
Poor/unsafe access to site Existing impervious cover Severe animal impacts (deer, beaver) Other: NOTES: -> Dumping (Mchoding Ac unit, ports, bricks, bottles, insulation, PARTS of An Above - glound swimming pool) a 41°50'32"/72°44'56" -> Fuether dawnsteeam from dumpsite (1) + possibly the same property, there is a recently excanated pond, there is teash, sediment, excess nutrients, no shade cover, Runoff + no Mulch Isled dam on topsoil -> SMALL dam + waterbase with Poortbridge here is well	Width (ft):				5		1 3		2 1
NOTES: -> Dumping (Mcheding AC unit, pots, bricks, bottles, insulation, parts of Au Above - glaund swimming pool) a 41°50'32"/72°44'56" -> Further dampsteern from dumpsite (T) + possibly the same property, there is a Recently excanated pand. There is trash, sediment, excess nutrients, no shade cover, Runoff + no Mulch seed dam on topsoil -> SMALL dam + waterball with Pootbridge here is well									n Lack of sun
Frether daystream from dumpsite (1) + possibly the same property, there is a recently exempted pand, there is trash, sediment, excess nutrients, no shade cover, runoff + no mulch/seed days on topsoil a small days + waterbase with footbridge here as well			=			· · · · · · · · · · · · · · · · · · ·			
Frether daystream from dumpsite (1) + possibly the same property, there is a recently excanated pand, there is trash, seasinest, excess nutrients, no shade cover, runoff + no Mulch seed down on topsoil + shall dam + waterbase with footbridge here as well	NOTES: - DUM	ibind civ	ichioling	AC un	it, pots, be	icks, b	othes linsu	ህ ት ጎን ና	M, PARTS OF
Frether daystream from dumpsite (T) + possibly the same property, there is a recently excanated pond, there is trash, sediment, excess nutrients, no shade cover, runoff + no Mulch seed down on topsoil + shall dam + waterbase with Pootbridge here as well	. AVI	M30VE -	graund	SMINNI	miny pool	100	41.20.32	1776	P°44'56"
property, there is a recently exchanted pand, there is trash, seasinent, excess nutrients, no shade cover, runoff + no Mulch seed down on topsoil & SMAPL dam + waterbase with Pootbridge here as well	- Frethe	n dawn	cheerm	from	dumpsi	te (r)) + oxxildu	H	
sediment, excess nutrients, no shade cover, known + no Mulch seed down on topsoil a shall dam + waterbase with Pootbailings here as well	או שבוה לוני.	ty Hair	ο .< Λ (لله مرح	ا م ۱۹۸۸ ا		\aad 41 a	۱۱ ک~ ~	TRACK
Mulch seed down on topsoil A SMARL dann + waterbare with Pootbaridge here as well	Coper.	11.1000	C D PT 1	-coeviii	y exchina		to careo	دا ک	1000 ± 100
A SMALL dam + waterback with Pootbacking were its well	Seaun	neuro 14	× CESS 1	MANA	MD NO	8014		, Lu	
	Mulo	h Iseed	daw	an to	psoil -				
	-> SMARL	dAM +	waters	ب عبد	ith Room	the salt	ze nere	15	well
				•					
	•								

Impacted Buffer

IB

WATERSHED/SUBSHED:	WBS]	Date: <u>/</u> ∂	103/00	Ass	ESSED BY: 🗘	M+B
SURVEY REACH:	4		TIME: 12	-: <u>45</u> am/(1	Рното II): (Camera-F	ic #) R	2300 # 36	37,38
SITE ID: (Condition-#)	START LA	т <u> 41°51</u>	' 38 " 1	LONG 72 °			LMK		GPS: (Unit	
		т <i>41°5</i> 0					LMK		1	
	DITO DI			20110 <u> - </u>	<u></u> .					
IMPACTED BANK: LT RT Both	REASON INA		T	vegetation [_		Widespread in	ivasive p	olants	
LAND USE:	Private I	nstitutional	Golf Cou	rse Park	Oth	er Public			i	
(Facing downstream) LT Bank	. ,]	□:				
RT Bank						<u> </u>	e .			
DOMINANT	Paved	Bare ground		_	rass S	Shrub/scrub	Trees	Other		
LAND COVER: LT Bank			区]		片			
RT Banl		U	<u>\</u>			U	<u> </u>	:		
Invasive Plants:	☐ None	A Rare	☐ P	artial coverag	ge	Extens	sive coverage	unk	cnown	
STREAM SHADE PROVIDE	ED? 🛛 None	e + Æ Part	ial [Full V	VETLA	NDS PRESI	ENT? Z No	☐ Y	es 🔲 Unknow	m
POTENTIAL RESTORATION	ON CANDIDA	ΓΕ ∏Activ		on Green	way des	sign 🖾 N	latural regenera	ation 🗀	Invasives remo	val
RESTORABLE AREA				Impacted area	•		pacted area on eit		Impacted area on	•
LT BANK	RT	REFOREST		where the ripa not appear to			iblic or private land esently used for a		land where road; to encroachment or o	-
Length (ft): ^500	1500'	POTENTIAL	Ji	specific purpor	se; plenty	rof pu	rpose; available a		feature significantl	y limits
Width (ft):		(Circle #)		area available	tor planti	ng pia	anting adequate		available area for	planting
1—				5	· · · · · · · · · · · · · · · · · · ·	4	3	<u> </u>	2	<u>D</u>
POTENTIAL CONFLICTS V Poor/unsafe access to site	. DEviction	immomiono	a. 🗀 sa.	despread involvere animal in	nnacta	(door boos	on) Dothar		n Lack of s	
NOTES: POLIAJE	laws -	obl A	msk	peopert	ł. N	sor l	ikely	rest	CAndli	chite
Notes: Periate but war	th noti	un As	, the	\Ack	f	shed	e 6-	5VC	th a low	9
sketen i	of str	eaux H	MT	temp	s d	aunst	New	•		
•										
									e.	
									ř.	
						•				

WATERSHED	/SUBSHED: W&≤			Date: <u>/⊋</u>	<u>103/09</u>	ASSES	SSED BY: (cm +B
SURVEY REA		TIME: 12 : 30		Рното ID	: (Camera-Pic	#) PC03	00 #36	+34
SITE ID: (Con	dition:#) SCA LAT	. see	LONG	0 1		1K	GPS (Init ID)
	_			ndame				
TYPE: Roa	ad Crossing Railroad Crossin			<u> </u>	Geological Form			
FOR ROAD/ RAILROAD	SHAPE: Arch Bottomless Single Box Elliptical Double Circular Triple Other: Other:		☐ Concrete ☐ FI ☐ Metal ☐ No		NMENT: ow-aligned t flow-aligned not know	Barrel dia	Height:	(ft)
CROSSINGS ONLY	CONDITION: (Evidence of) Cracking/chipping/corrosion Sediment deposition Other (describe):	m scour hole		ght $(2^{\circ} - 5^{\circ})$		ength:(ft)		
no	RESTORATION CANDIDATE	Fish barrier re	repair Othe		placement U	pstream st	orage retrofit	;
IS SC ACTING	G AS GRADE CONTROL	□ No □ Yo	es 🔲 Unkı					
	EXTENT OF PHYSICAL BLO	CKAGE:		BLO	CKAGE SEVER	ITY: (circl	le #)	
If yes for fish barrier	☐ Total ☐ Partial ☐ Unknow ☐ Unknow ☐ Unknow ☐ Unknow ☐ Unknow ☐ Drop too high ☐ Flow too shallow Water Drop of the Drop too high ☐ Flow too shallow ☐ Drop too high ☐ Drop too high ☐ Drop too high ☐ Drop too high ☐ Drop too high ☐ Drop too high ☐ Drop too high ☐ Drop too high ☐ Drop too high ☐ Drop too high ☐ Drop too high ☐ Drop too high ☐ Drop too high ☐ Drop too high ☐ Drop too high ☐ Drop too high ☐ Drop too high ☐ Drop too high ☐ Drop too high ☐ Drop too high ☐ Drop too high ☐ Drop too high ☐ Drop too high ☐ Drop too high ☐ Drop too high ☐ Drop too high ☐ Drop too high ☐ Drop too high ☐ Drop too high ☐ Drop too high ☐ Drop too high ☐ Drop too high ☐ Drop too high ☐ Drop too high ☐ Drop too high ☐ Drop too high ☐ Drop too high ☐ Drop too high ☐ Drop too high ☐ Drop too high ☐ Drop too high ☐ Drop too high ☐ Drop too high ☐ Drop too high ☐ Drop too high ☐ Drop too high ☐ Drop too high ☐ Drop too high ☐ Drop too high ☐ Drop too high ☐ Drop too high ☐ Drop too high ☐ Drop too high ☐ Drop too high ☐ Drop too high ☐ Drop too high ☐ Drop too high ☐ Drop too high ☐ Drop too high ☐ Drop too high ☐ Drop too high ☐ Drop too high ☐ Drop too high ☐ Drop too high ☐ Drop too high ☐ Drop too high ☐ Drop too high ☐ Drop too high ☐ Drop too high ☐ Drop too high ☐ Drop too high ☐ Drop too high ☐ Drop too high ☐ Drop too high ☐ Drop too high ☐ Drop too high ☐ Drop too high ☐ Drop too high ☐ Drop too high ☐ Drop too high ☐ Drop too high ☐ Drop too high ☐ Drop too high ☐ Drop too high ☐ Drop too high ☐ Drop too high ☐ Drop too high ☐ Drop too high ☐ Drop too high ☐ Drop too high ☐ Drop too high ☐ Drop too high ☐ Drop too high ☐ Drop too high ☐ Drop too high ☐ Drop too high ☐ Drop too high ☐ Drop too high ☐ Drop too high ☐ Drop too high ☐ Drop too high ☐ Drop too high ☐ Drop too high ☐ Drop too high ☐ Drop too high ☐ Drop too high ☐ Drop too high ☐ Drop too high ☐ Drop too high ☐ Drop too high ☐ Drop too high ☐ Drop too high ☐ Drop too high ☐ Drop too high ☐ Drop too high ☐ Drop too high ☐ Drop too high ☐ Drop too high ☐ Drop t	op:(in)	A structure such a road culvert on a 3 greater stream blo upstream movema anadromous fish; passage device pi	3rd order or ocking the ent of no fish	A total fish blockag tributary that would significant reach of or partial blockage interfere with the n anadromous fish.	i isolate a f stream, that may	beaver dam or the very head very little viable	arrier such as a a blockage at of a stream with e fish habitat al barriers such
NOTES/SKET	Other:		(5)		3		2	1
_	to small footbeidge under beidger	es 2 41° in there al	50'35"/ 1 dams	120 44' /water	54" (see Badis At	Lote	s 34+; \ sitea	30)
				·				
					n			Vra V IN
					KEPORT	ED TO AUT	HORITIES L	Yes X No

WATERSHED		Γ			185/00	·····	SSED BY: CM	
SURVEY REA		TIME::	_AM/PM		: (Camera-Pic	2#) PCS	<u> </u>	
SITE ID: (Con	dition-#) SC- <u>G</u> LAT	41.50 34	p_" Long 7	2 0 44	<u>45</u> " L	мк	GPS (Un	it ID)
	a Residential Devien	JAY.						
TYPE: Roa	ad Crossing Railroad Crossi	ng Manmade	Dam Beave	er Dam 🔲	Geological Fort	nation 🔲	Other:	
FOR ROAD/ RAILROAD	SHAPE: Arch Bottomless Box Elliptical Circular Other:	#BARRELS: Single Double Triple Other:	MATERIAL: Concrete Metal Other:	☐ Flo	NMENT: ow-aligned of flow-aligned not know	Barrel dia	IONS: (if variab meter: Height:	le, sketch) (ft) (ft)
CROSSINGS ONLY	CONDITION: (Evidence of) Cracking/chipping/corrosion Sediment deposition Other (describe):	n scour hole nankment	CULVERT SLOPE: Flat Slight (2° - 5°) Obvious (>5°) Roadwa			ngth: Width: elevation:	(ft) (ft)	
li	RESTORATION CANDIDATE		emoval Culv		olacement 🔲 U	Jpstream st	orage retrofit	
no	2 . a C2 . a a C . a a a	Local stream	•					
IS SC ACTING	G AS GRADE CONTROL	□ No □ Y	es 🔲 Unk				1 40	
	EXTENT OF PHYSICAL BLO Total Partial Temporary Unknow		A structure such a road culvert on a	as a dam or	A total fish blocka	ige on a	le #) A temporary barr beaver dam or a	
If yes for fish barrier	CAUSE: Drop too high Water Drop too shallow Water Drop Other;	rop: (in) epth: (in)	greater stream bk upstream movem anadromous fish; passage device p	ocking the ent of no fish	significant reach or partial blockag interfere with the anadromous fish.	of stream, e that may migration of	the very head of very little viable f above it; natural as waterfalls.	a stream with ish habitat
NOTES/SKET	CH: OAS as A s		0:0000		, i			_
	CH: Driveway are	n banks			www.2 Weel	w1 210		0
					Repor	TED TO AUT	THORITIES []	Yes No

WATERSHEI	D/SUBSHED: WBS	1			те: <u>[Д</u>			ESSED BY: CM			
SURVEY REA			_AM Æ Ø	PHO	ото ID	: (Camera-P	ic#) pc o	300 # 43			
SITE ID: (Co	idition#) SC- <u>O</u> LLAT	41 .50 . 30	<u>@_</u> " Long <u>∃</u>	<u> 2°</u>	44 .	<u>41 " </u>	MK	GPS (Unit	ID)		
	BROWN STREET										
TYPE: 🔼 Ro	ad Crossing Railroad Cross	ng Manmade	Dam Beav	er Da	ım 🔲	Geological Fo	rmation _	Other:			
	SHAPE:	#BARRELS:	MATERIAL:			NMENT:	ı	IONS: (if variable,	sketch)		
	☐ Arch ☐ Bottomless ☐ Box ☐ Elliptical	Single	Concrete	1		w-aligned	Barrel dia	ameter:	(ft)		
FOR ROAD/	Circular	Double Triple	Metal			t flow-aligned	}	Height:	(ft)		
RAILROAD	Other:	Other:	Other:		טע ⊔	not know					
CROSSINGS	CONDITION: (Evidence of)		•			ERT SLOPE:	Culvert le	_	(ft)		
ONLY	Cracking/chipping/corrosio	n 🔲 Downstream	n scour hole		Fla			Width:	(ft)		
	Sediment deposition	Failing emb	ankment			l					
	Other (describe):					vious (>5°)	Roadway	elevation:	(ft)		
Potential	POTENTIAL RESTORATION CANDIDATE Fish barrier removal Culvert repair/replacement Upstream storage retrofit										
no no	RESTORATION CANDIDATE	Local stream			ран/г е р	nacement	opstream s	wrage renout	,		
	CACCDARE COMMON										
15 SC ACTIN	G AS GRADE CONTROL	□ No □ Yo	es Unk	nown		CKAGE SEVE	DITV: /a/	n(a #)			
	EXTENT OF PHYSICAL BLO	OCKAGE:			DLO	CKAGE SEVE	KII T. (CIFE	ne #)			
	Temporary Unkno	wn	A structure such a road culvert on a			A total fish block tributary that we		A temporary barrier beaver dam or a ble			
If yes for	Carron		greater stream bl	ocking		significant reacl	of stream,	the very head of a	stream with		
fish barrier	CAUSE: Drop too high Water D	rop: (in)	upstream movem anadromous fish;		h ·	or partial blocka interfere with the		very little viable fish above it; natural ba			
	☐ Flow too shallow Water D		passage device p			anadromous fis		as waterfalls.			
	Other:		5		4	3		2 1			
Notes/Sket	CH: Starmwater	Dibe N	ext to		v lu	ext pix	e (m	KB)			
)(v) v v v v v ((v v v v v v v v v v v	14-	, ,		•	• •					
								•			
									·		
								·			
				,					Ì		
								•			
						,					
						Repo	PTEN TO ALL	THORITIES 🗌 YE	s DNo		

	SURVEY REACH I	D:(q	Wtrsi	HD/SUBSHD: W	35	DATE: 12/1	101	ASSESSED BY:	66-
•	START TIM	e: 12 : 30 an	1/ (D)	LMK:	END TIME:	1 : 30 AM/PM	LMI	K:	GPS ID:
	LAT 41 ° 50 '	/5 " Loi	NG 72	<u> </u>	LAT41°50'	37" LONG 7	2044	<u>' 33 "</u>	(m)
	DESCRIPTION:	regence ob	WBS	-8 And WOS-	P DESCRIPTION: C	nvergence	WITH	UKS-5	
_	PA	RKED 20 1		lee's Supee 1					
	RAIN IN LAST 24 HO	' - '		Steady rain	PRESENT CONDITIONS			ly rain ☐ Intern	
ļ	□ None	☐ Interm	ittent	☐ Trace	☐ Clear	☐ Trace	■ Over		y cloudy
	SURROUNDING LAND			☐ Commercial ☐ Park	□ Urban/Residential□ Crop	☐ Pasture	☑ Fores ☐ Othe	r:	
	Average	CONDITIONS	(check a	ipplicable)		SKETCH AND ST	ALTERNATION OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF	INTERCOLUMNIA DE LA COMPANSIA	
	BASE FLOW AS % CHANNEL WIDTH	□ 0-25% □25-50 %		□ 50%-75% Æ \$75-100%	within the survey r	of survey reach. Tra each (OT, ER, IB,SC, s deemed appropriate.	UT, TR, M	l) as well as any o	additional
	DOMINANT SUBSTR. □ Silt/clay (fine or Sand (gritty) □ Gravel (0.1-2.5	slick)		ole (2.5 –10") der (>10") rock	WE STE FLOW			·	et Tislike
	WATER CLARITY ☐ Stained (clear, n. ☐ Other (chemicals,	aturally colored) dyes)	□ Op	paque (milky)			ر (۵	nch/saideux co	
	AQUATIC PLANTS IN STREAM			⊠ some □ lots □ some □ lots	TRILL TO THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY	Z	KNES		!
	WILDLIFE IN OR AROUND STREAM		Beaver Other:N	RATION & Deer Allards, Muss	Ninge ->	I MASURO IP	pag		
	STREAM SHADING (water surface)	ZMostly sha ☐ Halfway (3 ☐ Partially sl ☐ Unshaded	≥50%) naded (≥		iA	win Mi	LS IN		
	CHANNEL DYNAMICS	Downcutt Widening Headcutti Aggradin	ing	Bed scour Bank failure Bank scour Slope failure			- Str	ean input	ec, menaj
	Unknown	Sed. depo	- 1	Channelized		mmre 7	1 GOOL	AREAS	of.
	BANKfull CHANNEL	Height: LT l RT l		4' (ft)		BANK	/ (2 pg	nded
	DIMENSIONS (FACING	Width: Bott		23' (ft)		\triangle	1	-	
	DOWNSTREAM)	Top	_	(ft)		esdent	AP	}	X
Ì	THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE S	REACH ACCESS	IBILITY			Trying	۸	1	7-
ļ	Good: Open area in	Fair: Forested or		ifficult. Must cross		PANY		1/2	JES-F
	public ownership,	developed area adjacent to strea		etland, steep slope, or ensitive areas to get to				, K-V	
	sufficient room to stockpile materials,	Access requires		ream. Few areas to				9	•
	easy stream channel	removal or impaction landscaped area		lockpile available nd/or located a great				\mathcal{A}	
	access for heavy equipment using	Stockpile areas	di	istance from stream.				.3]	
	existing roads or trails.	small or distant f stream.		pecialized heavy quipment required.				(
ļ	5	4 3	(2)	1	11 11 11 11 11 11 11 11 11 11 11 11 11	1 1 2 2	or tall or	-A- 00 10-	4.0.1
	NOTES: (biggest prot								west
•	garden "es	icapes" s	uch	As pach	ysandra + Plants don	JAPANOSE	_ ba	eventy A	re
	Cornmon t	t in son	e Ax	leas those	PIANTS CLOW	NIVIAN THE	A STED TO A	AUTHORITIES [YES 🗆 No

	Optimal	Suboptimal	Marginal	Poor
IN-STREAM HABITAT (May modify criteria based on appropriate	Greater than 70% of substrate favorable for epifaunal colonization and fish cover; mix of snags, submerged logs, undercut banks, cobble or other stable habitat and at stage to allow full colonization potential (i.e., logs/snags that are not new fall and not transient).		20-40% mix of stable habitat; habitat availability less than desirable; substrate frequently disturbed or removed.	Less than 20% stable habitat; lack of habitat is obvious; substrate unstable or lacking.
habitat regime)	20 19 18 17 16	rate at high end of scale).	10 9 8 7 6	5 4 3 2 1 0
VEGETATIVE PROTECTION (score each bank, determine sides by facing downstream) lots of	More than 90% of the streambank surfaces and immediate riparian zone covered by native vegetation, including trees, understory shrubs, or nonwoody macrophytes; vegetative disruption through grazing or mowing minimal or not evident; almost all plants allowed to grow naturally.	70-90% of the streambank surfaces covered by native vegetation, but one class of plants is not well-represented; disruption evident but not affecting full plant growth potential to any great extent; more than one-half of the potential plant stubble height remaining.	50-70% of the streambank surfaces covered by vegetation; disruption obvious; patches of bare soil or closely cropped vegetation common; less than one-half of the potential plant stubble height remaining.	Less than 50% of the streambank surfaces covered by vegetation; disruption of streambank vegetation is very high; vegetation has been removed to 5 centimeters or less in average stubble height.
INVASIVES >	Left Bank 10 9	8 🔿 6	5 4 3	2 1 0
some resident	Right Bank 10 9	8 7 6	5 4 3	2 1 0
BANK EROSION (facing downstream)	Banks stable; evidence of erosion or bank failure absent or minimal; little potential for future problems. <5% of bank affected.	Grade and width stable; isolated areas of bank failure/erosion; likely caused by a pipe outfall, local scour, impaired riparian vegetation or adjacent use.	Past downcutting evident, active stream widening, banks actively eroding at a moderate rate; no threat to property or infrastructure	Active downcutting; tall banks on both sides of the stream eroding at a fast rate; erosion contributing significant amount of sediment to stream; obvious threat to property or infrastructure.
	Left Bank 10 9	(8) 7 6	5 4 3	2 1 0
	Right Bank 10 9	7 6	5 4 3	2 1 0
FLOODPLAIN CONNECTION	High flows (greater than bankfull) able to enter floodplain. Stream not deeply entrenched.	High flows (greater than bankfull) able to enter floodplain. Stream not deeply entrenched.	High flows (greater than bankfull) not able to enter floodplain. Stream deeply entrenched.	High flows (greater than bankfull) not able to enter floodplain. Stream deeply entrenched.
T.	20 19 18 17 16	15 (4) 13 12 11 ABL BURGER AND ELOODPLA	10 9 8 7 6 NCONDITION	5 4 3 2 1 0
	Optimal	Suboptimal	Marginal	Poor
VEGETATED BUFFER WIDTH	Width of buffer zone >50 feet; human activities (i.e., parking lots, roadbeds, clear-cuts, lawns, crops) have not impacted zone.	Width of buffer zone 25-50 feet; human activities have impacted zone only minimally.	Width of buffer zone 10-25 feet; human activities have impacted zone a great deal.	Width of buffer zone <10 feet: little or no riparian vegetation due to human activities.
But loss of invasives ->	Left Bank 10	8 7 6	5 4 3	2 1 0
	Right Bank 10 9	8 7 6	5 4 3	2 1 0
FLOODPLAIN VEGETATION	Predominant floodplain vegetation type is mature forest	Predominant floodplain vegetation type is young forest	Predominant floodplain vegetation type is shrub or old field	Predominant floodplain vegetation type is turf or crop land
	20 19 18 (17) 16	15 14 13 12 11	10 9 8 7 6	5 4 3 2 1 0
FLOODPLAIN HABITAT	Even mix of wetland and non-wetland habitats, evidence of standing/ponded water	Even mix of wetland and non-wetland habitats, no evidence of standing/ponded water	Either all wetland or all non- wetland habitat, evidence of standing/ponded water	Either all wetland or all non- wetland habitat, no evidence of standing/ponded water
	20 19 18 👣 16	15 14 13 12 11	10 9 8 7 6	5 4 3 2 1 0
FLOODPLAIN ENCROACH- MENT	No evidence of floodplain encroachment in the form of fill material, land development, or manmade structures	Minor floodplain encroachment in the form of fill material, land development, or manmade structures, but not effecting floodplain function	Moderate floodplain encroachment in the form of filling, land development, or manmade structures, some effect on floodplain function	Significant floodplain encroachment (i.e. fill material, land development, or man-made structures). Significant effect on floodplain function
		(15) 14 13 12 11		



Impacted Buffer

IB

WATERSHED/SUBSHED: WBS	\$		DATE: 12 / 01 / 09	ASSESSED BY: CM+B
SURVEY REACH: 06	Тіме:	12:40 AM/PM)	РНОТО ID: (Camera-Pi	c#) fco10 /# ope
SITE ID: (Condition #) START	LAT 41 ° 50 ' 15	" Long <u>7</u> 2 <u>°44</u>	' <i>195</i> " LMK	GPS: (Unit ID)
B-A END	Lat° '	" Long °	' " LMK	
The state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the s				
IMPACTED BANK: REASO □ LT □ RT □ Both	Rece		o narrow 🛭 Widespread inv	asive plants
LAND USE: Private	·		ther Public	
(Facing downstream) LT Bank RT Bank			□: □:	
DOMINANT Pay		/lawn Tall grass	Shrub/scrub Trees	Other
LAND COVER: LT Bank	<u> </u>			
RT Bank				:
Invasive Plants:	one Rare	Partial coverage	Extensive coverage	unknown
STREAM SHADE PROVIDED?	None 🛭 Partial	☐ Full WETL	ANDS PRESENT? 🔼 No	☐ Yes ☐ Unknown
POTENTIAL RESTORATION CAND	Aug.	station Greenway	design 🖾 Natural regenerat	ion Invasives removal
RESTORABLE AREA LT BANK RT Length (ft):	REFORESTATION POTENTIAL: (Circle #)	Impacted area on pu where the riparian ar not appear to be use specific purpose; ple area available for pla	rea does public or private land the presently used for a sport of purpose; available area	nat is land where road; building ecific encroachment or other
vidili (it).	-	5	4 3	2
POTENTIAL CONFLICTS WITH RE Poor/unsafe access to site Ex		Widespread invasive Severe animal impact		nination
NOTES: Private Brace	wtr			
NOTES: PRIVATE proper - moun law	n up to top	no bank f	on 200°	
		•		
			•	•
				•
			•	•
•				
•				

IB |

WATERONED GURGIERO	<u> </u>		DATE: 12 /01 / 0°	A sepsent by Clad d C
WATERSHED/SUBSHED: WAS	TIME:	1 :00 AM/100		ASSESSED BY: CM+6
ar a pintanga. Apregnagnya yan bergin nengg	1.1	 		GPS: (Unit ID)
<i>a</i>			' '' LMK	= - 310. (0.11.2)
B36	LAT''	' LONG°	LIVIK	
	SON INADEQUATE: Lack			
LT RT Both			er: Residential	IAWNS
LAND USE: Priva (Facing downstream) LT Bank	ate Institutional Golf (☑ □	Course Park O □ □	ther Public	
		/lawn Tall grass	Shrub/scrub Trees	Other
 _		Partial coverage		unknown
STREAM SHADE PROVIDED? [☐ None	Full WETL	ANDS PRESENT? No	Yes Unknown
POTENTIAL RESTORATION CA	NDIDATE Active referes	Station Creenway	lesign 📈 Natural regenerat	tion of Invasives removal
no	Other:	station Gorechway (resign per ivaturar regenerar	ion 🔼 invasives removar
RESTORABLE AREA		Impacted area on pu	blic land Impacted area on eith	er Impacted area on private
LT BANK RT	REFORESTATION	where the riparian ar not appear to be use	ea does public or private land t	that is land where road; building
LT BANK RT Length (ft): ^ lpoo _	POTENTIAL: (Circle #)	specific purpose; ple	nty of purpose; available are	ea for feature significantly limits
Width (ft):	(Circle #)	area available for pla	planting adequate 4 3	available area for planting
POTENTIAL CONFLICTS WITH R	DEEODESTATION A	Widespread invasive		mination
Poor/unsafe access to site I				
Notes: Pourale of	2-20-1			
of States of	eq-city.		1	here there purely sandra et
stretch of	Approximately	300 m	1,000 Ht. W	were there
is 775% c	ioner of iniums	ive plant	5 (J. GARBERRY,	patchy sandra et
or recident	ine lawn. Le	of bank	is More imp	hated invasive
Decidoration	, some RIP-RAP		1	
,==3()== 0 (1)(1)) 2000 1000	<i>)</i> .		
				i
			•	•
•				
		•		
				·
,				
i e e e e e e e e e e e e e e e e e e e				

_	WATERSHED	/SUBSHED: WBS		DATE: 10/01/09 ASSESSED BY: CM+B6						36	
	SURVEY REA	Trianger - Process - Plane - Control - Control - Control - Control - Control - Control - Control - Control - Control - Control - Control - Control - Control - Control - Control - Control - Control - Control - Control - Control - Control - Control - Control - Control - Control - Control - Control - Control - Control - Control - Control - Control - Control - Control - Control - Control - Control - Control - Control - Control - Control - Control - Control - Control - Control - Control - Control - Control - Control - Control - Control - Control - Control - Control - Control - Control - Control - Control - Control - Control - Control - Control - Control - Control - Control - Control - Control - Control - Control - Control - Control - Control - Control - Control - Control - Control - Control - Control - Control - Control - Control - Control - Control - Control - Control - Control - Control - Control - Control - Control - Control - Control - Control - Control - Control - Control - Control - Control - Control - Control - Control - Control - Control - Control - Control - Control - Control - Control - Control - Control - Control - Control - Control - Control - Control - Control - Control - Control - Control - Control - Control - Control - Control - Control - Control - Control - Control - Control - Control - Control - Control - Control - Control - Control - Control - Control - Control - Control - Control - Control - Control - Control - Control - Control - Control - Control - Control - Control - Control - Control - Control - Control - Control - Control - Control - Control - Control - Control - Control - Control - Control - Control - Control - Control - Control - Control - Control - Control - Control - Control - Control - Control - Control - Control - Control - Control - Control - Control - Control - Control - Control - Control - Control - Control - Control - Control - Control - Control - Control - Control - Control - Control - Control - Control - Control - Control - Control - Control - Control - Control - Control - Control	TIME::	_AM/PM		ото ID	: (Camera-Pic			025	
	SITE ID: (Con	101111111111111111111111111111111111111	0 1	" LONG_	°_		" LI	ИК	GPS	(Unit ID)	
		Mills IN.						. –	<u> </u>		
	TYPE: K Roa		ng Manmade I #BARRELS:		er Da		Geological Form	***************************************			
		SHAPE: Arch Bottomless		MATERIAL:			NMENT:	DIMENSI Damal dia		ariable, ske. Ə'	
		☐ Arch ☐ Bottomless ☐ Box ☑ Elliptical	☐ Single ☑ Double	Concrete Metal		-	w-aligned t flow-aligned	Barrel dia		1 0 7'	_(ft)
ļ	FOR ROAD/	☐ Circular	Triple	Other:			not know		Height:	<u> </u>	_(ft)
	RAILROAD	Other:	Other:	, a cuitar			- I Of Kilo	Culvert length:(ft)		_(ft)	
	CROSSINGS ONLY	CONDITION: (Evidence of)	_	CULVERT SLO					width:		_(ft) _(ft)
		☐ Cracking/chipping/corrosion ☐ Downstream scour hole ☐ Sediment deposition ☐ Failing embankment							Width.		_(11)
		☐ Sediment deposition☐ Other (describe):	☐ Failing emb	ankment	1	Obvious (>5°)		Roadway	elevation:		(ft)
J		Other (describe).							-		
	POTENTIAL RESTORATION CANDIDATE										
ŀ	Д ло		Local stream	epair 🔲 Othe	er:						
	IS SC ACTING	G AS GRADE CONTROL	□ No □ Ye	es 🔲 Unk	nowr	n					
	EXTENT OF PHYSICAL BLOCKAGE: BLOCKAGE SEVERITY: (circle #)										
		☐ Total ☐ Partial		A structure such	structure such as a dam or					hasa	
	If yes for	☐ Temporary ☐ Unknow	vn ·	road culvert on a	3rd or	der or	tributary that woul	d isolate a	beaver dan	n or a blocka	ge at
	ij yes jor fish barrier	CAUSE:		greater stream bl upstream movem			significant reach of or partial blockage			ad of a strea able fish hab	
	J		op:(in)	anadromous fish; passage device p			interfere with the anadromous fish.	nigration of		atural barriers	
		☐ Flow too shallow Water De ☐ Other:	epth:(in)		ii eseii						
	NOTES/SKET			5		4	3	•	2	1	
	MOTES/SKET	intersection	. H	11/2 10							
		HUNDE QUON	WIN M	411.2 IV							
										,	
								٠			
						•					
			•								
		•									
							÷				
							_				ا ,,,
7	•						REPORT	TED TO AUT	HORITIES	∐ YES	No

Severe Bank Erosion

ER

WATERSHED/SUBS	HED: WBS		DATE: <u>12 / 01</u>	SESSED BY: CM + BG						
SURVEY REACH:	06			РНОТО ID (САМ	1ERA-PIC #): PC	800 # 607 + 008				
SITE ID: (Condition-	#) START LAT	sea belon	LONG°_	1 11	LMK	GPS: (Unit ID)				
ER- TY OF	END LAT_	0 1	" Long°	<u> </u>	LMK					
Drogress -	<u> </u>	BANK OF CO	NCERN TIT		11:: 1					
PROCESS:	Currently unknown Bed scour	LOCATION:	Meander bend	☐ RT ☑ Both (<i>i</i> ☐ Straight section	Steep slope	/valley wall Other:				
☐ Widening	Bank failure	DIMENSIONS				_				
Headcutting	Bank scour			t and/or RT	ft B	ottom widthft				
Aggrading	Slope failure	Bank Ht	LTfi	ft and/or RTft Top widthft						
Sed. deposition	Channelized	Bank Angle	LT	° and/or RT	° v	Vetted Widthft				
LAND OWNERSHIP: Private Public Unknown LAND COVER: Forest Field/Ag Developed:										
POTENTIAL RESTORATION CANDIDATE: Grade control Bank stabilization										
	<u>e - unknamn i</u> erty/Infrastruct									
	erty/infrastruct an Width: √ARY		☐ Yes (Describ : ☐ 25 - 50 ft [5-100ft □>	·100 ft				
	<u> </u>		. <u> </u>		7-100it	10011				
EROSION SEVERITY(circle#)	Active downcutting; tall ban of the stream eroding at a f	ast rate; erosion	•	evident, active stream s actively eroding at a Grade and width stable; isolated areas of bank						
Channelized= 1	contributing significant amo stream; obvious threat to pr infrastructure.		moderate rate; no thr infrastructure	•		ikely caused by a pipe outfall, local riparian vegetation or adjacent use.				
Chaintenzen-	5		4 3		(2)	1				
ACCESS:	Good access: Open area in ownership, sufficient room materials, easy stream chat heavy equipment using eximals.	to stockpile nnel access for	Fair access: Forested or developed area adjacent to stream. Access requires tree removal or impact to landscaped areas. Stockpile areas small or distant from stream. Difficult access. Must cross wetland, steep slo other sensitive areas to access stream. Minima stockpile areas available and/or located a great distance from stream section. Specialized heave equipment required.							
	trails.		4 3		2)	1				
NOTES/CROSS SEC					_					
- minor	e bank eros	sian on	RB beli	ind reside	ential u	ones 2				
410:	50'19"/72°44	1'22"				:				
- P mina	bank ero	sion on	LB + RB	2 41°59	D'27"/72	2° 44′27"				
	ing paths as Adjace									
_ WH ()				Ael	Rijate	so vot				
IAni	15 Ady He	MT TO	olvers							
1 4	ely rest ca	ndiduk			•					
		•								
						•				
					REPORTED TO	DAUTHORITIES YES NO				

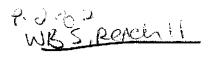
WBS, ROACHIL

Reach Level Assessment



Alan

			r		
SURVEY REACH ID:	WTRSHD/SUBSHD: WY	, 	DATE: 11 /30		M/36
START TIME: 12: 15 A	м /РМ LMK:	END TIME: 6	AMOND	LMK:	GPS ID:
	NG 04-044 100 "	LAT4 049 1	8 " Long	2044 ·O	7-" ~ ~
DESCRIPTION: OLD GRISHM		DESCRIPTION:		1. 5 1.	
DESCRIPTION. O(O) G(C) 51/4	BONLING MEMORI	AIVAC	nse (tian v	/talouta	
RAIN IN LAST 24 HOURS Heavy	rain	PRESENT CONDITIONS	☐ Heavy rain	₩ Standy rain	n 🗆 Intermittent
None d⊠Interm		☐ Clear	☐ Trace	☐ Overcast	☐ Partly cloudy
		Urban/Residential		Forested	☐ Institutional
Demice control and the cost — m-	If course		☐ Pasture	Other:	institutional
AVERAGE CONDITION		 	SKETCH AND SIT	E IMPACT T	RACKING
BASE FLOW AS % 0-25%	□ 50%-75%	Simple planar sketch o	f survey reach. Trac	ck locations and	IDs for all site impacts
CHANNEL WIDTH 25-50 %	₫ .75-100%	within the survey rea	ich (OT, ER, IB,SC,	UT, TR, MI) as v	vell as any additional
			leemed appropriate.	/Indicate directi	on of flow
DOMINANT SUBSTRATE ☐ Silt/clay (fine or slick)	Cobble (2.5 –10")	AD ENO			
☐ Shociay (fine of shock) ☐ Sand (gritty)	☐ Boulder (>10")		p ^y		
	☐ Bed rock	1 /	$\mathcal{F} = \mathcal{F} - \mathcal{F}$		
		1 5 / 2			
WATER CLARITY VI Clear			1 / /		
☐ Stained (clear, naturally colored) \square Opaque (milky)		$I/J_{\mathcal{F}}$		
☐ Other (chemicals, dyes)			77 .		
AQUATIC PLANTS Attached:	none Ssome 🗆 lots		<i>f</i> +		
IN STREAM Floating:	Lnone □ some □ lots	General General	\$ / puch		
WILDLIFE IN OR (Evidence of)	Beaver Deer Record	Spendy +	The state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the s		
	Beaver Deer Deer Chip 12 Mussels				
	•	- 1		Ser Cong	
STREAM SHADING Halfway (aded (≥75% coverage)	*	1 Dag	· 	
	ehaded (≥25%)	,	Time		
☐ Unshaded			i		
CHANNEL Downcu	tting Bed scour	1	T.		
Widenin		ret-	# Corn	alo care	·
DYNAMICS Headcut	ting Bank scour		1111	The second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second secon	4 1700-190-
Unknown Aggradi	· — ·			- Kite a	4
Sed. dep	osition	J. 2000 67 1	7.3		
Height: LT	bank (ft)	(DOANK			
CHANNEL	bank (ft)		2)		,
DIMENSIONS RT (FACING Width: Bot			i i 🕍	r	
DOWNSTREAM)	 , ,		17	542/ · 11/	
Тор		4 and	The second of the second		Carlon L
REACH ACCES		- 1		- Red	To fall the
Good: Open area in developed area		TO HAVE	en la se see		77 37 3
public ownership, sufficient room to adjacent to stre			1	1	A Comment
stockpile materials, Access require			, , , , , , , , , , , , , , , , , , ,	1	War San -
easy stream channel landscaped are	eas. and/or located a great		1200	46 Y	
equipment using Stockpile areas				and the second second	The state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the s
existing roads or trails. stream.	equipment required.			10 0 1 65	The state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the s
5 4 3	2 1		<u>, , , , , , , , , , , , , , , , , , , </u>	11.	- 1 L+ L+ D+
NOTES: (biggest problem you see in	survey reach) 50mene	bank wasi	an myder	enthing	(50 4-of
7				**	
			REPOR	TED TO AUTHO	RITIES 🔲 YES 🔲 NO



OVERALL STREAM CONDITION										
\\.	Optimal	Suboptimal	Marginal	Poor						
HABITAT (May modify criteria based on appropriate	favorable for epifaunal colonization and fish cover; mix of snags, submerged logs, undercut banks, cobble or other stable habitat and at stage to allow full colonization potential (i.e., logs/snags that are not new fall and not transient). suited for full colonization potential; adequate habitat for maintenance of populations; presence of additional substrate in the form of newfall, but not yet prepared for colonization (may rate at high end of scale).			Less than 20% stable habitat; lack of habitat is obvious; substrate unstable or lacking.						
	20 19 (18) 17 [.] 16	15 14 13 12 11	10 9 8 7 6	5 4 3 2 1 0						
PROTECTION (score each bank, determine sides by facing	More than 90% of the streambank surfaces and immediate riparian zone covered by native vegetation, including trees, understory shrubs, or nonwoody macrophytes; vegetative disruption through grazing or mowing minimal or not evident; almost all plants allowed to grow naturally.	70-90% of the streambank surfaces covered by native vegetation, but one class of plants is not well-represented; disruption evident but not affecting full plant growth potential to any great extent; more than one-half of the potential plant stubble height remaining.	50-70% of the streambank surfaces covered by vegetation; disruption obvious; patches of bare soil or closely cropped vegetation common; less than one-half of the potential plant stubble height remaining.	Less than 50% of the streambank surfaces covered by vegetation; disruption of streambank vegetation is very high; vegetation has been removed to 5 centimeters or less in average stubble height.						
	Left Bank 10 9	8 🧿 6	5 4 3	2 1 0						
	Right Bank 10 9	8 🕖 6	5 4 3	2 1 0						
EROSION (facing	Banks stable; evidence of erosion or bank failure absent or minimal; little potential for future problems. <5% of bank affected.	Grade and width stable; isolated areas of bank failure/erosion; likely caused by a pipe outfall, local scour, impaired riparian vegetation or adjacent use.	Past downcutting evident, active stream widening, banks actively eroding at a moderate rate; no threat to property or infrastructure	Active downcutting; tall banks on both sides of the stream eroding at a fast rate; erosion contributing significant amount of sediment to stream; obvious threat to property or infrastructure.						
	Left Bank 10 9	8 7 🚳	5 4 3	2 1 0						
	Right Bank 10 9	8 7 6	5 4 3	2 1 0						
	High flows (greater than bankfull) able to enter floodplain. Stream not deeply entrenched.	High flows (greater than bankfull) able to enter floodplain. Stream not deeply entrenched.	High flows (greater than bankfull) not able to enter floodplain. Stream deeply entrenched.	High flows (greater than bankfull) not able to enter floodplain. Stream deeply entrenched.						
	20 19 18 17 (16)	15 14 13 12 11	10 9 8 7 6	5 4 3 2 1 0						
	OVER	RALL BUFFER AND FLOODPLAIN CONDITION								
	Optimal	Suboptimal	Marginal	Poor						
BUFFER	Width of buffer zone >50 feet; human activities (i.e., parking lots, roadbeds, clear-cuts, lawns, crops) have not impacted zone.	Width of buffer zone 25-50 feet; human activities have impacted zone only minimally.	Width of buffer zone 10-25 feet; human activities have impacted zone a great deal.	Width of buffer zone <10 feet: little or no riparian vegetation due to human activities.						
	Left Bank 10 9	8 0 6	5 4 3	2 1 0						
	Predominant floodplain vegetation type is mature forest	Predominant floodplain vegetation type is young forest	Predominant floodplain vegetation type is shrub or old	Predominant floodplain vegetation type is turf or crop land						
	20 19 18 17 (6)	15 14 13 12 11	10 9 8 7 6	5 4 3 2 1 0						
	Even mix of wetland and non-wetland habitats, evidence of standing/ponded water	Even mix of wetland and non-wetland habitats, no evidence of standing/ponded water	Either all wetland or all non- wetland habitat, evidence of standing/ponded water	Either all wetland or all non- wetland habitat, no evidence of standing/ponded water						
	20 19 18 17 (6)	15 14 13 12 11	10 9 8 7 6	5 4 3 2 1 0						
Encroach-	No evidence of floodplain encroachment in the form of fill material, land development, or manmade structures 20 19 18 17 (16)	Minor floodplain encroachment in the form of fill material, land development, or manmade structures, but not effecting floodplain function	Moderate floodplain encroachment in the form of filling, land development, or manmade structures, some effect on floodplain function	Significant floodplain encroachment (i.e. fill material, land development, or man-made structures). Significant effect on floodplain function						
			5 4 3 2 1 0							
	IN-STREAM HABITAT (May modify criteria based on appropriate habitat regime) VEGETATIVE PROTECTION (score each bank, determine sides by facing downstream) BANK EROSION (facing downstream) FLOODPLAIN CONNECTION VEGETATED BUFFER WIDTH FLOODPLAIN VEGETATION FLOODPLAIN FLOODPLAIN FLOODPLAIN FLOODPLAIN FLOODPLAIN FLOODPLAIN FLOODPLAIN FLOODPLAIN FLOODPLAIN FLOODPLAIN FLOODPLAIN FLOODPLAIN FLOODPLAIN FLOODPLAIN FLOODPLAIN FLOODPLAIN FLOODPLAIN FLOODPLAIN FLOODPLAIN FLOODPLAIN FLOODPLAIN FLOODPLAIN FLOODPLAIN FLOODPLAIN FLOODPLAIN FLOODPLAIN FLOODPLAIN FLOODPLAIN FLOODPLAIN FLOODPLAIN FLOODPLAIN FLOODPLAIN FLOODPLAIN FLOODPLAIN FLOODPLAIN FLOODPLAIN	IN-STREAM HABITAT (May modify criteria based on appropriate habitat regime) VEGETATIVE PROTECTION (score each bank, determine sides by facing downstream) BANK EROSION (facing downstream) BANK EROSION (facing downstream) BANK EROSION (facing downstream) BANK EROSION (facing downstream) CONNECTION Width of buffer zone >50 feet; human activities (i.e., parking lots, roadbeds, clear-cuts, lawns, crops) have not impacted zone. Left Bank 10 9 Right Bank 10 9 FLOODPLAIN CONNECTION Width of buffer zone >50 feet; human activities (i.e., parking lots, roadbeds, clear-cuts, lawns, crops) have not impacted zone. Left Bank 10 9 Right Bank 10 9	In-STREAM HABITAT Greater than 70% of substrate favorable for epifaunal colonization and fish cover, mix of snags, submenged logs, undercut banks, cobble or other stable habitat are agit stable habitat are agit stable habitat are agit stable habitat are agit stable habitat are agit stable habitat are agit stable habitat are agit stable habitat are agit stable habitat are agit stable habitat are agit stable habitat are agit stable habitat are agit stable habitat are agit stable habitat are agit stable habitat are agit stable habitat are agit stable habitat are agit stable habitat are agit stable habitat are agit stable habitat are agit stable habitat are agit stable habitat are agit stable habitat are agit stable habitat are agit stable habitat are agit stable habitat are agit stable habitat are agit stable habitat are agit stable habitat are agit stable habitat are agit stable habitat are agit stable habitat are agit stable habitat are agit stable habitat are agit stable habitat are agit stable habitat and at stage to alive oblication and appropriate habitat are agit stable habitat are agi	IN-STREAM IN-STREAM Creater than 70% of substrate forwarbe for epitaural coinstation and fail over the forward programme in the control of stages, submissed for surface to the forward programme in the control of stages, submissed for surface to the control of stages and surface and surface and surface and surface and surface and surface and surface and surface and surface and surface and surface and surface and surface and surface and surface and surface and surface and surface and surface and surface and surface and surface and surface and surface and surface and surface and surface and surface and surface and surface and surface and surface and surface and surface and surface and surface and surface and surface and surface and surface and surface and surface and surface and surface and surface and surface and surface and surface and surface and surface and surface and surface and surface and surface and surface and surface and surface and surface and surface and surface and surface and surface and surface and surface and surface and surface and surface and surface and surface and surface and surface and surface and surface and surface and surface and surface and surface and surface and surface and surface and surface and surface and surface and surface and surface and surface and surface and surface and surface and surface and surface and surface and surface and surface and surface and surface and surface and surface and surface and surface and surface and surface and surface and surface and surface and surface and surface and surface and surface and surface and surface and surface and surface and surface and surface and surface and surface and surface and surface and surface and surface and surface and surface and surface and surface and surface and surface and surface and surface and surface and surface and surface and surface and surface and surface and surface and surface and surface and surface and surface and surface and surface and surface and surface and surface and surface and surface and surfa						

Storm Water Outfalls



WATERSHED/SUBSHED: WBS			DATE: 11 / 30 /C	DATE: 11 / 30 /09 ASSESSED BY: CM + 86.				
SURVEY REACH ID:	, ,	ME:AM/PM	Рното ID: (Camera-	РНОТО ID: (Сатега-Ріс #) /#				
SITE ID (Condition-#): C	T- ALYGY LA	T	"LONG'	_" LMK	GPS: (Unit ID)			
BANK: (BOW) BLT MRT Head FLOW: None Trickle	TYPE: Closed pipe	MATERIAL: Concrete M PVC/Plastic Bt Other:	SHAPE: Single etal Circular Doubl		SUBMERGED: No Partially Fully			
Moderate Substantial Other:	Open channel	☐ Concrete ☑ Eart ☐ Other:		Depth: (in) Width (Top): (in) " (Bottom): (in)	NOT APPEACABLE			
CONDITION: None Chip/Cracked Peeling Paint Corrosion Other:	ODOR: NO Gas Sewage Rancid/Sour Sulfide Other:	DEPOSITS/STAINS: None Oily Flow Line Paint Other:	VEGGIE DENSITY: None Normal Inhibited Excessive Other:	PIPE BENTHIC GI Brown Ora Other: POOL QUALITY: Good Odors Suds Algae Other:	nge Green No pool Colors Oils			
FOR COLOR: Clear Brown Grey Yellow Green Orange Red Other: FLOWING TURBIDITY: None Slight Cloudiness Cloudy Opaque ONLY FLOATABLES: None Sewage (toilet paper, etc.) Petroleum (oil sheen) Other: OTHER CONCERNS: Needs Regular Maintenance Bank Erosion Other:								
no	TION CANDIDATE	Discharge investi	gation Stream daylighting it Other:	Local stream repai	r/outfall stabilization			
If yes for daylighting: Length of vegetative cover	er from outfall:	ft Type of	existing vegetation:	Slope	·°			
If yes for stormwater: Is stormwater currently c Yes No Not		Land Us Area ava	e description:		-			
SEVERITY: stro (circle #) stre	npared to the amount of eam; discharge appears nificant impact downstrea	f discharge is significant normal flow in receiving to be having a am.	mall discharge; flow mostly clear and ischarge has a color and/or odor, the ischarge is very small compared to the ow and any impact appears to be min	amount of e stream's base or / localized.	es not have dry weather s; staining; or appearance g any erosion problems.			
Cympos /Nicopo	5	4	3	2	1			
SKETCH/NOTES:	see rever	se*			,			
				REPORTED TO AUTHOR	RITIES: YES NO			

- Stockhunter and Face FIFC on LB from medical building parking tot.
 [See photo 149 300-11] concrete, Rannal 36" diam 241°48'53"/78°44'01"
 Moderate flow, to unusual observations. Rip-Rap has been placed under outland.
- Stremmater pipe from parking for a CB 241°48'52"/72944'06"
- I and fall pipe on (PB) next to preking for + building (church?) 241°49'00"/75°44'15"

 cliptical, concrett, no unusual asservations.
- Tributary or open eleanner runoff input a (B) 41°49'05"/72°44'15"- WATER is
- 41°49'15"/72°44'27" slippy bend in brook here + erosion to UB.

WATERSHED	D/SUBSHED: WBS			DATE: <u>] </u>	130 109	ASSE	ESSED BY: 🔿	m/66			
SURVEY REA		Time: <u>12 : 15</u>): (Camera-Pi	c#) 149	300 /# 10				
SITE ID: (Con	ndillon-#) SC- 🚣 LAT	41 0 48 54	<u> </u>	<u> 2° 44 </u>	<u>∞"</u> L	MK	GPS (Ut				
Type, D.			<u> </u>	ъ П	0 1 1 15	E		footbe d			
TYPE: L Ros	ad Crossing Railroad Crossi	mg Manmade #BARRELS:	MATERIAL:		Geological For NMENT:	l					
	SHAPE: Arch Bottomless	# BARRELS:	Concrete		ow-aligned	DIMENSIONS: (if variable, sketch) Barrel diameter:(ft)					
For Board	Box Elliptical	Double	☐ Metal		ot flow-aligned		Height:	```			
FOR ROAD/ RAILROAD	Circular Other:	☐ Triple☐ Other:	Other:	☐ Do	not know		•				
CROSSINGS	CONDITION: (Evidence of)	L 	l.	CULV	ERT SLOPE:	Culvert length:(ft)		(ft)			
ONLY	Cracking/chipping/corrosio	n scour hole				Width:	(ft)				
	Sediment deposition	☐ Failing emb	ankment	l l	☐ Slight (2° – 5°) ☐ Obvious (>5°)		_1	(0)			
	Other (describe):				7 (C <)	Roadway	elevation:	(ft)			
POTENTIAL I	POTENTIAL RESTORATION CANDIDATE										
no Carbinate Carbinate Carbinate Curvert repair/replacement Copstream storage reactiff											
IS SC ACTING	G AS GRADE CONTROL	□ No □ Ye	es Unkn	own							
	EXTENT OF PHYSICAL BLO	OCKAGE:		BLO	CKAGE SEVE	RITY: (circ	:le #)				
	☐ Total ☐ Partial ☐ Temporary ☐ Unknow	wn	A structure such as		A total fish blocks	age on a	A temporary bar				
If yes for	_ , , _	****	road culvert on a 3rd order or greater stream blocking the		tributary that would isolate a significant reach of stream,		beaver dam or a blockage at the very head of a stream with				
fish barrier	CAUSE: Drop too high Water D	rop:(in)	upstream movement of or partial blocks anadromous fish; no fish interfere with the				very little viable above it; natural	fish habitat			
	☐ Flow too shallow Water D	passage device pro	. 1				barriers such				
	Other:		, 5		4 3		2	1			
NOTES/SKET	ICH: covered for	tlavido	man "	, " ,	P. A. O.D.	٠ . ١	ماء م				
	TCH: covered for looks like pa			· - ×	to 1.	V) ()	ecek —	- ad			
	looks where per	HRT OF A	m oxbom) W'	th the	Ken	MMAN	, ₀ 0			
	An old grists	$\sim H - C$									
	Ť										
	·										
								•			
							•				
		÷									
					•						
	•							·			
					•						
					Dence		THODUTES [Ven DNo			
					KEPOR	TED TO AU	THORITIES 🗌	I ES 🔲 INO			

S	C

WATERSHED	/SUBSHED:	<u> </u>			DATE: <u>//</u>	<u> </u>	1 120020		om-	t 18 G
SURVEY REA	e da lada ria duduktur dukan Julak da di bulan da	ll mingrous out	TIME::_	_AM/PM		D: (Camera-Pio	c#) <u>/493</u>	po /#	17	
SITE ID: (Con	ditton-#) SC{		<u>41 ° 48 · 5 ·</u>	7_" Long 7	2 º 44	' <u>16</u> " Li	MK	GPS	(Unit ID)	
		e Cepone					.,	0.1		
TYPE: Roa	T	Railroad Crossi	ng Manmade	T		Geological For				
	SHAPE:	Bottomless	#BARRELS:	MATERIAL:		NMENT:	DIMENSIO		riable, sket [
] Elliptical	Single Double	Concrete Metal		ow-aligned ot flow-aligned	Barrel dian	_	101	_(ft)
FOR ROAD/	Circular	•	Triple	Other:		o not know	Г	leight: _	10	_(ft)
RAILROAD CROSSINGS	Other:		Other:				Culvert len	oth:		(ft)
ONLY	CONDITION: (CUL'	VERT SLOPE:		Vidth:		_(ft) _(ft)
	☐ Cracking/chi				☐ Slight (2° – 5°)				_(-,	
	Other (descr	•	☐ Failing emb	-R. (p-RAP		bvious (>5°)	Roadway e	levation;_		_(ft)
	1 —									
POTENTIAL I	RESTORATION (CANDIDATE	Fish barrier re	emoval 🔲 Cul	vert repair/re	placement 🔲 I	Upstream sto	rage retro	fit	
D no			Local stream	repair	er:					
Is SC ACTING	g as Grade Co	NTROL	□ No □ Y	es Unk	nown					
	EXTENT OF P		OCKAGE:		BLO	OCKAGE SEVE	RITY: (circle	e #)		
	☐ Total ☐ Partial ☐ Temporary ☐ Unknown		A structure such	as a dam or	A total fish blocks	age on a	A temporary	barrier such	n as a	
If ves for	If yes for				3rd order or locking the	tributary that wou significant reach		beaver dam the very hea	•	· "
fish barrier	CAUSE:	h Watan D	(in)	upstream moven	nent of	or partial blockag	e that may	very little via	ible fish habi	itat
	☐ Drop too hig ☐ Flow too sha		rop: (in) epth: (in)	anadromous fish passage device		interfere with the anadromous fish.		above it; nat as waterfalls		such
	Other:		()	, ,		4 3		2		
NOTES/SKET	сн: Даа	is some	of cull	Hierock	e 0 0	. α. Δ. Δ. α	Yana L	att. I	- 4 - 4	1
	1,000			1	, 12	White .		ora u	SHVUC	
on c	up stream) sidul	2 ans	rect.						İ
						•				ŀ
,										}
		•								
						REPOR	TED TO AUT	HORITIES	YES [No

WATERSHED	/SUBSHED: WBS		130/09		SSED BY: CW	. /		
SURVEY REA		TIME::		_	: (Camera-Pic			
SITE ID: (Con	2.18-354-5-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1	41 0 49 1 02	8_" Long <u>72</u>	<u>°44_'-</u>	<u>20 " LN</u>	ик	GPS (Unit	ID)
	& Bloomfield And			D	Geological Forn	notion \square	Othor:	
TYPE: K Roa		ng Manmade I	Dam Beaver MATERIAL:					sketch)
	SHAPE: ☑ Arch ☐ Bottomless	#BARRELS:	Concrete	ALIGNMENT: DIMENSIONS: (if variable, s Flow-aligned Barrel diameter:			(ft)	
	Box Elliptical	Double	Metal		flow-aligned		Height:	(ft)
FOR ROAD/ RAILROAD	☐ Circular ☐ Other:	☐ Triple☐ Other:	Other:	☐ Do	not know			
CROSSINGS	CONDITION: (Evidence of)	J. 	<u></u>	CULVI	ERT SLOPE:	Culvert le	_	(ft)
ONLY	Cracking/chipping/corrosio	n 🔲 Downstrean	n scour hole	☐ Flat	l l		Width:	(ft)
	Sediment deposition	☐ Failing emb	ankment		\square Slight $(2^{\circ} - 5^{\circ})$ \square Obvious $(>5^{\circ})$		Desdesses desertions	
	Other (describe):					Roadway elevation: (f		(ft)
POTENTIAL 1	RESTORATION CANDIDATE	Fish barrier re	emoval Culver	rt repair/rep	lacement 🔲 U	Jpstream st	orage retrofit	
⊠kno		Local stream	repair Other:					<u> </u>
Is SC ACTING	G AS GRADE CONTROL	□No □Y	es 🔲 Unkno					
	EXTENT OF PHYSICAL BL			BLO	CKAGE SEVER	RITY: (circ	le #)	
	☐ Total ☐ Partial ☐ Temporary ☐ Unknown		A structure such as road culvert on a 3n		A total fish blocka tributary that wou			
If yes for			greater stream bloc	king the	significant reach	of stream,	the very head of a	stream with
fish barrier	CAUSE: Drop too high Water I	Prop:(in)	upstream movemen anadromous fish; no	o fish	or partial blockag- interfere with the	migration of	solate a beaver dam or a blockage at the very head of a stream with hat may very little viable fish habitat	
_	☐ Flow too shallow Water I	Depth:(in)	passage device pre	esent.	anadromous fish.	ı, as waterfalls.		
	Other:		5		3		2 1	
Notes/Sket	сн:							
							4	
\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \			•					
	•						•	
					•			ļ
	•							
							•	ļ
			•					
					Repoi	RTED TO AU	THORITIES 🔲	YES No

Trash and Debris

TR

WATERSHED/SUI	BSHED: WRS		DATE: 1 / 30 / 67 ASSESSED BY: CM + 66							
SURVEY REACH		ГІМЕ::АМ/РМ	РНОТО ID: (Сал	mera-Pic #) /493	00 /# 15 × 16					
SITE ID: (Condition	#)) (IR-0002 LAT	sec below "Long	·	_" LMK	GPS: (Unit 1D)					
TYPE: ☐ Industrial ☐ Commercial ☑ Residential	MATERIAL: ☐ Plastic ☐ Tires ☐ Cons ☐ Appliances ☐ Automotive ☐ Other	truction	SOURCE: Unknown Flooding Illegal dump Local outfall	LOCATION: Stream Riparian Are Lt bank Rt bank	LAND OWNERSHIP: Public Unknown Private AMOUNT (# Pickup truck loads):					
POTENTIAL RESTORATION CANDIDATE ☑ Stream cleanup ☑ Stream adoption segment ☑ Removal/prevention of dumping ☐ no ☐ Other:										
If yes for trash or	EQUIPMENT NEEDED:	Heavy equipment 🔼 Tı	ash bags 🔲 Unkno	wn	DUMPSTER WITHIN 100 FT:					
debris removal	WHO CAN DO IT:	Volunteers Local G	ov 🔲 Hazmat Te	am 🔲 Other	Yes No. Unknown					
CLEAN-UP POTENTIAL: (Circle #)	A small amount of trash (i.e., less than two pickup truck loads) located inside a park with easy access		nay have been dumped ov it could be cleaned up in	A large amount of trash or deon's scattered over a large amount of trash or deon's scattered over a large amount of trash or deon's scattered over a large amount of trash or deon's scattered over a large amount of trash or deon's scattered over a large amount of trash or deon's scattered over a large amount of trash or deon's scattered over a large amount of trash or deon's scattered over a large amount of trash or deon's scattered over a large amount of trash or deon's scattered over a large amount of trash or deon's scattered over a large amount of trash or deon's scattered over a large amount of trash or deon's scattered over a large amount of trash or deon's scattered over a large amount of trash or deon's scattered over a large amount of trash or deon's scattered over a large amount of trash or deon's scattered over a large amount of trash or deon's scattered over a large amount of trash or deon's scattered over a large amount of trash or deon's scattered over a large amount of trash or deon's scattered over a large amount of trash or deon's scattered over a large amount of trash or deon's scattered over a large amount of trash or deon's scattered over a large amount of trash or deon's scattered over a large amount of trash or deon's scattered over a large amount of trash or deon's scattered over a large amount of trash or deon's scattered over a large amount of trash or deon's scattered over a large amount of trash or deon's scattered over a large amount of trash or deon's scattered over a large amount of trash or deon's scattered over a large amount of trash or deon's scattered over a large amount of trash or deon's scattered over a large amount of trash or deon's scattered over a large amount of trash or deon's scattered over a large amount of trash or deon's scattered over a large amount of trash or deon's scattered over a large amount of trash or deon's a large amount of trash or deon's a large amount of trash or deon's a large amount of trash or deon's a large amount of trash or deon's a large amount						
	5	(4)	3	2	1					
NOTES: Believed the medicial center there is trash/dumping, including a where chair, Ac unit, golf balls, plastic bottles, etc. -> Believed parking for (druppen brilding?) there is yard work dumping 241.47.62"/42.4415 -> Lots of golf balls where River PLWS Adjacent to Golf course										
				Reportei	TO AUTHORITIES YES NO					

SURVEY REACH: TIME: : AM/PM PHOTO ID: (Camera-Pic #) 49300 4 5+16	±30
BURVEY REACH: \\ TIME::AM/PM PHOTO ID: (Camera-Pic #)/49300 /# 15+16	× 17
SITE ID: (Condition #) START LAT *6 SEA GELGY LONG O ! " LMK GPS: (Unit ID)	
B END LAT ° ' ' LONG ° ' ' ' LMK	
IMPACTED BANK: REASON INADEQUATE: □ Lack of vegetation □ Too.narrow □ Widespread invasive plants □ Recently planted □ Other:	
LAND USE: Private Institutional Golf Course Park Other Public	
Facing downstream) LT Bank 🔲 💆 🔲 🔲 : RT Bank 😡 🔯 🗭 🗆 :	
DOMINANT Paved Bare ground Turf/lawn Tall grass Shrub/scrub Trees Other	\dashv
LAND COVER: LT Bank 🖾 📋 🗹 🖂 🗀:	
RT Bank 🔼 🔲 🔲 🖂 🗀:	
INVASIVE PLANTS: ☐ None ☑ Rare ☐ Partial coverage ☐ Extensive coverage ☐ unknown	
STREAM SHADE PROVIDED? None Partial Full WETLANDS PRESENT? No Yes Unknown	
POTENTIAL RESTORATION CANDIDATE Active reforestation Greenway design Natural regeneration Invasives removal	
no Other:	
RESTORABLE AREA Impacted area on public land where the riparian area does public or private land that is land where road; building	
DI BANK RI not appear to be used for any presently used for a specific encroachment or other	`
(Circle #) area available for planting planting adequate available area for planting	
Width (ft): 5 4 3 (2) 1	
POTENTIAL CONFLICTS WITH REFORESTATION ☐ Widespread invasive plants ☐ Potential contamination ☐ Lack of sun ☐ Poor/unsafe access to site ☐ Existing impervious cover ☐ Severe animal impacts (deer, beaver) ☐ Other:	
NOTES: _ Lebt BANK (LB) & 41° 48' 53"/72° 44' 06" -> Rip-RAP + gabians believed	
medical conter.	
medical conter.	
medical conter.	
Medical center. The belief residential house is mun + diventy of 41° 48's 4"/73' 44' 10" LB has his a 10' wide forested buffer (truin) belief coudo is + residential knowns on other side to forested steep. The RK has Richard + some exercise of 41° 48' 54"/722 11-11"	uni f
Medical center. The belief residential house is mun + diventy of 41° 48's 4"/73' 44' 10" LB has his a 10' wide forested buffer (truin) belief coudo is + residential knowns on other side to forested steep. The RK has Richard + some exercise of 41° 48' 54"/722 11-11"	uni f
Medical center. The believed residential house = mun + divensy ~ 41° 48'5 4"/72'44'10" LB have his a 10' wide farested buffer (thin) believed could be residential laners on other side to foursted steep. The has Rip-Rap + severe erosion & 41° 48'56"/72"44'15" LB here has 10' strip of Frested buffer (thin) + muss on other side lb here has concrete slab in change	uni f
Medical center. The believed residential house is muntaneumy of 41° 48's 4"/72"44'10" LB have has a 10' wide forested buffer (truin) believed course to residential knowns on other side to forested steep. The has Rip-RAP + severe erosion of 41° 48'56"/72"44'15" LB here has 10' strip of Frested buffer (truin) + hours on other side LB here has concrete slab in channel The lip-RAP Along both banks for NOS' Length of 41° 48'59"/72"44'110"	unit
Medical center. The believed residential house is hum + diventy of 41° 48's 4"/72"44'10" LB has his a 10' wide forested buffer (truin) believed coudo to the residential hours on other side to forested steep. The has rip-RAP + severe erosion of 41° 48'56"/72"44'15" LB here has 10' strip of Frested buffer (truin) + hours on other side LB here has concrete slab in channel I lip-lap Along both banks for nos' length of 41° 48'59"/72"44'110"	unit
Medical center. The believed residential house is muntaneously of 41° 48's 4"/72"44'10" LB here has a 10' wide forested buffer (truin) believed coudo to the residential knowns on other side to forested steep. The has rip-rap + severe erosion of 41° 48'56"/72"44'15" LB here has 10' strip of Frested buffer (truin) + hours on other side LB here has concrete slab in channel the lip-rap along both banks for nos' renorth of 41° 48'59"/72"44'110"	unit
The believed residential house I have the diventy of 41° 48'54"/72'44'10" LB have his a 10' wide facested buffer (thin) believed counds the residential knowns on other side of forested steep. The RB has Rip-RAP + severe erosion of 41° 48'56"/72° 44'15" LB here has 10' strip of Frested buffer (thin) + hours on other side like here has concrete state in channel The Rip-RAP Along both banks for nos' rength of 41° 48'59"/72° 44'16" The leaf dumping on RB of 41° 49' of "/70" 44' 15" + parking for here. The RB has thin forested buffer + lawns opposite that (no' wide for all "49' of "/47' 44' 15").	enit
Medical center. The believed residential house is thun + diventy of 41° 48's 4"/73' 44' 10" LB have his a 10' wide farested buffer (thuis) believed condo of the residential hours on other side to forested steep. The has hip-RAP + severe erosion of 41° 48' 56"/73° 44' 15" LB here has 10' strip of Frested buffer (thuis) + hours on other side LB here has concrete slabo in channel The representation both banks for nos' renoth of 41° 48'59"/73° 44' 16" The leaf dumping on RB of 41° 49' of "/70" 44' 15" + parking for here. The has thin forested buffer + hours opposite that (no' wide fo.) 2 41° 49' of "/71° 44' 15"	enit
Medical center. The believed residential house is hum + divenity of 41° 48's 4"/73' 44' 10" LB here has a 10' wide fareafted buffer (thin) believed condo is The residential hours on other side to forested steep. The here has 10' strip of Frested buffer (thin) + hums on other side LB here has concrete slab in channel The rep along both banks for nos' length of 41° 48'59"/72° 44' 16" The leaf dumping on RB is 41° 49' of "/70" 44' 15" + parking for here. The has thin forested buffer + hours opposite that (no' wide fo.) 2 41° 49' or "/72° 44' 15"	enit
Medical center. The believed residential house I thun + divenity 2 41° 48'5 4"/72' 44' 10" LB have his a 10' wide farested buffer (thur) believed counds the residential knowns on other side of farested steep. The has rip-RAP + severe erosion 20 41° 48' 56"/72" 44' 15" LB here has 10' strip of Frested buffer (thur) + hours on other side the here has concrete slab in channel The p-RAP Along both banks for 25' rength 2 41° 48'59"/72° 44' 16" The leaf dumping on RB 20 41° 49' 07"/70" 44' 15" + parking for here. The has thin farested buffer + lawns opposite that (NO' wide for	enit

Severe Bank Erosion

ER

WATERSHED/SUBS	SHED: WBS			DATE: 1/3	109	ASSESSED BY: (CM+B6				
SURVEY REACH:	11		AM/PM	РНОТО ID (СА	mera-Pic#	#): 49 <i>300 </i> #	o				
SITE ID: (Condition	#) START LAT L	11 048 56	" Long <u>72 ° 4</u>	4.15"	LMK	GPS: (<i>U</i>	Init ID)				
ER- MY OF	END LAT_	<u> </u>	LONG°_	<u> </u>	LMK						
PROCESS: Downcutting	Currently unknown	BANK OF CO LOCATION:	NCERN: LT	RT Both Straight section	(looking dow	vnstream) slope/valley wall	Other: daws				
Widening	Bank failure	DIMENSIONS				•	will-				
Headcutting	Bank scour		GPS) LTf	t and/or RT	ft	Bottom width _					
☐ Aggrading	Slope failure	Bank Ht	LTf	t and/or RT	ft	Top width					
Sed. deposition	Channelized			° and/or RT			ft				
LAND OWNERSHIP: □ Private ☑ Public □ Unknown LAND COVER: □ Forest □ Field/Ag □ Developed:											
POTENTIAL RESTORATION CANDIDATE: ☐ Grade control ☐ Bank stabilization ☐ Other:											
THREAT TO PROP	PERTY/INFRASTRUCT	URE: No	Yes (Describ	oe): Bloownfield	L AVE						
EXISTING RIPARIA	AN WIDTH:	△ ≤25 ft	25 - 50 ft	□ 50-75ft □ 7	5-100ft	□>100ft					
EROSION SEVERITY(circle#)	SEVERITY(circle#) of the stream eroding at a fast rate; erosion contributing significant amount of sediment to stream; obvious threat to property or			ng evident, active stream ks actively eroding at a ; no threat to property or Grade and width stable; isolated areas failure/erosion; likely caused by a pipe scour, impaired riparian vegetation or a			pipe outfall, local				
Channelized= 1	infrastructure.		4 3		2	1					
ACCESS:	Good access: Open area in ownership, sufficient room in materials, easy stream chatheavy equipment using exist trails.	to stockpile nnel access for	Fair access: Forested or developed area adjacent to stream. Access requires tree stockpile areas an stockpile areas an			access. Must cross wetla sitive areas to access str areas available and/or lo rom stream section. Spe t required.	eam. Minimal cated a great				
· ·	(3)					1					
NOTES/CROSS SE	CTION SKETCH:	0									
AdjA	count to bl	as with edd	Henre	•			·				
		•			-						
							,				
					ů.						
					REPORT	ED TO AUTHORITIES	YES NO				

						L	
			h by soois noath	DATE: 12/3	109	Assessed by:	CM
	E: 2 : 14 AM/0		END TIME:		LMK	:	GPS ID:
LAT41°51'	42" LONG	12 . 43 . 51 "	LAT410521	" Long 7	2.43	33"	(GAA)
DESCRIPTION: AT	-	2040	DESCRIPTION: AT	•			10000
	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	<u> </u>			亚儿	.01	
RAIN IN LAST 24 HO	OURS Heavy rain	☐ Steady rain	PRESENT CONDITIONS	☐ Heavy rain		rain 🗆 Inter	mittent
□ None	☐ Intermittent	-	☐ Clear	☐ Trace	Overc		ly cloudy
SURROUNDING LANI		I	☐ Urban/Residential		Foreste		*
AVERAGE	CONDITIONS (che	ck applicable)	REACH	SKETCH AND SIT	E IMPACT	TRACKING	WHERE !
BASE FLOW AS %	□ 0-25%	□ 50%-75%	Simple planar sketch o				Impacts DON
CHANNEL WIDTH	□25-50 %	12 75-100%		ach (OT, ER, IB,SC, l deemed appropriate.			additional
DOMINANT SUBSTR. ☐ Silt/clay (fine or ☐ Sand (gritty) ☐ Gravel (0.1-2.5	slick) □ C □ B	obble (2.5 –10") oulder (>10") ed rock	Jeanar es 1	,	wA1	Sie V	APP LS
WATER CLARITY Stained (clear, no other (chemicals,	aturally colored) 🛚			pmven4 vndel a vndel a	45 45		
AQUATIC PLANTS IN STREAM		e ☐ some ☐ lots	·	-Muics			THACHY
WILDLIFE IN OR AROUND STREAM	(Evidence of) ☐ Fish ☐ Beav ☐ Snails ☐ Othe	er 🗆 Deer		STABA!	۹ (8	Yard
STREAM SHADING (water surface)	Mostly shaded ☐ Halfway (≥50% ☐ Partially shaded ☐ Unshaded (< 2:	%) d (≥25%)		ATV BNDCE			,
CHANNEL DYNAMICS Unknown	Downcutting Widening Headcutting Aggrading Sed, depositio	Bed scour Bank failure Bank scour Slope failure Channelized			ς - Έ	PALA WALL WALL WALL WALL WALL WALL WALL	
CHANNEL DIMENSIONS (FACING	Height: Lift bank	· ·	BOY SON CAGIN GILAPSING	" 30° 5°	JODED		
DOJVNSTREAM)	Width: Bottom	<u>4</u> (ft)	FOOTSMAKE,		EIBUTHA4	.77	-
		CONFRUENCE(t) TO MODE	المسم هلاله			77	
, L	REACH ACCESSIBILI	-	wooned	OVERCHO	WP	11	
Good: Open area in	Fair: Forested or developed area	Difficult, Must cross wetland, steep slope, or		FIGUD	i	11	1
public ownership, sufficient room to	adjacent to stream.	sensitive areas to get to	1		/		į
stockpile materials,	Access requires tree removal or impact to	stream. Few areas to stockpile available	į M	UCKO ROA		1	
easy stream channel	landscaped areas.	and/or located a great	1		- 1	1	
access for heavy equipment using	Stockpile areas	distance from stream.	From		I_{i}	l	
existing roads or trails.	small or distant from	Specialized heavy			- 11		
5	stream.	equipment required. 2	-				
NOTES: (biggest pro-		reach)	الم الله ع			. '	1.11.4.11
		includes to	es, ad care, sto	re, da Bud	childra.	horden	PIDE. AUX
	د.لہ	and Arna De	51 Woodland	A	HOAD !	المرسو وروساني	
		MY THEPP OUT	2 I VYEXDOLIANOL	REPOR	TED TO AU	THORITIES _	YES [NO]
	1		Astic bottles	AT.1			

		OVERALL STREAM COND	ITION	
	Optimal	Suboptimal	Marginal	Poor
IN-STREAM HABITAT (May modify criteria based on appropriate habitat regime)	Greater than 70% of substrate favorable for epifaunal colonization and fish cover; mix of snags, submerged logs, undercut banks, cobble or other stable habitat and at stage to allow full colonization potential (i.e., logs/snags that are not new fall and not transient).	40-70% mix of stable habitat; well- suited for full colonization potential; adequate habitat for maintenance of populations; presence of additional substrate in the form of newfall, but not yet prepared for colonization (may rate at high end of scale).	20-40% mix of stable habitat; habitat availability less than desirable; substrate frequently disturbed or removed.	Less than 20% stable habitat; lack of habitat is obvious; substrate unstable or lacking.
•••	20 19 18 (17) 16	15 14 13 12 11	10 9 8 7 6	5 4 3 2 1 0
VEGETATIVE PROTECTION (score each bank, determine sides by facing downstream)	More than 90% of the streambank surfaces and immediate riparian zone covered by native vegetation, including trees, understory shrubs, or nonwoody macrophytes; vegetative disruption through grazing or mowing minimal or not evident; almost all plants allowed to grow naturally.	70-90% of the streambank surfaces covered by native vegetation, but one class of plants is not welf-represented; disruption evident but not affecting fulf plant growth potential to any great extent; more than one-half of the potential plant stubble height remaining.	50-70% of the streambank surfaces covered by vegetation; disruption obvious; patches of bare soil or closely cropped vegetation common; less than one-half of the potential plant stubble height remaining.	Less than 50% of the streambank surfaces covered by vegetation; disruption of streambank vegetation is very high; vegetation has been removed to 5 centimeters or less in average stubble height.
	Left Bank 10 9	8 7 6	5 4 3	2 1 0
	Right Bank (0) 9	8 7 6	5 4 3	2 i 0
BANK EROSION (facing downstream)	Banks stable; evidence of crosion or bank failure absent or minimal; little potential for future problems. <5% of bank affected.	Grade and width stable; isolated areas of bank failure/erosion; likely caused by a pipe outfall, local scour, impaired riparian vegetation or adjacent use.	Past downcutting evident, active stream widening, banks actively eroding at a moderate rate; no threat to property or infrastructure	Active downcutting; tall banks on both sides of the stream eroding at a fast rate; erosion contributing significant amount of sediment to stream; obvious threat to property or infrastructure.
	Left Bank 10 (9)	8 7 6	5 4 3	2 1 0
	Right Bank 10 9 .	8 7 6	5 4 3	2 1 0
FLOODPLAIN CONNECTION	High flows (greater than bankfull) able to enter floodplain. Stream not deeply entrenched.	High flows (greater than bankfull) able to enter floodplain. Stream not deeply entrenched.	High flows (greater than bankfull) not able to enter floodplain. Stream deepty entrenched.	High flows (greater than bankfull) not able to enter floodplain. Stream deeply entrenched.
	20 (19) 18 17 16	15 14 13 12 11	10 9 8 7 6	5 4 3 2 1 0
	OVER.	ALL BUFFER AND FLOODPLAI	N CONDITION	
	Optimal	Suboptimal	Marginal	Poor
Vegetated Buffer Width	Width of buffer zone >50 feet; human activities (i.e., parking lots, roadbeds, clear-cuts, lawns, crops) have not impacted zone. Some ANGAS (SO	Width of buffer zone 25-50 feet; human activities have impacted zone only minimally.	Width of buffer zone 10-25 feet; human activities have impacted zone a great deal.	Width of buffer zone <10 feet: little or no riparian vegetation due to human activities.
	Left Bank 10 (9) Right Bank 10 (9)	8 7 6 8 7 6	5 4 3	2 1 0
FLOODPLAIN VEGETATION	Right Bank 10 (9) Predominant floodplain vegetation type is mature forest	8 7 6 Predominant floodplain vegetation type is young forest	5 4 3 Predominant floodplain vegetation type is shrub or old field	2 1 0 Predominant floodplain vegetation type is turf or crop land
	20 19 (18) 17 16	15 14 13 12 11	10:9 8 7 6	5 4 3 2 1 0
FLOODPLAIN HABITAT	Even mix of wetland and non-wetland habitats, evidence of standing/ponded water	Even mix of wetland and non-wetland habitats, no evidence of standing/ponded water	Either all wetland or all non- wetland habitat, evidence of standing/ponded water	Either all wetland or all non- wetland habitat, no evidence of standing/ponded water
	20 (19) 18 17 16	15 14 13 12 11	. t0 9 8 7 6	5 4 3 2 1 0
FLOODPLAIN ENCROACH- MENT	No evidence of floodplain encroachment in the form of fill material, land development, or manmade structures	Minor floodplain encroachment in the form of fill material, land development, or manmade structures, but not effecting floodplain function	Moderate floodplain encroachment in the form of filling, land development, or manmade structures, some effect on floodplain function	Significant floodplain encroachment (i.e. fill material, land development, or man-made structures). Significant effect on floodplain function
	20 19 18 17 16	15 14 13 12 11	(lò) 9 8 7 6	5 4 3 2 1 0

WATERSHED	/SUBSHED: NBN		**	DAT	е: <u>/</u> д_	103/09	ASSE	SSED BY: CM/B6	
SURVEY REA	rafferateurinain para a companya a para a companya a companya a	Тіме: <u>Э : 14</u>				(Camera-Pie	:#) PC 03	500 /# 45	
SITE ID: (Con		41 0 51 1 42				<u>5/_"</u> Ll	мк	GPS (Unit ID)	
m	Mucko Road (gra								
TYPE: KROS	ad Crossing								
	SHAPE: Arch Bottomless	# BARRELS:	MATERIAL:				DIMENSIONS: (if variable, sketch)		
	Box Elliptical	☐ Double	☐ Concrete ☐ Metal		☐ Flow-aligned ☐ Not flow-aligned ☐ Do not know		Barrel diameter: $94''$ (ft) Height:(ft)		
FOR ROAD/	Circular	Triple	Other:						
RAILROAD CROSSINGS	Other:	Other:					Culvert length:(ft)		
ONLY	CONDITION: (Evidence of)	_	CULVE	RT SLOPE:	047,0107	Width:(ft)			
	☐ Cracking/chipping/corrosion☐ Sediment deposition	□ Downstream □ Failing emb			_	ht $(2^{\circ} - 5^{\circ})$		(',	
	Other (describe): When	r anning cinio الأحكاد المصادمة	Destan	I	☐ Obv	ious (>5°)	Roadway	elevation:(ft)	
	Other (describe): when	ent is too	SMAIL						
POTENTIAL I	RESTORATION CANDIDATE	Fish barrier re		ert rep	oair/repl	acement 🔼	Jpstream st	torage retrofit	
no		Local stream	repair 🔲 Othe	er: Ţ	Pepha	edwith	lacger	- culvert.	
Is SC ACTING	G AS GRADE CONTROL	□ No □ Y	es 🔲 Unk						
	EXTENT OF PHYSICAL BLO	CKAGE:			BLOC	KAGE SEVER	UTY: (circ	le #)	
	☐ Total ☐ Partial ☐ Temporary ☐ Unknow	ı,n	A structure such	as a dan	n or	A total fish blocka	ge on a	A temporary barrier such as a	
If yes for		VII	road culvert on a greater stream bl					beaver dam or a blockage at the very head of a stream with	
fish barrier	CAUSE:		upstream movem	ent of		or partial blockage	e that may	very little viable fish habitat	
	☐ Drop too high Water Dr ☐ Flow too shallow Water Do	•	anadromous fish; passage device p			interfere with the anadromous fish.	~	above it; natural barriers such as waterfalls.	
	Other:	pui (iii)				2		2 1	
NOTES/SKET	CH: We spoke to A	1 landown	er who	is	COM	cerned	Alona	- A	
PROO	sed commercial : Reach is current ie is an Aband	developm	ent on	Much	40 W	2 and t	wis .	artion or	
مل	004-1 10 0000	All Procedo	a Cual	- 100	ٔ لا ا	munerel	uip i	unclear	
7 7	REACH IS CHIRLEN	my havesn	t. a	P-10	7		د. مداراه	-L	
1 the	ie is An Alband	loned loo	King Boy	SCOM	+ c	Annly 4	at len	sie me	
Re	sidential home.		V						
•									
						REPOR	TED TO AUT	THORITIES YES NO	

WATERSHED	/SUBSHED: WBN			DATE: 📗	<u> २/६३ /८</u> ९	ASSE	ESSED BY: C	<u>un+86</u>	
SURVEY REA	<u>.cн ID: 4</u>	Тіме::	_AM/PM		D: (Camera-Pi	c #)	/# No	ne	
SITE ID: (Con	dition-#) SCB LAT	41°51 '5	" Long 7	2 <u> </u>	<u>'37</u> " L	MK	GPS (Init ID)	
							•		
TYPE: Roa	ad Crossing	ng Manmade	Dam Beave	r Dam	Geological For	mation 🖔	Others (Civ	remay	
FOR ROAD/ RAILROAD	SHAPE: Arch Bottomless Box Elliptical Circular Other:	# BARRELS: Single Double Triple Other:	MATERIAL: Concrete Metal Other:			Barrel dia	Height:	(ft)(ft)	
CROSSINGS ONLY	CONDITION: (Evidence of) Cracking/chipping/corrosion Sediment deposition Other (describe):	□ Downstream □ Failing emb		□ F □ S	VERT SLOPE: lat light (2° – 5°) Obvious (>5°)	Width:((ft) (ft) (ft)	
POTENTIAL RESTORATION CANDIDATE									
IS SC ACTING	G AS GRADE CONTROL	□ No □ Yo	es 🔲 Unkı	nown					
	EXTENT OF PHYSICAL BLO Total Partial Temporary Unknow		A structure such a	s a dam or	A total fish blocks	age on a A temporary barrier suc		arrier such as a	
If yes for fish barrier	CAUSE: Drop too high Water Dr Flow too shallow Water Do Other:	greater stream bld upstream moveme anadromous fish; passage device pi	ocking the ent of no fish	of or partial blockag ish interfere with the		the very head very little viable	of a stream with		
NOTES/SKET	CH:		<u> </u>		7 . 3				
	70 foot long will	elt under	c dervien	۸۷.					
					•	·			
,									
7					Repor	TED TO AU	THORITIES	l Yes □ No	

WATERSHED	WATERSHED/SUBSHED: WKN DATE: 12/3/29 ASSESSED BY: CM+Bo									
SURVEY REA		Тіме: <u>З</u> : <i>Э</i> €				: (Camera-Pic	:#) PC3	00 /# 58		
SITE ID: (Con	distor#) SGC LAT	41.52.04	<u>† " Long]</u>	<u>2 º4</u>	<u>3 '</u>	<u>33 </u> " li	ик	GPS (Unit ID)		
Tripp. E7 p	10 · □n: 10 ·					G 1 1 1 E		Lou		
TYPE: 🔀 Roa	ad Crossing 🔲 Railroad Crossi					Geological Form				
FOR ROAD/ RAILROAD	SHAPE: Arch Bottomless Box Elliptical Circular Other:	# BARRELS: Single Double Triple Other:	MATERIAL: ☐ Concrete ☐ Metal ☐ Other:	☐ Flow-aligned ☐ Not flow-aligned ☑ Do not know		flow-aligned	DIMENSIONS: (if variable, sketch) Barrel diameter:(ft) Height:(ft)			
CROSSINGS ONLY	CONDITION: (Evidence of) Cracking/chipping/corrosion Sediment deposition Other (describe):	n scour hole Slight (2° – 5°)			t ght (2° – 5°)	Culvert length:				
POTENTIAL RESTORATION CANDIDATE ☐ Fish barrier removal ☐ Culvert repair/replacement ☐ Upstream storage retrofit ☐ no ☐ Local stream repair ☐ Other: > need Wager culvert ?										
Is SC ACTING	G AS GRADE CONTROL	□ No □ Yo	es 🔲 Unk	nown						
EXTENT OF PHYSICAL BLOCKAGE: Total								A temporary barrier such as a		
If yes for fish barrier	CAUSE: Drop too high Water Dr Flow too shallow Water Do Other:	op: (in)	road culvert on a 3rd ord greater stream blocking upstream movement of anadromous fish; no fish passage device present		og the significant reach of or partial blockag interfere with the		of stream, e that may	beaver dam or a blockage at the very head of a stream with very little viable fish habitat above it; natural barriers such as waterfalls.		
NOTES/SKET	CH: Man 's On h		0	6	٠ ١		11 7			
NOTESISKET	Stremmater pip Stremmater pip Rip-RAP + PA Crossing + MA	e an UB) rement a son headu	AM OF O	LUC WAU WI	vert ele hs- ps-te	~ 10'c	dans	THORITIES YES NO		

Trash and Debris



WATERSHED/SUB	SHED: WBN		DATE: 10/03/09 ASSESSED BY: BG						
SURVEY REACH I	D: 04	TIME::AM/PM	Рното ID: (Са	mera-Pic #)	1# (See belw)				
SITE ID: (Condition	#) TR-ONE LAT_	of See Gelow-		" LMK	GPS: (Unit ID)				
TYPE: Industrial Commercial Residential	*-	onstruction	SOURCE: Unknown Flooding Lillegal dump Local outfall	LOCATION: Stream Riparian Area Lt bank Rt bank	LAND OWNERSHIP: ☐ Public ☐ Unknown ☐ Private AMOUNT (# Pickup truck loads):				
POTENTIAL RESTORATION CANDIDATE Stream cleanup Stream adoption segment Removal/prevention of dumping Other:									
If yes for trash or debris removal	EQUIPMENT NEEDED: WHO CAN DO IT:				UMPSTER WITHIN 100 FT: Yes □ No □ Unknown				
CLEAN-UP POTENTIAL:	A small amount of trash (i.e., than two pickup truck loads) loo inside a park with easy access	a long period of time but few days, possibly with a s	nay have been dumped of it could be cleaned up it mail backhoe.	area, where access or indications of haz					
(Circle #)	5	(4)	3	2	1,				
NOTES: -D DUMPSITE ON CB = 41°51'48"/72°43'43" including thes, old care (entire), stove, old frundation, broken pipes. Illegal-looking dump (Photo PCB00-50) -> old tank in Charned (oil tank?) = 41°51'56"/72°43'39" -> trash invaled, including plastic Milk bottles, bleach bottles + garbage on CB = 41°51'59"/72°43'37"									
					AUTHORITIES YES NO				

SURVEY REACH I	D: 2 w	/TRSHD/SUBSHD: BH	:R	DATE: 12/8/	ASSESSE	M/BG
START TIM	E: 0 : _0 AM/P	M LMK:	END TIME: 1	: 00 AM/PM	LMK:	GPS ID:
LAT 41 0 51	09" LONG	92.42 · 38 "	LAT 41 ° 51 ' 6	3" LONG 632	· 42:38	" (our)
	f .	•	DESCRIPTION:	Ail MARSE		
	JUNCT ON	. Ordley Town Rol	<u> </u>	HIT MILES		
RAIN IN LAST 24 HO		n Steady rain I	PRESENT CONDITIONS	☐ Heavy rain □	☐ Steady rain ☐	Intermittent
None	☐ Intermitte		□ Clear	-	•	Partly cloudy
SURROUNDING LAN	D USE: 🖾 Industr	ial Commercial [☐ Urban/Residential □	Suburban/Res	Forested \Box	Institutional
			☐ Crop [☐ Pasture □	☐ Other:	
ÄVERAGE	CONDITIONS (cl	heck applicable)	REACHS	KETCH AND SITE	IMPACT TRAC	KING
BASE FLOW AS %	□ 0-25% □25-50 %	€ 50%-75% □ 75-100%	Simple planar sketch oj within the survey read	survey reach. Track ch (OT, ER, IB,SC, UT		
CHANNEL WIDTH	□25-30 %		features d	eemed appropriate. It	ndicate direction of	flow
DOMINANT SUBSTR		0.111.70.5.1083	cul mel X	30-5	MARSH	- BALLIDAY
☐ Silt/clay (fine or ✓ Sand (gritty)		Cobble (2.5 –10") Boulder (>10")	Coc la			
☐ Gravel (0.1-2.5		Bed rock	gene		-	LANK.
`	· · · · · · · · · · · · · · · · · · ·		EN.			enouthery
		oid (suspended matter)	CANATO	iviet		
☐ Stained (clear, n☐ Other (chemicals,		→ Opaque (milky)	$\overline{}$	St.	\	
· · · · · · · · · · · · · · · · · · ·			Carl	Harris	11.	
AQUATIC PLANTS		one Some 🗆 lots	Feral	av or "	11 7	ا د
IN STREAM		ne □ some □ lots	1	, -	SMANN	Γ
WILDLIFE IN OR	(Evidence of) ☐ Fish ☐ Bea	aver Æ-Deer	,	\	11	
AROUND STREAM	☐ Snails ☐ Oth	,		[DIMP]	11	
		d (≥75% coverage)		I STEN	H_{Λ}	\a_
STREAM SHADING	☐ Halfway (≥50)%)		¥/	ALL PINE	Warrings
(water surface)	☐ Partially shad☐ Unshaded (<		À		/ X	1/gro
			74	- 1/	•	
CHANNEL	Downcutting	· =	7)	
DYNAMICS	☐ Widening ☐ Headcutting	Bank failure Bank scour		\\	₹0	
	Aggrading	Slope failure	44.44			
Unknown	Sed. depositi		Min Smi			
	-	1	erosi			j
CHANNEL	Height: LT bank)() r		
DIMENSIONS (FACING	RT ban	,		SWAY	MP Tailant	496
DOWNSTREAM)	Width: Bottom	``		1/ 4	-40×10×11	1
	Тор	(ft)		11/	_	
	2000 1000 1000 1000 1000 1000 1000 1000	LITY		/~/	forest +	
Good: Open area in	Fair: Forested or developed area	Difficult. Must cross wetland, steep slope, or		\ (7	
public ownership, sufficient room to	adjacent to stream.	sensitive areas to get to		()	of harden	
stockpile materials,	Access requires tree removal or impact to			11	(100 DOLLINGA	
easy stream channel access for heavy	landscaped areas.	and/or located a great		<i>}</i> }	940.	ļ
equipment using	Stockpile areas small or distant from	distance from stream. Specialized heavy	And the trans		- TRIBUTARY RAP-RAP - CUIVED	1
existing roads or trails.	stream.	equipment required.	W. Modelley Tow	Kd. 6	I = culveat	
	4 3	2 (T)				
NOTES: (biggest pro	viem you see in surv	EUMPINE	1 tenson			
		•	,			
				D		me Vec No
1				KEPORTI	ED TO AUTHORIT	IES YES NO

T	Optimal	Suboptimal	Marginal	Poor		
IN-STREAM HABITAT (May modify criteria based on appropriate habitat regime)	Greater than 70% of substrate favorable for epifaunal colonization and fish cover; mix of snags, submerged logs, undercut banks, cobble or other stable habitat and at stage to allow full colonization potential (i.e., logs/snags that are not new fall and not transient).	adequate habitat for maintenance of populations; presence of additional substrate in the form of newfall, but not yet prepared for colonization (ma) rate at high end of scale).	20-40% mix of stable habitat; habitat availability less than desirable; substrate frequently disturbed or removed.	Less than 20% stable habitat; le of habitat is obvious; substrate unstable or lacking.		
Vacan		(13) 14 13 12 11	10 9 8 7 6	5 4 3 2 1 0		
VEGETATIVE PROTECTION (score each bank, determine sides by facing downstream)	More than 90% of the streambank surfaces and immediate riparian zone covered by native vegetation, including trees, understory shrubs, or nonwoody macrophytes; vegetative disruption through grazing or mowing minimal or not evident; almost all plants allowed to grow naturally.	represented; disruption evident but not affecting full plant growth potential	disruption obvious; patches of	Less than 50% of the streambal surfaces covered by vegetation; disruption of streambank vegetation is very high; vegetation as been removed to 5 centimeters or less in average stubble height.		
	Left Bank 10 9	8 🕏 6	5 4 3	2 1 0		
<u>.</u>	Right Bank 10 9	8 7 6	5 4 3	2 1 0		
BANK EROSION (facing downstream)	Banks stable; evidence of erosion or bank failure absent or minimal; little potential for future problems. <5% of bank affected.	Grade and width stable; isolated areas of bank failure/erosion; likely caused by a pipe outfall, local scour, impaired riparian vegetation or adjacent use.	Past downcutting evident, active stream widening, banks actively eroding at a moderate rate; no threat to property or infrastructure	Active downcutting; tall banks on both sides of the stream eroding a fast rate; erosion contributing significant amount of sediment to stream; obvious threat to property		
	Left Bank 10 9	8 7 6	5 4 3	or infrastructure.		
	Right Bank 10 9	8 (7) 6	5 4 3	$\frac{2}{2} \frac{1}{1} 0$		
LOODPLAIN CONNECTION	High flows (greater than bankfull) able to enter floodplain. Stream not deeply entrenched.	High flows (greater than bankfull) able to enter floodplain. Stream not deeply entrenched.	High flows (greater than bankfull) not able to enter floodplain. Stream deeply entrenched.	High flows (greater than bankfull) not able to enter floodplain. Stream deeply entrenched.		
li de la company	20 19 18 17 16	15 14 13 (1) 11	10 9 8 7 6	5 4 3 2 1 0		
15 (15 (15 (16 (16 (15 (15 (15 (15 (15 (15 (15 (15 (15 (15	OVER	ALL BUFFER AND FLOODPLAI	N CONDITION			
	Optimal	Suboptimal	Marginal			
EGETATED UFFER VIDTH	Width of buffer zone >50 feet; human activities (i.e., parking lots, roadbeds, clear-cuts, lawns, crops) have not impacted zone. Left Bank 10 9	Width of buffer zone 25-50 feet; human activities have impacted zone only minimally.	Width of buffer zone 10-25 feet; human activities have impacted zone a great deal.	Poor Width of buffer zone <10 feet: little or no riparian vegetation due to human activities.		
<u></u>	Left Bank 10 9 Right Bank 10 9	7 6	5 4 3	2 1 0		
		8 7 6	5 4 3	2 1 0		
	Predominant floodplain vegetation type is mature forest	Predominant floodplain vegetation type is young forest	Predominant floodplain vegetation type is shrub or old field	Predominant floodplain vegetation type is turf or crop land		
	20 19 18 17 (6)	15 14 13 12 11	10 9 8 7 6	5 4 3 2 1 0		
ABITAT	Even mix of wetland and non-wetland habitats, evidence of standing/ponded water	standing/ponded water	Either all wetland or all non- wetland habitat, evidence of standing/ponded water	Either all wetland or all non- wetland habitat, no evidence of standing/ponded water		
	20 18 17 16	15 14 13 12 11	10 9 8 7 6	5 4 3 2 1 0		
CROACH-	material, land development, or	form of fill material, land	Moderate floodplain encroachment in the form of filling, land development, or manmade structures, some	Significant floodplain encroachment (i.e. fill material, land development, or man-made structures). Significant effect on floodplain function		

Sub Total In-stream: 2 /80

Buffer/Floodplain: (27 /80

Total Survey Reach 122/160

Trash and Debris



WATERSHED/SUB	SHED: BHR		DATE: 10 / 0 /	8109	ASSESSED BY: CM+BG				
SURVEY REACH I	D: 07-	TIME::AM/PM	Рното ID: (Са	mera-Pic#) PCO	80 # 08 1, 082				
SITE ID: (Condition	#) TIR ONL LAT	1 . 5/ . 20 "Lone	572 · 40 · 37	_" LMK	GPS: (Unit 1D)				
TYPE: ☐ Industrial ☐ Commercial ☑ Residential	Appliances Y	aper Metal onstruction Medical ard Waste ther: Old Rayvas?	SOURCE: Unknown Flooding Ullegal dump Local outfall	LOCATION: Stream Riparian Are Lt bank Rt bank	LAND OWNERSHIP: Public Unknown Private AMOUNT (# Pickup truck loads):				
POTENTIAL REST	POTENTIAL RESTORATION CANDIDATE Stream cleanup Stream adoption segment Removal/prevention of dumping								
If yes for trash or debris removal	EQUIPMENT NEEDED: WHO CAN DO IT:	Heavy equipment \(\sqrt{1} \) Uolunteers \(\sqrt{Local } \)			DUMPSTER WITHIN 100 FT: ☐ Yes ☑ No ☐ Unknown				
CLEAN-UP POTENTIAL:	A small amount of trash (i.e., than two pickup truck loads) loo inside a park with easy access	less A large amount of trash,	or bulk items, in a small a may have been dumped o it could be cleaned up i	A large amoun	nt of trash or debris scattered over a large ccess is very difficult. Or presence of drums of hazardous materials				
(Circle #)		4	3	(3)	1				
NOTES: dum Anta Ac	ip site include o parts. Adjace	s items such ut to a stan	as oil du	Luns, of	Rloage caus t 2. Unsure of				
7	•			REPORTE	D TO AUTHORITIES 🔲 YES 🔁 NO				

Storm Water Outfalls



	WATERSHED/SUBSHEI	WATERSHED/SUBSHED: BHR				DATE: 108/09 ASSESSED BY: CM+B6						
	SURVEY REACH ID:	O- Tu	ME: :AM/PN	ſ	Рното ID: (Camera-P	ic#) PC080 /#	083					
	SITE ID (Condition-#): O	T- LA	т <u>41 ° 51 23</u>	_" Lo	ng 72° 42'38		GPS: (Unit ID)					
	BANK: LT RT Head FLOW: None Trickle Moderate Substantial Other:	TYPE: Closed pipe Open channel	MATERIAL: Concrete PVC/Plastic Other: Concrete Ea		Parabolic v	Dimensions: Diameter: \	(in) Partially Fully NOT APPECABLE					
!	CONDITION: None Chip/Cracked Peeling Paint Corrosion Other:	ODOR: No Gas Sewage Rancid/Sour Sulfide Other:	DEPOSITS/STAINS None Oily Flow Line Paint Other:	5:	VEGGIE DENSITY: None Normal Inhibited Excessive Other:	PIPE BENTHIC C Brown Other: POOL QUALITY Good Odor Suds Alga Other:	: ⊠ No pool s □Colors □Oils					
	•	ITY: 🔲 None	Slight Clouding Sewage (toilet stic bags)	≥8 8	Cloudy Dpaque tc.) Petroleum (bulk) Excessive	Orange Red (oil sheen)	Other:					
		ΓΙΟΝ CANDIDATE	_	_	Stream daylighting	Local stream rep	air/outfall stabilization					
	If yes for daylighting: Length of vegetative cove	r from outfall:	Storm water retr		Other:	Slop	pe:°					
	If yes for stormwater: Is stormwater currently co			Use desc vailable	cription: facested	+ Residen	thal					
	SEVERITY: stroic com streic streic stroic com streic stroic com streic stroic s	vy discharge with a dist ng smell. The amount of npared to the amount of am; discharge appears t ificant impact downstrea	f discharge is significant normal flow in receiving to be having a	discharg discharg	scharge; flow mostly clear and o ge has a color and/or odor, the ar ge is very small compared to the I any impact appears to be minor	mount of discharge of cause	does not have dry weather ge; staining; or appearance ing any erosion problems.					
ļ.		. 5	4		3	2	1					
	SKETCH/NOTES: 6	tuk ekosi	on t p	pe	is now							
					ı	REPORTED TO AUTHO	ORITIES: YES NO					

WATERSHED	/SUBSHED: HK				D 108 1 09			CW1/6
SURVEY REA	en ren 1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919)(1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919)(1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919)(1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919)(1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919)(1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919 (1919)(1919 (1919 (1919)(1919 (1919)(1919 (1919)(1919 (1919)(1919)(1919)(1919)(1919)(1919)(1919)(1919)(1919)(1919)(1919)(1919)(1919)	Тіме: <u>/0</u> : 2			ID: (Camera-Pio	:#) PCO8	50 /#	070
		<u>41.51.0</u>	<u>1</u> " Long <u>7</u>	2º 42	<u>'38"</u> LI	MK	GPS	(Unit ID)
1 7 7	est Ondley Town Road	_	_					
TYPE: Ros	ad Crossing 🔲 Railroad Crossi	ng Manmade			☐ Geological For		Other:	
1	SHAPE:	#BARRELS:	MATERIAL:		AGNMENT:		••	ariable, sketch)
1	Arch Bottomless Bliptical	Single ☐ Double	☐ Concrete ☑ Metal	☐ Flow-aligned ☐ Not flow-aligned		Barrel dia	· ·	(ft)
FOR ROAD/	∆ Circular	Triple	Other:		Do not know		Height:	(ft)
RAILROAD	Other:	Other:			DO HOL KHOW	Culment la		(4)
CROSSINGS ONLY	CONDITION: (Evidence of)				LVERT SLOPE:	Culvert le	mgun: Width:	(ft)
07,27	Cracking/chipping/corrosion				Flat Slight (2° – 5°)		Width.	(11)
	☐ Sediment deposition ☐ Other (describe):	unkment		Obvious (>5°)	Roadway	elevation:	(ft)	
	Other (describe):		., ,,,		` '			(14)
POTENTIAL I	RESTORATION CANDIDATE	Fish barrier re	emoval 🔲 Culv	ert repair	replacement 🔲 🕻	Jpstream st	orage retro	ofit
no		Local stream	repair 🔲 Othe	er:				
Is SC ACTING	G AS GRADE CONTROL	□ No □ Y	es Unk					
	EXTENT OF PHYSICAL BLO	CKAGE:	· · · · · · · · · · · · · · · · · · ·	В	LOCKAGE SEVE	RITY; (circ	le #)	
	☐ Total ☐ Partial ☐ Temporary ☐ Unknown	A structure such a					y barrier such as a	
If yes for			road culvert on a greater stream bk		r tributary that wou significant reach			n or a blockage at ad of a stream with
fish barrier	CAUSE: Drop too high Water Dr	rop:(in)	upstream movem anadromous fish;	ent of	or partial blockag interfere with the	e that may		able fish habitat atural barriers such
	Flow too shallow Water D		passage device p		anadromous fish.		as waterfal	
	Other:		5		4 3		2	<u> </u>
NOTES/SKET	CH: On On	1 (/ .	1.
	ELIP-KAP	has be	en pin	Ud	of the	The.	CAL	31/2-
	to ~	10' da	nstrea	W	or the	o. L.	ext	
	- PACC	. 		•	6	40	- (1	
	1.3							
				·				•
ļ	•						•	
		•						
								•
7					₩			□ v _{es} □ v _e
					REPOR	TED TO AU	THORITIES	YES NO

WATERSHED	WATERSHED/SUBSHED: BHK DATE: B DS DT ASSESSED BY: CM (66)										
SURVEY REA			2409/PM			(Camera-Pic	#) PC08	30 1# 083			
SITE ID: (Con	dition-#) SC- <u>B</u> LAT	<u>41 · 51 · 23</u>			23	<u>8" Li</u>	ик	GPS (Unit ID)			
			em ar dik								
TYPE: Ros	ad Crossing Railroad Crossi										
	SHAPE: Arch Bottomless	#BARRELS:	MATERIAL:			MENT: -aligned	Barrel dia	MONS: (if variable, sketch) meter: 24"			
	Box Elliptical	Double	Metal		☐ Not flow-align			Height: 18" (%)			
FOR ROAD/	Circular Other:	Triple	Other:			ot know		OVEZ V			
RAILROAD CROSSINGS		Other:	<u> </u>		C	RT SLOPE:	Culvert le	ength:(ft)			
ONLY	CONDITION: (Evidence of) Cracking/chipping/corrosion	n scour hole	-	□ Flat	RI SLOPE:		Width:(ft)				
	Sediment deposition	ankment	_	_	$t(2^{\circ}-5^{\circ})$						
	Other (describe):			[Obvid	ous (>5°)	Roadway	elevation:(ft)			
			. 🗆 .				•	. 6.			
l	RESTORATION CANDIDATE	Fish barrier re		_	air/repla	acement 🔲 (Jpstream st	orage retrofit			
по	· · · · · · · · · · · · · · · · · · ·	Local stream									
IS SC ACTING	G AS GRADE CONTROL	□ No □ Y	es 🔲 Unk	nown	Di oci	A OP CEVER	TTPMA (aire	I - #\			
	EXTENT OF PHYSICAL BLO	CKAGE:			BLUCI	KAGE SEVER	div. (circ	te # <i>)</i>			
	☐ Temporary ☐ Unknow	wn	A structure such as a da road culvert on a 3rd or greater stream blocking upstream movement of					A temporary barrier such as a beaver dam or a blockage at			
If yes for	Cause:				ne s	significant reach or partial blockage	of stream,	the very head of a stream with very little viable fish habitat			
fish barrier		rop: (in)	anadromous fish	; no fish	j	interfere with the	,	above it; natural barriers such			
	Flow too shallow Water D	epth: (in)	passage device	present.	1	anadromous fish.		as waterfalls.			
	Other:		5		4	3		2 1			
NOTES/SKET	TCH: Dible (<	Jull in	nat a	, ∕≥⁄ _Λ	. 7	ha In	a 44	Alpan			
	4.1.)((11100)		4 00		, ,	4 U				
	~18" W	izen x f	he bau	ks	- h	Ave e	rodeo	stleam I Away. And uses			
	LANGUAR	alan de	Arre 1 min 1			من فسمال	ر ا	und uces			
	٧١١٠)٠٠١٩٠	NOON	necess	- 51	UKKO	MINOCIVI	'' (C	400c 0202			
	ARR RE	sidental	l /fre	FroGreat	<u> </u>						
						,		:			
	•										
								·			
	•										
		4									
			•								
7						<u></u>		-			
<u>'</u>	·					REPOR	TED TO AU	THORITIES YES NO			



	WATERSHED/SUBSHED: BAR			DATE: 12 10	ASSESSED BY: CM/B				
	SURVEY REA	<u>сн ID:</u>	07	TIME: : AM/PM	Рното II	D: (Camera-Pic #)	/#		
	SPTE ID: (Cone	dition#)	START LAT END LAT	Long Long	0 1 11	LMK	GPS: (Unit ID)		
			☑ Bank armoring	concrete channel F	loodplain encroach	ment Other:			
	MATERIAL:		Does channel hav	e perennial flow?	✓ Yes □ No	DIMENSIONS:			
	☐ Concrete [Rip Rap [☐ Gabion ☐ Earthen	Is there evidence	of sediment deposition?	Yes No	Height Bottom Width	(ft)		
	Metal	_ Lartien	Is vegetation grov	ving in channel?	Yes 🔼 No	Top Width:	(ft)		
	Other:		Is channel connec	ted to floodplain?	☐ Yes ØNo	Length:	(ft)		
j	BASE FLOW CHANNEL Depth of flow(in) Defined low flow channel? Yes \Boxed No ADJACENT STREAM CORRIDOR Available width LT(ft) RT(ft) Utilities Present? Fill in floodplain?								
ŀ	% of channel l				☐ Yes ☐ No		□Yes □ No		
	POTENTIAL R	ESTORATIO	ON CANDIDATE	☐ Structural repair ☐ Base ☐ De-channelization ☐ Fis		ation 🔲 Natural o 🔯 Bioengir	channel design		
	CHANNEL- IZATION SEVERITY: (Circle #)	channel where	of concrete stream (>500 e water is very shallow (<1 natural sediments present	" A moderate length (> 200) ,	atural stream channel.	depth, a natura shape similar t	annel less than 100 ft with good water al sediment bottom, and size and o the unchannelized stream reaches ow impacted area.		
	NOTES: there are 2 AREAS containing Rip-RAP: Out culrent junction with W. Dudley Town Rd								
		Off culvert motion with the born dike							
L									

SURVEY REACH I	D: WT	RSHD/SUBSHD: W	TR	DATE: 12/8/01	ASSESSED BY:	B6
	е: <u>9.40 Ф</u> /рм	LMK:	END TIME:		1K:	GPS ID:
LAT 41 ° 51 '	44 " Long 7	<u> 2° 43' 08 "</u>	LAT41 . 51 . 4	16 " LONG 72 º 4	<u>3 · 07 "</u>	(mo)
DESCRIPTION: NAME	eth end of 1	Judley Town	DESCRIPTION: CU	hert told you	MANNED Jam LOAG	
RAIN IN LAST 24 HO	URS Heavy rain		PRESENT CONDITIONS		ady rain □ Inter	
None	☐ Intermittent	☐ Trace	☐ Clear	☐ Trace ☐ Ov	ercast 🔼 Parti	ly cloudy
SURROUNDING LAN	DUSE: Andustrial			□ Suburban/Res ÆNFor □ Pasture □ Oth		tutional
AVERAGE	CONDITIONS (chec	k applicable)	REACH S	KETCH AND SITE IMP	ACT TRACKING	
Base Flow as % Channel Width	□ 0-25% □25-50 %	≤ 50%-75% □ 75-100%	within the survey rea	f survey reach. Track locati ch (OT, ER, IB,SC, UT, TR, leemed appropriate. Indicat	MI) as well as any	
DOMINANT SUBSTR ☐ Silt/clay (fine or ☐ Sand (gritty) ☐ Gravel (0.1-2.5	slick) 🗆 Co	bble (2.5 –10") oulder (>10") d rock	ten	Leep MARSI	-> 4	L LANSA
	☑Clear □Turbid aturally colored) □ dyes)		old	Roma Ra (AO	name)	ATTE PIPES
AQUATIC PLANTS IN STREAM	•	e □ some □ lots □ some □ lots	+ reas	sh		
WILDLIFE IN OR AROUND STREAM	(Evidence of) ☐ Fish ☐ Beave ☐ Snails 🕰 Other	R-t Work, er BDeer : RArcom, MANARd			NSW X WASIN	uks
STREAM SHADING (water surface)	Mostly shaded (☐ Halfway (≥50%☐ Partially shaded☐ Unshaded (< 25) (≥25%)		J. J.	7	
CHANNEL DYNAMICS STABLE Unknown	Downcutting Widening Headcutting Aggrading Sed. deposition	Bed scour Bank failure Bank scour Slope failure Channelized	CHANNEL SINUON'S	three How	preking ly nowst Buildi	15 200
CHANNEL DIMENSIONS (FACING DOWNSTREAM)	Height: LT bank RT bank Width: Bottom Top	(ft) (ft) (ft)	21	3	1	
	TOP TEACH ACCESSIBILE	Visite de l'accident de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la company de la com		MAR		
Good: Open area in public ownership, sufficient room to stockpile materials,	Fair: Forested or developed area adjacent to stream. Access requires tree	Difficult. Must cross wetland, steep slope, or sensitive areas to get to stream. Few areas to		5	4	
easy stream channel access for heavy equipment using existing roads or trails.	removal or impact to landscaped areas. Stockpile areas small or distant from stream.	stockpile available and/or located a great distance from stream. Specialized heavy equipment required.		oudley-town pond	1	
NOTES: (biggest prob	blem you see in survey		(and parts, p	instic leather, etc.) CKENICLE	plastic la	mckets,
+ PANCIAZ	DIVIDE WINDE	y siding of	remove cours in	INGS CREMICIE	WASHING?	YES VNO

Early de Long (1997)		OVERALL STREAM CO	NDITION	
<u></u>	Optimal	Suboptimal	Marginal	
IN-STREAM HABITAT (May modify criteria based on appropriate habitat regime	favorable for epifaunal colonization a fish cover; mix of snags, submerged logs, undercut banks, cobble or othe stable habitat and at stage to allow for colonization potential (i.e., logs/snagthat are not new fall and not transien	40-70% mix of stable habitat; well- suited for full colonization potential; adequate habitat for maintenance o populations; presence of additional substrate in the form of newfall, but	f 20-40% mix of stable habitat; habitat availability less than desirable; substrate frequently	Less than 20% stable habitaty of habitat is obvious; substratunstable or lacking.
	20 19 18 17 16	15 (13) 13 12 11	10 9 8 7 6	5 4 3 2 1 0
VEGETATIVE PROTECTION (score each bank, determin sides by facing downstream)	surfaces and immediate riparian zone covered by native vegetation, includir trees, understory shrubs, or nonwood macrophytes; vegetative disruption through grazing or mowing minimal or not evident; almost all plants allowed grow naturally.	class of plants is not well- represented; disruption evident but not affecting full plant growth potential to any great evident.	e 50-70% of the streambank surfaces covered by vegetation disruption obvious; patches of	Less than FOW at the at-
	Left Bank 10 9	8 7 6	3 4 3	2 1 0
	Right Bank 10 9	8 7 6	5 4 3	<u>-</u> <u>-</u> -
BANK EROSION (facing downstream)	Banks stable; evidence of erosion or bank failure absent or minimal; little potential for future problems. <5% of bank affected.	Grade and width stable; isolated areas of bank failure/erosion; likely caused by a pipe outfall, local scour, impaired riparian vegetation or adjacent use.	Past downcutting evident, active stream widening, banks actively eroding at a moderate rate; no threat to property or infrastructure	Active downcutting; tall banks of both sides of the stream eroding a fast rate; erosion contributing significant amount of sediment the stream; obvious threat to proper
	Left Bank 10 9	8 7 🚳	5 4 3	or infrastructure.
	Right Bank 10 9	3 7 6	5 4 3	2 1 0
COODPLAIN CONNECTION	High flows (greater than bankfulf) able to enter floodplain. Stream not deeply entrenched.	High flows (greater than bankfull) able to enter floodplain. Stream not deeply entrenched.	High flows (greater than bankfull) not able to enter floodplain. Stream deeply entrenched.	
ille (Buencie again	20 19 (18) 17 16	15 14 13 12 11	10 9 8 7 6	5 4 3 2 1 0
	OVE	RALL BUFFER AND FLOODPLA	IN CONDITION	
	Optimal	Suboptimal	Marginal	Poor
EGETATED UFFER VIDTH	Width of buffer zone >50 feet; human activities (i.e., parking lots, roadbeds, clear-cuts, lawns, crops) have not impacted zone. Left Bank 10 9	Width of buffer zone 25-50 feet; human activities have impacted zone only minimally.	Width of buffer zone 10-25 feet; human activities have impacted zone a great deal.	Width of buffer zone <10 feet: little or no riparian vegetation due to human activities.
	Right Bank 10	8 7 6	5 4 3	2 1 0
OODPLAIN GETATION	Predominant floodplain vegetation type is mature forest	Predominant floodplain vegetation type is young forest	5 4 3 Predominant floodplain vegetation type is shrub or old field	2 I 0 Predominant floodplain vegetation type is turf or crop land
	20 19 18 17 16	15 (14) 13 12 11	10 9 8 7 6	
OODPLAIN BITAT	Even mix of wetland and non-wetland habitats, evidence of standing/ponded water	Even mix of wetland and non-wetland habitats, no evidence of standing/ponded water	Either all wetland or all non- wetland habitat, evidence of standing/ponded water	5 4 3 2 1 0 Either all wetland or all non- wetland habitat, no evidence of standing/ponded water
	10 17 10	15 14 (13) 12 11	10 9 8 7 6	5 4 3 2 1 0
		Minor floodplain encroachment in the	Moderate floodplain	Significant floodplain
CROACH-	No evidence of floodplain encroachment in the form of fill material, land development, or manmade structures 20 19 18 17 16	form of fill material, land development, or manmade structures, but not effecting floodplain function	encroachment in the form of filling, land development, or manmade structures, some effect on floodplain function	encroachment (i.e. fill material, land development, or man-made structures). Significant effect on floodplain function

Storm Water Outfalls



-	WATERSHED/SUBSHED	: WTR		DATE: 2 /08 /09	ASSESSED BY:	cm/BB
	SURVEY REACH ID:		ме: <u>9 :40 (</u> Фи/РМ	PHOTO ID: (Camera-Pic	:#) /#	hone
	SITE ID (Condition-#): O	T- 👊 LA	т <u>41°51 '44</u> "Lo	ong 70° 43' 08"	LMK	GPS: (Unit ID)
	ibsBadisbdaftsGefribadbakatheGeristiderasi	halan farence and control (New 2004)				
	BANK: LT RT Head FLOW: None Trickle	TYPE: Closed pipe	MATERIAL: Concrete Metal PVC/Plastic Brick Other:	SHAPE: Single Circular Double Elliptical Triple Other:	DIMENSIONS: Diameter: (in)	SUBMERGED: No Partially Fully
	Moderate Substantial Other:	Open channel	☐ Concrete	Parabolic W	epth: (in) idth (Top): (in) (Bottom): (in)	NOT APPECABLE
	CONDITION: None Chip/Cracked Peeling Paint Corrosion Other:	ODOR: NO Gas Sewage Rancid/Sour Sulfide Other:	DEPOSITS/STAINS: None Oily Flow Line Paint Other:	VEGGIE DENSITY: None Normal Inhibited Excessive Other:	PIPE BENTHIC GRO Brown Orang Other: POOL QUALITY: Good Odors Suds Algae Other:	ge Green No pool Colors Goils
	FLOWING TURBIDI ONLY FLOATA OTHER Exce	TY: None	Sewage (toilet paper, eastic bags)	Cloudy Opaque ctc.) Petroleum (ctc.) Excessive c		I
	POTENTIAL RESTORAT	TION CANDIDATE	E Discharge investigation	n ☐ Stream daylighting [Local stream repair/o	outfall stabilization
١	☐ no		Storm water retrofit	Other:		
ı	If yes for daylighting:					_
	Length of vegetative cove	r from outfall:	ft Type of exist	ing vegetation:	Slope: _	
	If yes for stormwater: Is stormwater currently co ☐ Yes A No ☐ Not in		Land Use des Area availabl	scription:e:		
	SEVERITY: stror come stree		f discharge is significant normal flow in receiving to be having a am.	ischarge; flow mostly clear and od ge has a color and/or odor, the am ge is very small compared to the st d any impact appears to be minor /	ount of discharge; stream's base	not have dry weather taining; or appearance ny erosion problems.
	SKETCH/NOTES: S	mificant	r erosion firm	m imperman	S Suffere	2 high
	slape	over st	ream. Starmu	unter remotes	ALC numer	eous +
	1 /ice 40) E	romanon.	t is occumin	y to steem	n chann	el bean
) ~ (
				· R	EPORTED TO AUTHORIT	ries: ☐ yes ☐ no

C 1	
2	

WATERSHED	/SUBSHED: WTK			DATE: 16				cm/66
SURVEY REA		TIME: 9:50): (Camera-Pi			
SITE ID: (Con	dition#) SC-		o_" Long <u>₹</u>	<u> 2° 43 '</u>	<u>09</u> " L	MK	GPS (Unit ID)
Type, Do	ad Crossing	ing TMonmode		- Dom П	Geological For	nation [Other	
TYPE: KO	SHAPE:	#BARRELS:	MATERIAL:		NMENT:		IONS: (if vari	iable, sketch)
FOR ROAD/ RAILROAD	Arch Bottomless Box Elliptical Circular Other:	Single Double Triple Other:	☐ Concrete ☐ Metal ☑ Other: A	D⊈.Flo	ow-aligned of flow-aligned o not know	Barrel dia	meter: Height:	(ft) (ft)
CROSSINGS ONLY	CONDITION: (Evidence of) Cracking/chipping/corrosic Sediment deposition Other (describe):	on ☐ Downstream ☐ Failing emb		☐ Fla	VERT SLOPE: at ght $(2^{\circ} - 5^{\circ})$ ovious $(>5^{\circ})$	Culvert le	width: elevation:	(ft) (ft)
POTENTIAL I	RESTORATION CANDIDATE	☐ Fish barrier re	emoval Culve repair Othe	=	placement 🔲 l	Jpstream s	torage retrofi	t
Is SC ACTING	G AS GRADE CONTROL	□ No □ Y	es 🗌 Unkr					
If yes for fish barrier	EXTENT OF PHYSICAL BLC Total Partial Temporary Unknow CAUSE: Drop too high Water D Flow too shallow Water D Other:	own Этор: (in)	A structure such a road culvert on a 3 greater stream blo upstream moveme anadromous fish; passage device pr	s a dam or Brd order or ocking the ent of no fish	A total fish blocka tributary that wou significant reach or partial blockag interfere with the anadromous fish.	age on a ld isolate a of stream, e that may migration of	A temporary to beaver dam of the very head very little viable above it; naturals waterfalls.	parrier such as a or a blockage at l of a stream with le fish habitat ral barriers such
NOTES/SKET			5		4 3		2	1
	looks ok							
					Repor	TED TO AU	THORITIES []Yes □No

WATERSHED/SUB	SHED: WTR		DATE: 2 /08	7 /09	ASSESSED BY: CM/BG		
SURVEY REACH I		TIME::AM/PM	РНОТО ID: (Са	mera-Pic #)	/#		
SITE ID: (Condition	+) TR- ME LAT_	See below "Long		_" LMK	GPS: (Unit ID)		
TYPE: Industrial Commercial Residential		aper (☑ Metal onstruction ☐ Medical ard Waste	SOURCE: Unknown Flooding Ulllegal dump	LOCATION: Stream Riparian Are	AMOUNT (# Pickup truck		
Residential	Automotive O	ther:	Local outfall	Rt bank	loads):		
POTENTIAL REST	TORATION CANDIDATE	Stream cleanup Strea	ım adoption segmen	t Kemoval/pr	evention of dumping		
If yes for trash or	EQUIPMENT NEEDED:	Heavy equipment .T	rash bags 🔲 Unkno	own	DUMPSTER WITHIN 100 FT:		
debris removal	WHO CAN DO IT:	☑ Volunteers ☑ Local C	Gov 🔲 Hazmat Te	eam 🗌 Other	Yes No Unknown		
CLEAN-UP POTENTIAL:	nt of trash or debris scattered over a large ccess is very difficult. Or presence of drums of hazardous materials						
(Circle #)	5	few days, possibly with a s	3	2	1		
NOTES:				Reporte	nd to Authorities 🗀 YES 🔀 NO		
trash t	dumping is	. A problem	througe	, this	Reach. Areas of		
Note A	Me consolidate	d to one she	et:				
DLB (left Bank) where is wheeler trucks park AT the top of a steep slipe t dump trush lithcluding cups etc. 241.51.44 /72.43'08" Can be removed with pickup Truck / bag removal. No photo. EASY Access, no heavy Machinery required.							
@ LB + vin	@ LB + RB trash dumping (including plastic buckets, auto parts, vinyl sidny, garbage cant, etc.) Easy access, heavy marchinery						
lik	ely required	- (fax Auto pa	refs. No pl	veto	J		



SURVEY REACH ID: UTR-CO WTRSHD/SUBSHD: WIN	TONBUNY RES, DATE: 12/8/09 ASSESSED BY:
START TIME: 8 : 35 M/PM LMK:	END TIME: 1: 15 AD/PM LMK: GPS ID:
LAT410 S1 1 21 " LONG 720 43 1 25"	LAT 41 ° 51 '32 " LONG 97 ° 43 ' 16 "
DESCRIPTION: OLD FARM ROAD	DESCRIPTION: OUTLET FROM POND DAM
	1
RAIN IN LAST 24 HOURS Heavy rain Steady rain	PRESENT CONDITIONS ☐ Heavy rain ☐ Steady rain ☐ Intermittent
✓ None ☐ Intermittent ☐ Trace	Clear
SURROUNDING LAND USE: Industrial Commercial	☐ Urban/Residential ☐ Suburban/Res ☐ Forested ☐ Institutional ☐ Crop ☐ Pasture ☐ Other:
Golf course Park	☐ Crop ☐ Pasture ☐ Other: REACH SKETCH AND SITE IMPACT TRACKING
AVERAGE CONDITIONS (check applicable)	COLORD THE REPORT OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPE
BASE FLOW AS % □ 0-25%	Simple planar sketch of survey reach. Track locations and IDs for all site impacts within the survey reach (OT, ER, IB,SC, UT, TR, MI) as well as any additional
CHANNEL WIDTH □25-50 % □ 75-100%	features deemed appropriate. Indicate direction of flow
DOMINANT SUBSTRATE □ Silt/clay (fine or slick) □ Cobble (2.5 –10")	}
☐ Silt/clay (fine or slick) ☐ Cobble (2.5 –10") ☑ Sand (gritty) ☐ Boulder (>10")	
☐ Gravel (0.1-2.5") ☐ Bed rock	
WATER CLARITY Clear Turbid (suspended matter)	(DUDLEY TOWN)
Stained (clear, naturally colored) ☐ Opaque (milky)	YON"
☐ Other (chemicals, dyes)	
AQUATIC PLANTS Attached: In none I some I lots	DAM
IN STREAM Floating: ☑ none ☐ some ☐ lots	
(Evidence of) Word pecked	Cloud Copen
WILDLIFE IN OR	v) 1°
□ Shans □ Other. Kinesee	
Mostly shaded (≥75% coverage) STREAM SHADING □ Halfway (≥50%)	> \
(water surface) ☐ Partially shaded (≥25%)	(S) / PARKING
☐ Unshaded (< 25%)	Sold backing
CHANNEL Downcutting Bed scour	0
DYNAMICS Widening Bank failure Widening Bank failure Bank scour	ν ζ
Headcutting Bank scour Aggrading Slope failure	z 5
Unknown State Sed. deposition Channelized	\sim 0
Height: LIT bank 2 (ft)	7 ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~
CHANNEL	1 24
(FACING Width: Bottom (ft)	Trusoran 50
DOWNSTREAM) Top (ft)	3
REACH ACCESSIBILITY	<u></u>
Fair: Forested or Difficult, Must cross	3 53 washants + treash
Good: Open area in public ownership, adjacent to stream. wetland, steep slope, or sensitive areas to get to	TRIBUTARY 30 NEW GLAST
sufficient room to Access requires tree stream. Few areas to	0 6
stockpile materials, easy stream channel easy stream channel landscaped areas. stockpile available and/or located a great	Terbuhay 30
access for neavy Stockpile areas distance from stream.	culvert with BUDG
existing roads or trails. small or distant from stream, Specialized heavy equipment required.	Culvert Jose Harst old foot Bridge
5 4 3 2 1	- Stage
NOTES: (biggest problem you see in survey reach)	
BUFFER ENCADACHMENT D.	N DAM EULUM
BOTTEL ENCADAMINEUT (L)	BANK (NEW GLOG).
	REPORTED TO AUTHORITIES YES 🔏 NO

	Optimal	Suboptimal	Marginal	Poor
In-STREAM HABITAT (May modify criteria based on appropriate habitat regime)	Greater than 70% of substrate favorable for epifaunal colonization and fish cover; mix of snags, submerged logs, undercut banks, cobble or other stable habitat and at stage to allow full colonization potential (i.e., logs/snags that are not new fall and not transient).	40-70% mix of stable habitat; well- suited for full colonization potential; adequate habitat for maintenance of populations; presence of additional substrate in the form of newfall, but not yet prepared for colonization (may rate at high end of scale).	20-40% mix of stable habitat; habitat availability less than desirable; substrate frequently disturbed or removed.	Less than 20% stable habitat; lack of habitat is obvious; substrate unstable or lacking.
	20 (19) 18 17 16	15 14 13 12 11	10 9 8 7 6	5 4 3 2 1 0
VEGETATIVE PROTECTION (score each bank, determine sides by facing downstream)	More than 90% of the streambank surfaces and immediate riparian zone covered by native vegetation, including trees, understory shrubs, or nonwoody macrophytes; vegetative disruption through grazing or mowing minimal or not evident; almost all plants allowed to grow naturally.	70-90% of the streambank surfaces covered by native vegetation, but one class of plants is not well-represented; disruption evident but not affecting full plant growth potential to any great extent; more than one-half of the potential plant stubble height remaining.	50-70% of the streambank surfaces covered by vegetation; disruption obvious; patches of bare soil or closely cropped vegetation common; less than one-half of the potential plant stubble height remaining.	Less than 50% of the streambank surfaces covered by vegetation; disruption of streambank vegetation is very high; vegetation has been removed to 5 centimeters or less in average stubble height.
	Left Bank 10 9	8 7 6	5 4 3	2 1 0
	Right Bank 10 9	8 7 6	5 4 3	2 1 0
BANK EROSION (facing downstream)	Banks stable; evidence of erosion or bank failure absent or minimal; little potential for future problems. <5% of bank affected.	Grade and width stable; isolated areas of bank failure/erosion; likely caused by a pipe outfall, local scour, impaired riparian vegetation or adjacent use. UPPEN SECTION	Past downcutting evident, active stream widening, banks actively eroding at a moderate rate; no threat to property or infrastructure	Active downcutting; tall banks on both sides of the stream eroding a fast rate; erosion contributing significant amount of sediment to stream; obvious threat to property or infrastructure.
	Left Bank 10 9	③ 7 6	5 4 3	2 1 0
	Right Bank 10 9	8 7 6	5 4 3	2 1 0
FLOODPLAIN CONNECTION	High flows (greater than bankfull) able to enter floodplain. Stream not deeply entrenched.	High flows (greater than bankfull) able to enter floodplain. Stream not deeply entrenched.	High flows (greater than bankfull) not able to enter floodplain. Stream deeply entrenched.	High flows (greater than bankfull) not able to enter floodplain. Stream deeply entrenched.
	20 19 18 17 16	13 14 13 12 11	10 9 8 7 6	5 4 3 2 1 0
	OVER	ALL BUFFER AND FLOODPLAI	N CONDITION	
	Optimal	Suboptimal	Marginal	Poor
VEGETATED Buffer Width	Width of buffer zone >50 feet; human activities (i.e., parking lots, roadbeds, clear-cuts, lawns, crops) have not impacted zone.	Width of buffer zone 25-50 feet; human activities have impacted zone only minimally.	Width of buffer zone 10-25 feet; human activities have impacted zone a great deal.	Width of buffer zone <10 feet: little or no riparian vegetation due to human activities.
	Left Bank 10 9	(8) 7 6	5 4 3	2 1 0
	Right Bank (10) 9	8 7 6	5 4 3	2 1 0
FLOODPLAIN VEGETATION	Predominant floodplain vegetation type is mature forest	Predominant floodplain vegetation type is young forest	Predominant floodplain vegetation type is shrub or old field	Predominant floodplain vegetation type is turf or crop-land
	(20) 19 18 17 16	15 14 13 12 11	10 9 8 7 6	5 4 3 2 1 0
FLOODPLAIN HABITAT	Even mix of wetland and non-wetland habitats, evidence of standing/ponded water	Even mix of wetland and non-wetland habitats, no evidence of standing/ponded water	Either all wetland or all non- wetland habitat, evidence of standing/ponded water	Either all wetland or all non- wetland habitat, no evidence of standing/ponded water
	20 19 18 (17) 16	15 14 13 12 11	10 9 8 7 6	5 4 3 2 1 0
FLOODPLAIN ENCROACH- MENT	No evidence of floodplain encroachment in the form of fill material, land development, or manmade structures	Minor floodplain encroachment in the form of fill material, land development, or manmade structures, but not effecting floodplain function	Moderate floodplain encroachment in the form of filling, land development, or manmade structures, some effect on floodplain function	Significant floodplain encroachment (i.e. fill material, land development, or man-made structures). Significant effect on floodplain function

Sub Total In-stream: 40 /80

Buffer/Floodplain:

<u>To</u> /80

Total Survey Reach 140 /160

Watershed	SUBSHED: WTR				108109	•	SSED BY	
SURVEY REA	Substitution of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract o	TIME: <u>8</u> : 35			: (Camera-Pie			
SITE ID: (Con	dition-#) SC- <u>A</u> LAT	41.51.2	<u> </u>	<u>° 43 '</u>	25" L	<u>МК</u>	GPS	(Unit ID)
TYPE: \square Roa	ad Crossing Railroad Crossi	ng	Dam Beaver	Dam 🔲	Geological Form	nation 🔲	Other:	
FOR ROAD/ RAILROAD	SHAPE: Arch Bottomless Box Elliptical Circular Other:	#BARRELS: Single Double Triple Other:	MATERIAL: Concrete Metal Other:	☐ Flo	NMENT: ow-aligned t flow-aligned not know	Barrel dia	meter: Height:	riable, sketch)(ft)(ft)
CROSSINGS ONLY	CONDITION: (Evidence of) Cracking/chipping/corrosion Sediment deposition Other (describe):			□ Cli_L (20 €				(ft)
POTENTIAL I	RESTORATION CANDIDATE	☐ Fish barrier re ☐ Local stream	moval Culver repair Other:	t repair/rep	olacement 🔲 l	Upstream s	torage retro	ofit
Is SC ACTING	G AS GRADE CONTROL	□ No □ Yo	es Unkno					
If yes for fish barrier	Flow too shallow Water D	wn rop:(in)	A structure such as a road culvert on a 3rd greater stream block upstream movement anadromous fish; no passage device pres	a dam or I order or ling the t of fish	A total fish blocka tributary that wou significant reach or partial blockag interfere with the anadromous fish	age on a ald isolate a of stream, e that may migration of	A temporary beaver dame the very hele very little vis	y barrier such as a n or a blockage at ad of a stream with able fish habitat tural barriers such s.
	Other:		5		4 3		2	1
NOTES/SKET	CH:							
					Repor	RTED TO AU	THORITIES	□YES □ No

	SUBSHED: WTK				-108/0°			CM1/86
SURVEY REA	.cн ID: <i>О</i> Э	<u> Тіме: ७ : 1≤</u>			: (Camera-Pic	:#) PCO	80 /#	072
SITE ID: (Con	dition-#) SC- <u>B</u> LAT	41.51.30	2 " Long <u>7</u>	<u> 43 - 43 - </u>	<u> 16 " Li</u>	ИΚ	GPS	(Unit ID)
		enrithe						
TYPE: TRO	ad Crossing 🔲 Railroad Cross	ing 🔀 Manmade	Dam 🔲 Beaver	r Dam 🔲	Geological Form	nation 🔲	Other:	
	SHAPE:	#BARRELS:	MATERIAL:	ALIG	NMENT:	DIMENSI	IONS: (if va	riable, sketch)
	☐ Arch ☐ Bottomless	☑ Single	☐ Concrete	⊠ Flo	w-aligned	Barrel dia	meter:	<u>3'</u> (ft)
,	Box Elliptical	Double Double		☐ No	t flow-aligned		Height:	J' high
FOR ROAD/	Circular Other:	Triple Other:	Other:	□ Do	not know		-	, ,
RAILROAD CROSSINGS		Other.				Culvert le	ngth:	(ft)
ONLY	CONDITION: (Evidence of)	-			ERT SLOPE:		Width:	(ft)
. •	Cracking/chipping/corrosic				ght $(2^{\circ} - 5^{\circ})$		_	
	Sediment deposition	☐ Failing emb	ankment		vious (>5°)	Roadway	elevation:	(ft)
	Other (describe):				` <u>`</u>	100001103	••••••	
POTENTIAL I	RESTORATION CANDIDATE	Fish barrier re	moval Culve	rt repair/re	olacement \square I	Jostream st	orage retro	fit
no	Callion Charles	Local stream		-	4			osteeam o
	G AS GRADE CONTROL	□ No □ Y			ZI QU MUC	M 211	ic w	S INCLUDIO
IS SC ACTING	· -		es Unkn		arrian Onion		I (I)	
	EXTENT OF PHYSICAL BLO			BLO	CKAGE SEVER	ury: (circ	<i>1</i> е #)	
	☐ Total ☐ Partial ☐ Temporary ☐ Unknown		A structure such as		A total fish blocka			/ barrier such as a
If yes for	remporary onkine		road culvert on a 3 greater stream bloc		tributary that would significant reach of			or a blockage at ad of a stream with
fish barrier	CAUSE:		upstream movement of		or partial blockage that may		very little via	able fish habitat
		Prop:(in)	anadromous fish; n		interfere with the anadromous fish.	migration of	above it; na as waterfall	tural barriers such
	Flow too shallow Water D	Depth: (in)	passage device pre	esent.	anadromous lish.		as wateriali	s.
1	Other:		5		4 3		2	1
NOTES/SKET	CH:							
		•						
	·							

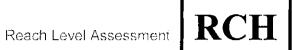
Trash and Debris



WATERSHED/SUI	BSHED: WTR		DATE: 🔀 / O	<u> ස/0</u> ී .	ASSESSED BY: CM+BG		
SURVEY REACH	00	TIME::AM/PM	Рното ID: (Са	mera-Pic #)	1# none		
SITE ID: (Condition	n-#) TR-ONE LATE	11.51.22" LONG	72 . 43 . 24	" LMK	GPS: (Unit ID)		
TYPE: Industrial Commercial Residential	Appliances Y	aper	SOURCE: Unknown Flooding Illegal dump Local outfall	LOCATION: Stream Riparian Area Lt bank Rt bank	LAND OWNERSHIP: Public Unknown Private AMOUNT (# Pickup truck loads):		
POTENTIAL REST	TORATION CANDIDATE	Stream cleanup Stream Other:	m adoption segment	Removal/pre	vention of dumping		
If yes for trash or	EQUIPMENT NEEDED:	☐ Heavy equipment ☐ Tr	ash bags 🔲 Unkno	wn	DUMPSTER WITHIN 100 FT:		
debris removal	WHO CAN DO IT:	Volunteers ☐ Local G	ov Hazmat Te	am 🔲 Other	Yes No Unknown		
CLEAN-UP POTENTIAL: (Circle #)	A small amount of trash (i.e., than two pickup truck loads) loo inside a park with easy access		ay have been dumped ov t could be cleaned up in	ver area, where aco	of trash or debris scattered over a large ess is very difficult. Or presence of drums hazardous materials		
, ,	(5,10)	4	3	2	1		
Notes: broken glass, tires, delaris, toilet, Easy Accept							
		_		REPORTED	TO AUTHORITIES YES NO		

WATERSHED/SUBSHED:				DATE	: / /	Ass	SESSED BY:
SURVEY REACH:	1	Гіме:	AM/PN		o ID: (Camera-P		/#
SITE ID: (Condition:#) START L	AT ° '	<u>'</u>		J	" LMK		GPS: (Unit ID)
	AT °	" Lo		, ,	" LMK		-
							
IMPACTED BANK: REASON IN LT RT Both					v □ Widespread in LOS) Oh + So		
LAND USE: Private	Institutional	Golf Cours	se Park	Other Pub		PRO	un constructi
(Facing downstream) LT Bank					-		
RT Bank RT Bank		T C/1	<u> </u>]:	0.1	
DOMINANT Paved LAND COVER: LT Bank	Bare ground	Turf/lawr	n Tallgπa □	ss Shrub/s		Other	mpervious
RT Bank				• ≥ 2			1 1 44 114 42 42 44
INVASIVE PLANTS: None	Rare	— <u> </u>	tial coverage	<u>_</u>	xtensive coverage	unk	known
STREAM SHADE PROVIDED? No		_			RESENT? No		
STREAM SHADE I KOVIDED: [] NO	ne Extracual	ᆜ	wii Wi	I LANDS P	KESENI! LINO	υΥ	es Unknown
POTENTIAL RESTORATION CANDIDA	ATE Active	reforestation	n Greenw	ıv design	Natural regenera	ıtion 🗆	Invasives removal
no					,	~	welfands by
RESTORABLE AREA	<u> </u>		Impacted area o		Impacted area on eit		Impacted area on private
LT BANK RT	REFORESTAT	TION	where the riparia	n area does	public or private land	that is	land where road; building
Length (ft):	POTENTIAL:		not appear to be specific purpose		presently used for a spurpose; available ar		encroachment or other feature significantly limits
Width (ft):	(Circle #)	i	area available fo	planting	planting adequate	į	available area for planting
Vidui (ii)			5		4 (3)		2 1
POTENTIAL CONFLICTS WITH REFOR			espread invas		Potential conta		n 🔲 Lack of sun
Poor/unsafe access to site Existin	ig impervious cove	cı 🗀 Seve	re animai imp	acts (deer,	ocaver) Uther		
NOTES:			,				
1 LB believed now	buildin	where	then	eis A	was front	ا بارج	wiften +
O LB behind now sediment has	LOPPIA	تاريع كهمة	up +	0 26 1	Prom tu	e +	so of Rad
due to rece	+ const	On a sufficiency		NO P	untina ca	Atria	(WP ACLURAS
due to rece	at Louist	icei cr	, , , , , ,	ي حيا مانده ما	المارين	A & C.	المصراعه لماليس
in place. The	slope is	s stee	ip + s	ECANO	mi uns	W.C.C	213.60
off slage int	o beode	- the	مو ۱۹۲۸	Ser	relat whi	sta a	uts 1 scaus
0410511	22 1/ 2201	10 24	٧				ĺ
	,						
@ LB belund who exosion a	new buil	divig	V+ px	ekin.	AREA!	Rece	nt construct
No produce a	material al	ں چھورے چھو	r no	68	J		
yo eresen c	EWI 1 3/1	TI DAI	١١٠٠ إ	~10,			·

TOB, REACHS



SURVEY REACH I	D: <u>5</u>	WTRSHD/SUBSHD:	oB.	DATE: 1 / 30 /0°	Assessed by:	6
	E: <u>3</u> 20 AI		_		MK:	GPS ID:
LAT41049.		NG 72° 45 ' 2-"		50 " Long 72 ° 4		(en)
DESCRIPTION: For	rested s	section	Description: (2.	k, 178/Monata	n Are,	
RAIN IN LAST 24 HO	URS Heavy	•	PRESENT CONDITIONS	· · · · · · · · · · · · · · · · · · ·	eady rain	
SURROUNDING LAN		ıstrial ☐ Commercial f course ☐ Park	☐ Urban/Residential ☐ Crop	Suburban/Res Fo	orested 🔲 Institu ther:	itional
AVERAGE	CONDITIONS	(check applicable)	REACH	SKETCH AND SITE IM	PACT TRACKING	
BASE FLOW AS % CHANNEL WIDTH	□ 0-25% □25-50 %	□ 50%-75% 2 \75-100%	within the survey re	of survey reach. Track loca ach (OT, ER, IB,SC, UT, Th deemed appropriate. Indica	, MI) as well as any a	
DOMINANT SUBSTR. Silt/clay (fine or Sand (gritty) Gravel (0.1-2.5	slick)	☐ Cobble (2.5 –10") ☐ Boulder (>10") ☐ Bed rock	क्र <u>त</u> ्ती	101 calvert		vec.
	aturally colored) dyes)	urbid (suspended matter) Opaque (milky)	dime A	1/2		
AQUATIC PLANTS IN STREAM	Floating: 🗷	none ⊠ some □ lots	BO BO	(//)		
WILDLIFE IN OR AROUND STREAM	(Evidence of) ☐ Fish ☐ ☐ ☐ Snails 🐼	Beaver Deer Other: RACOON HEAK		Thick, dens	e shrub	by ves
STREAM SHADING (water surface)	☐ Halfway (≥	naded (≥25%)	Stroken S	1 (-	
CHANNEL DYNAMICS	Downcutt Widening Headcutti	Bank failure				
Unknown	Aggradin	g Slope failure]			
CHANNEL DIMENSIONS	Height: LTb	,				
(FACING DOWNSTREAM)	Width: Both		A		= Heating	
R	REACH ACCESS] As strew	- // \	-(AW)	K
Good: Open area in public ownership, sufficient room to stockpile materials, easy stream channel	Fair: Forested or developed area adjacent to stread Access requires to removal or impact landscaped areas	wetland, steep slope, or sensitive areas to get to stream. Few areas to stockpile available		harts >	A	
access for heavy equipment using existing roads or trails.	Stockpile areas small or distant fr stream.	distance from stream. Specialized heavy equipment required.				
NOTES: (biggest prot store, talet mustard, b	olem you see in su SINK, +	rvey reach) Dumping ARES . Some INV	, including of newe plants (ld car, heating multiplea reso	oil tank	4,0,1deum
	1*			Reported to	AUTHORITIES \(\bigcup \)	YES NO

TOB, REACHS

	OVERALL STREAM CONDITION											
		Optimal	Suboptimal	Marginal	Poor							
	IN-STREAM HABITAT (May modify criteria based on appropriate habitat regime)	Greater than 70% of substrate favorable for epifaunal colonization and fish cover; mix of snags, submerged logs, undercut banks, cobble or other stable habitat and at stage to allow full colonization potential (i.e., logs/snags that are not new fall and not transient).	40-70% mix of stable habitat; well- suited for full colonization potential; adequate habitat for maintenance of populations; presence of additional substrate in the form of newfall, but not yet prepared for colonization (may rate at high end of scale).	20-40% mix of stable habitat; habitat availability less than desirable; substrate frequently disturbed or removed.	Less than 20% stable habitat; lack of habitat is obvious; substrate unstable or lacking.							
	<u> </u>	20 19 18 17 16	13 14 13 12 11	10 9 8 7 6	5 4 3 2 1 0							
	VEGETATIVE PROTECTION (score each bank, determine sides by facing downstream)	More than 90% of the streambank surfaces and immediate riparian zone covered by native vegetation, including trees, understory shrubs, or nonwoody macrophytes; vegetative disruption through grazing or mowing minimal or not evident; almost all plants allowed to grow naturally.	70-90% of the streambank surfaces covered by native vegetation, but one class of plants is not well-represented; disruption evident but not affecting full plant growth potential to any great extent; more than one-half of the potential plant stubble height remaining.	50-70% of the streambank surfaces covered by vegetation; disruption obvious; patches of bare soil or closely cropped vegetation common; less than one-half of the potential plant stubble height remaining.	Less than 50% of the streambank surfaces covered by vegetation; disruption of streambank vegetation is very high; vegetation has been removed to 5 centimeters or less in average stubble height.							
		Left Bank 10 9	◎ 7 6	5 4 3	2 1 0							
		Right Bank 10 9	(3) 7 6	5 4 3	2 1 0							
	BANK EROSION (facing downstream)	Banks stable; evidence of erosion or bank failure absent or minimal; little potential for future problems. <5% of bank affected.	Grade and width stable; isolated areas of bank failure/erosion; likely caused by a pipe outfalt, local scour, impaired riparian vegetation or adjacent use.	Past downcutting evident, active stream widening, banks actively eroding at a moderate rate; no threat to property or infrastructure	Active downcutting; tall banks on both sides of the stream eroding at a fast rate; erosion contributing significant amount of sediment to stream; obvious threat to property or infrastructure.							
		Left Bank 10 9	⊘ 7 6	5 4 3	2 ! 0							
		Right Bank 10 9	7 6	5 4 3	2 1 0							
	FLOODPLAIN CONNECTION	High flows (greater than bankfull) able to enter floodplain. Stream not deeply entrenched.	High flows (greater than bankfull) able to enter floodplain. Stream not deeply entrenched.	High flows (greater than bankfull) not able to enter floodplain. Stream deeply entrenched.	High flows (greater than bankfull) not able to enter floodplain. Stream deeply entrenched.							
		20 19 (18) 17 16	15 14 13 12 11	10 9 8 7 6	5 4 3 2 1 0							
		OVER	ALL BUFFER AND FLOODPLAI	N CONDITION								
		Optimal	Suboptimal	Marginal	Poor							
	VEGETATED BUFFER WIDTH	Width of buffer zone >50 feet; human activities (i.e., parking lots, roadbeds, clear-cuts, lawns, crops) have not impacted zone.	Width of buffer zone 25-50 feet; human activities have impacted zone only minimally.	Width of buffer zone 10-25 feet; human activities have impacted zone a great deal.	Width of buffer zone <10 feet: little or no riparian vegetation due to human activities.							
		Left Bank (10) 9	8 7 6	5 4 3	2 1 0							
i		Right Bank 10 9	8 7 6	5 4 3 Predominant floodplain	2 1 0							
	FLOODPLAIN VEGETATION	Predominant floodplain vegetation type is mature forest	Predominant floodplain vegetation type is young forest	vegetation type is shrub or old field	Predominant floodplain vegetation type is turf or crop land							
		20 19 18 17 16	15 14 13 12 11	(10) 9 8 7 6	5 4 3 2 1 0							
	FLOODPLAIN HABITAT	Even mix of wetland and non-wetland habitats, evidence of standing/ponded water	Even mix of wetland and non-wetland habitats, no evidence of standing/ponded water	Either all wetland or all non- wetland habitat, evidence of standing/ponded water	Either all wetland or all non- wetland habitat, no evidence of standing/ponded water							
		20 19 18 17 (16)	15 14 13 12 11	10 9 8 7 6	5 4 3 2 1 0							
	FLOODPLAIN ENCROACH- MENT	No evidence of floodplain encroachment in the form of fill material, land development, or manmade structures	Minor floodplain encroachment in the form of fill material, land development, or manmade structures, but not effecting floodplain function	Moderate floodplain encroachment in the form of filling, land development, or manmade structures, some effect on floodplain function	Significant floodplain encroachment (i.e. fill material, land development, or man-made structures). Significant effect on floodplain function							
		20 19 18 17 16	15 14 13 12 11	10 9 8 7 6	5 4 3 2 1 0							
	Sub Total In-str	ream: <u>65</u> /80 + B	uffer/Floodplain: <u>60</u> /80	= Total Survey	Reach 125 /160							

Trash and Debris



WATERSHED/SUE	SHED: TOB	- .	DATE: 1 / 30) /OO A	SSESSED BY: CM/B6				
SURVEY REACH I	D: 5	TIME::AM/PM	Рното ID: (Сат	nera-Pic #)	1# rone				
SITE ID: (Condition	1-#) TR-ONE LAT_	See below LON	G°!	_" LMK	GPS: (Unit ID)				
TYPE: Industrial Commercial Residential	Appliances X Ya	per Medical nstruction Medical rd Waste her: 5 Wk + Talk+	Unknown	LOCATION: Stream Riparian Area Lt bank Rt bank	LAND OWNERSHIP: Public Unknown Private AMOUNT (# Pickup truck loads):				
POTENTIAL RESTORATION CANDIDATE Stream cleanup Stream adoption segment Removal/prevention of dumping Other:									
If yes for trash or debris removal		Heavy equipment 🔯 T	•••		DUMPSTER WITHIN 100 FT: Yes No Unknown				
CLEAN-UP POTENTIAL: (Circle #)	A small amount of trash (i.e., than two pickup truck loads) local inside a park with easy access	ess with easy access. Trash	or bulk items, in a small are may have been dumped ove it could be cleaned up in	A large amount o	f trash or debris scattered over a large ss is very difficult. Or presence of drums azardous materials				
	5	4	3	Ø	1				
NOTES: O Heating oil tank on LB 2 41049'47"/72045'02", likely illegally dumped on prevale residence. O RB 2 41049'47"/72045'60" including Automobile, oil drums, tries, store, sink, toilet. Invasive plants here (J. Knotweed).									
				Reported t	O AUTHORITIES YES (NO				

C	
)	

WATERSHED	/subshed: +0B			<u> Date: //</u>	<u> 130109</u>	ASSES		CM+B
SURVEY REA	.cн ID: <u>5</u>	TIME: 3 : 50	2 AMAPN	Р ното ID	: (Camera-Pic	: #)	/#	have
SITE ID: (Con	dition#) SC- Size LAT	41.49.5	<u>o</u> " Long <u>T</u>) <u>45 '</u>	<u>//.5</u> " Li	мк	GPS	(Unit ID)
TYPE: Ros	ad Crossing	ing Manmade	Dam Beave	er Dam 🔲	Geological Form	nation 🔲	Other:	
FOR ROAD/ RAILROAD CROSSINGS ONLY	SHAPE: Arch Bottomless Box Elliptical Circular Other: CONDITION: (Evidence of)	#BARRELS: Single Double Triple Other:	MATERIAL: Concrete Metal Other:			Height:(_
ONLI	☐ Cracking/chipping/corrosic☐ Sediment deposition☐ Other (describe):	n Downstrear					Width: _	
no	RESTORATION CANDIDATE	☐ Fish barrier re	repair 🔲 Othe	r:	placement 🔲 l	Jpstream ste	orage retro	fit
IS SC ACTING	G AS GRADE CONTROL	□No □Y	es Unk					
If yes for fish barrier	EXTENT OF PHYSICAL BLC Total Partial Temporary Unknot CAUSE: Drop too high Water D Flow too shallow Water I	own Prop:(in)	A structure such a road culvert on a greater stream ble upstream movem anadromous fish; passage device p	as a dam or 3rd order or ocking the ent of no fish	A total fish blocka tributary that wou significant reach or partial blockag interfere with the anadromous fish.	age on a ld isolate a of stream, e that may migration of	A temporary beaver dam the very hea very little via	barrier such as a or a blockage at d of a stream with ble fish habitat ural barriers such
	Other:		5		4 3		2	1 ,
NOTES/SKET	СН:							
						·	·	
			·					
			<u>.</u>		REPOR	TED TO AUT	HORITIES	☐ YES ☐ No



SURVEY REACH II):TBB-6 WTR	SHD/SUBSHD: カレM	BLEDOWN BROOK	DATE: 11/30	ASSESSED BY	+CM
START TIME	: 3 : 00 AMPM	LMK:		_:ZOAMPM)	LMK:	GPS ID:
LAT°'	" Long	o ! !!	LAT°	" Long	<u> </u>	
DESCRIPTION: COA	HUENGE IIII	TH THE R	DESCRIPTION: 601	U FLU ENCE	WITH THERE	
RAIN IN LAST 24 HOU	IRS 🗆 Heavy rain	☐ Steady rain	PRESENT CONDITIONS		☐ Steady rain ☐ Inte	
□ None	☐ Intermittent	Trace	☐ Clear	☐ Trace		tly cloudy
SURROUNDING LAND	USE: Industrial Golf cours			Suburban/Res ☐ Pasture	☐ Forested ☐ Inst ☐ Other:	itutional
Average	CONDITIONS (check	k applicable)	REACH S	SKETCH AND SIT	E IMPACT TRACKIN	G
BASE FLOW AS % CHANNEL WIDTH	□ 0-25% □25-50 %	□ 50%-75% □ 75-100%	within the survey rea	ich (OT, ER, IB,SC, U	k locations and IDs for al UT, TR, MI) as well as any Indicate direction of flow	additional -
DOMINANT SUBSTRA Silt/clay (fine or s Sand (gritty) Gravel (0.1-2.5)	slick) □ Col □ Bo	oble (2.5 – 10") ulder (>10") i rock				
WATER CLARITY ☐ Stained (clear, no ☐ Other (chemicals, o	aturally colored) 🔲 (dyes)	Opaque (milky)		wount)		
AQUATIC PLANTS IN STREAM	Attached: ☐ none Floating: ☐ none	Some □ lots □ lots □ some □ lots	SAND PIPE	ELDR		
WILDLIFE IN OR AROUND STREAM	(Evidence of) ☐ Fish ☐ Beave ☐ Snails ☐ Other					
STREAM SHADING (water surface)	☐ Mostly shaded (☐ Halfway (≥50% ☐ Partially shaded ☐ Unshaded (< 25) (<u>≥</u> 25%)		LĪ		
CHANNEL	☐ Downcutting ☐ Widening	Bed scour Bank failure	MALLAND DR		The state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the s	To de
DYNAMICS	Headcutting	Bank scour				
Unknown	Aggrading Sed. deposition	Slope failure Channelized				
CHANNEL	Height: LT bank	Bruchic (ft)		;	MC. Wood	ie. j
DIMENSIONS	RT bank	(π)		· · · · · · · · · · · · · · · · · · ·	are wood	* 10
(FACING DOWNSTREAM)	Width: Bottom	13 (ft)	_		[wown]	
MUCH MARRAGEL IN	ofen Top			*		
	REACH ACCESSIBILI			2		
Good: Open area in	Fair: Forested or developed area	Difficult. Must cross wetland, steep slope, or		A	*	
public ownership,	adjacent to stream.	sensitive areas to get to		MODUM)		
sufficient room to stockpile materials,	Access requires tree	stream. Few areas to stockpile available			The second second	
easy stream channel	removal or impact to landscaped areas.	and/or located a great			<i>,</i>	
access for heavy equipment using	Stockpile areas	distance from stream.			<i>t</i> .	
existing roads or trails.	small or distant from stream.	Specialized heavy equipment required.				
	4) 3	2 1		1.4	عـر :	MANUT
NOTES: (biggest pro	blem you see in survey	reach) ImpArted	the helps	cent	TRUS	
		to while	the thelpia			
				REPOR	RTED TO AUTHORITIES	
		_			- Green	

	Optimal	Suboptimal	Marginal	Poor		
IN-STREAM HABITAT (May modify criteria based on appropriate habitat regime)	Greater than 70% of substrate favorable for epifaunal colonization and fish cover; mix of snags, submerged logs, undercut banks, cobble or other stable habitat and at stage to allow full colonization potential (i.e., logs/snags that are not new fall and not transient).	40-70% mix of stable habitat; well- suited for full colonization potential; adequate habitat for maintenance of populations; presence of additional substrate in the form of newfall, but not yet prepared for colonization (may rate at high end of scale).	20-40% mix of stable habitat; habitat availability less than desirable; substrate frequently disturbed or removed.	Less than 20% stable habitat; lack of habitat is obvious; substrate unstable or lacking.		
iubitut regime)	20 19 18 17 16	15 14 13 12 11	10 9 (8) 7 6	5 4 3 2 1 0		
VEGETATIVE PROTECTION (score each bank, determine sides by facing downstream)	More than 90% of the streambank surfaces and immediate riparian zone covered by native vegetation, including trees, understory shrubs, or nonwoody macrophytes; vegetative disruption through grazing or mowing minimal or not evident; almost all plants allowed to grow naturally.	70-90% of the streambank surfaces covered by native vegetation, but one class of plants is not well-represented; disruption evident but not affecting full plant growth potential to any great extent; more than one-half of the potential plant stubble height remaining.	50-70% of the streambank surfaces covered by vegetation; disruption obvious; patches of bare soil or closely cropped vegetation common; less than one-half of the potential plant stubble height remaining.	Less than 50% of the streambank surfaces covered by vegetation; disruption of streambank vegetation is very high; vegetation has been removed to 5 centimeters or less in average stubble height.		
	Left Bank 10 9	8 7 6	5 4 3	2 1 0		
	Right Bank 10 9	(8) 7 6	5 4 3	2 1 0		
BANK EROSION (facing downstream)	Banks stable; evidence of crosion or bank failure absent or minimal; little potential for future problems. <5% of bank affected.	Grade and width stable; isolated areas of bank failure/erosion; likely caused by a pipe outfall, local scour, impaired riparian vegetation or adjacent use.	Past downcutting evident, active stream widening, banks actively eroding at a moderate rate; no threat to property or infrastructure	Active downcutting; tall banks on both sides of the stream eroding at a fast rate; erosion contributing significant amount of sediment to stream; obvious threat to property or infrastructure.		
	Left Bank 10 9	8 🕡 6	5 4 3	2 1 0		
	Right Bank 10 9	(8) 7 6	5 4 3	2 1 0		
FLOODPLAIN CONNECTION	High flows (greater than bankfull) able to enter floodplain. Stream not deeply entrenched.	High flows (greater than bankfull) able to enter floodplain. Stream not deeply entrenched.	High flows (greater than bankfull) not able to enter floodplain. Stream deeply entrenched.	High flows (greater than bankfull) not able to enter floodplain. Stream deeply entrenched.		
	20 19 18 17 16	(15) 14 13 12 11	10 9 8 7 6	5 4 3 2 1 0		
	OVER	ALL BUFFER AND FLOODPLA	IN CONDITION	<u></u>		
	Optimal	Suboptimal	Marginal	Poor		
VEGETATED BUFFER WIDTH	Width of buffer zone >50 feet; human activities (i.e., parking lots, roadbeds, clear-cuts, lawns, crops) have not impacted zone.	Width of buffer zone 25-50 feet; human activities have impacted zone only minimally.	Width of buffer zone 10-25 feet; human activities have impacted zone a great deal.	Width of buffer zone <10 feet: little or no riparian vegetation due to human activities.		
	Left Bank 10 9	8 7 6	5 4 3	2 1 0 1A 2 1 0 W		
FLOODPLAIN VEGETATION	Right Bank 10 9 Predominant floodplain vegetation type is mature forest	Predominant floodplain vegetation type is young forest	5 4 3 Predominant floodplain vegetation type is shrub or old field	Predominant floodplain vegetation type is turf or crop land		
	20 19 18 17 16	15 14 13 12 11	10 9 8 7 6	5 4 3 2 1 0		
FLOODPLAIN HABITAT Even mix of wetland and non-wetland habitats, evidence of standing/ponded water		Even mix of wetland and non-wetland habitats, no evidence of standing/ponded water	Either all wetland or all non- wetland habitat, evidence of standing/ponded water	Either all wetland or all non- wetland habitat, no evidence of standing/ponded water		
	20 19 18 17 (6	15 14 13 12 11	10 9 8 7 6	5 4 3 2 1 0		
		Adia - Bas delais seeme chront in the	Moderate floodplain encroachment in the form of	Significant floodplain encroachment (i.e. fill material,		
FLOODPLAIN ENCROACH- MENT	No evidence of floodplain encroachment in the form of fill material, land development, or manmade structures	Minor floodplain encroachment in the form of fill material, land development, or manmade structures, but not effecting floodplain function (15) 14 13 12 11	filling, land development, or manmade structures, some effect on floodplain function	land development, or man-made structures). Significant effect on floodplain function 5 4 3 2 1 0		

Storm Water Outfalls



WATERSHED/SUBSHEI	(0)			DATE: 1/30/09 ASSESSED BY: CM+BG					
SURVEY REACH ID:		ме: <u>З : IS </u> ам е й		Р ното ID : (Camera-P		/# /^	ore		
SITE ID (Condition=#): 0	T- ONLY ONE LA	л <u>41 · 49 · 37</u>	<u> -</u> " Lo	NG 72. 45.05	" LMK_		GPS: (Unit ID)		
BANK: - LT NRT Head FLOW: None Trickle	TYPE:	MATERIAL: Concrete PVC/Plastic Other:	Metal Brick	SHAPE: Single Circular Double Elliptical Triple Other:		IONS:	SUBMERGED: No Partially Fully		
Moderate Substantial Other:	Open channel	☐ Concrete ☑ Ea	arthen		Vidth (Top):_	epth: (in) idth (Top): (in) (Bottom): (in)			
CONDITION: None Chip/Cracked Peeling Paint	None □Gas □None Chip/Cracked □Sewage □Oily Peeling Paint □Rancid/Sour □Flow Lin Corrosion □Sulfide □Paint		S:	VEGGIE DENSITY: None Normal Inhibited	☐ Brown ☐ Other:	Orange			
Corrosion Other:				Excessive Other:	☐ Good	POOL QUALITY: No pool Good Godors Colors Suds Algae Floatab Other:			
FOR COLOR: Clear Brown Grey Yellow Green Orange Red Other: FLOWING TURBIDITY: None Slight Cloudiness Cloudy Opaque ONLY FLOATABLES: None Sewage (toilet paper, etc.) Petroleum (oil sheen) OTHER CONCERNS: Needs Regular Maintenance Bank Erosion Other:									
POTENTIAL RESTORA	TION CANDIDAT	E ☐ Discharge inve	, -	n ☐ Stream daylighting ☐ Other:	☐ Local stre	eam repair/or	utfall stabilization		
If yes for daylighting:	er from outfall:			ing vegetation:		Slope:	0		
If yes for stormwater: Is stormwater currently compared by Yes \(\bigcap \) No \(\bigcap \) Not			Use dese	cription:					
SEVERITY: stro (circle #) stre	avy discharge with a dis ing smell. The amount of npared to the amount of iam; discharge appears ificant impact downstre	of discharge is significant f normal flow in receiving to be having a	discharg discharg	scharge; flow mostly clear and one of the action and/or odor, the action is very small compared to the lany impact appears to be mino	mount of stream's base r / localized.	discharge; sta of causing an	not have dry weather aining; or appearance y erosion problems.		
	. 5	4	4	3		2	1		
SKETCH/NOTES:									
					REPORTED TO	O AUTHORIT	IES: 🗌 YES 🔲 NO		

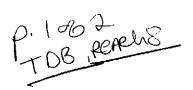
Impacted Buffer

IB

WATERSHED/SUBSHED: TOB					DATE!	1 /30 / 09	ASS	ESSED BY: (M/KG	
SURVEY REACH:	7	FIME: 3	_: <u>&O_</u> AM/{					19200/# 06 , 07	
SITE ID: (Condition-#) START LA			ONG	<u>- است</u> ا د		LMK	, 1-	GPS: (Unit ID)	
BE ONE SHEET END LA			ONG	· •	**	LMK			
BAD BA	<u>'</u>		ONG			LIVIN			
IMPACTED BANK: REASON INA	_		vegetation [☐ Widespread ir	ıvasive p	plants	
LAND USE: Private Is (Facing downstream) LT Bank	nstitutional	Golf Cou	rse Park 1 –	Othe	r Public	Athletic			
RT Bank					⊠:	~			
DOMINANT Paved	Bare ground				hrub/scr	1,00	Other	,	
LAND COVER: LT Bank		Ø]			□:		
RT Bank		K]			:	···	
INVASIVE PLANTS: None	Rare	☐ P	artial covera	ge .	☐ Exte	nsive coverage	unk	nown	
STREAM SHADE PROVIDED? None	e Partial		Full V	VETLAN	IDS PRE	SENT? No	□ Y	es Unknown	
POTENTIAL RESTORATION CANDIDATE									
RESTORABLE AREA			Impacted area	on public	land	Impacted area on eit	her	Impacted area on private	
LT BANK RT Length (ft): 250 280	LT BANK RT REFORESTAT			rian area be used fo se; plenty for plantir	ed for any presently used for a specific enty of purpose; available area for planting adequate Afficial for the present of the present of the present of the present of the present of the present of the present of the present of the present of the present of the present of the present of the present of the present of the present of the present of the present of the present of the present of the present of the present of the present of the present of the present of the present of the present of the present of the present of the present of the present of the present of the present of the present of the present of the present of the present of the present of the present of the present of the present of the present of the present of the present of the present of the present of the present of the present of the present of the present of the present of the present of the present of the present of the present of the present of the present of the present of the present of the present of the present of the present of the present of the present of the present of the present of the present of the present of the present of the present of the present of the present of the present of the present of the present of the present of the present of the present of the present of the present of the present of the present of the present of the present of the present of the present of the present of the present of the present of the present of the present of the present of the present of the present of the present of the present of the present of the present of the present of the present of the present of the present of the present of the present of the present of the present of the present of the present of the present of the present of the present of the present of the present of the present of the present of the present of the present of the present of the present of the present of the present of the present of the present of the present of the present of the present of the present of the present of the present of the present of the			land where road; building encroachment or other feature significantly limits available area for planting	
Width (ft):			5	TO PIGITAL	74	3	<u>ا خاراخ ا</u>	2 1	
POTENTIAL CONFLICTS WITH REFORE Poor/unsafe access to site Existing								n Lack of sun	
Notes: O impact to 16th B due LB length of RB length of		etic f : ~as	telds to meter 80 mete	/mm s ns.	n h	· · ·			

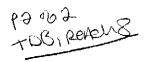
WATERSHED	/SUBSHED:	<u> 705</u>	- ₁		DATE: _	<u> //30/04</u>	ASSES	SED BY:	$-\infty$	186
SURVEY REA	CH ID:	<u>(o</u>	Тіме::_	_AM/PM		D: (Camera-Pi	c #)	/#	nare	
SITE ID: (Con	dition-#) SC/-	LAT	410 49 3	<u>≤" Long 7</u>	2045	<u>' 05</u> " L	MK	GPS	(Unit ID)	
TYPE: KROE	ad Crossing Ra	ilroad Cross	ing	Dam Bcav	er Dam	Geological For	mation 🔲 🤇	Other:		
	SHAPE:		#BARRELS:	MATERIAL:		GNMENT:	DIMENSIO		riable, ske	tch)
		Bottomless	Single	Concrete		low-aligned	Barrel dian	ieter: _	<u> 58 ''</u>	_ (**)
FOR ROAD/	☐ Box	Elliptical	Double Triple	☐ Metal		ot flow-aligned	l F	leight:		_(ft)
RAILROAD	Other:		Other:	Other:		o not know				
CROSSINGS	CONDITION: (Evigence of)				CULVERT SLOPE:		Culvert len	gth: _		_(ft)
ONLY					☐ Fi	lat	v	Vidth: _		_(ft)
						light $(2^{\circ} - 5^{\circ})$				
	Other (describe):					bvious (>5°)	Roadway e	levation:_		(ft)
	RESTORATION CA	NDIDATE			ert repair/re	eplacement 🔲	Upstream sto	rage retro	fit	
⊠no			Local stream	repair	er:					
Is SC ACTING	G AS GRADE CON	TROL	□ No □ Y	es 🔲 Unk	nown					
	EXTENT OF PHY		OCKAGE:		BL	OCKAGE SEVE	RITY: (circle	#)		
	Total	Partial	•	À structure such	as a dam or	A total fish blocks	age on a	A temporary	/ barrier suc	:hasa
If was for	☐ Temporary ☐ Unknown If yes for fish harrier CAUSE:			road culvert on a	3rd order or	tributary that wou	ıld isolate a	beaver dam	or a blocka	ige at
ij yes jor fîsh barrier				greater stream bl		significant reach or partial blockag			ad of a strea able fish hab	
	Drop too high			anadromous fish;	no fish	interfere with the	migration of	above it; nat	tural barriers	
	Flow too shall	ow Water D	epth:(in)	passage device p	resent.	anadromous fish		as waterfalls.		
	Other:			5		4 3		2	1	
NOTES/SKET	СН:									
ı	_									
			·							
										ŀ
										ļ
										}
L										.
7						REPOR	TED TO AUTI	IORITIES	☐ YES [J No │

WATERSHED	SUBSHED: TUB			DATE: /	<u>1130 109 </u>	ASSESS	SED BY:	<u>cu</u>	185
SURVEY REA	. <u>сн ID:</u>		2 AM/(EN): (Camera-Pic	: #)	/#	none	ر
SITE ID: (Con	dition#) SC- <u>B</u> LA	г <u>4/ • 49 • 4</u>	2 " Long $\overline{2}$	2. 45	<u>∽</u> " LN	ИК	GPS	(Unit ID)	
							· · ·		
TYPE: X Roa	ad Crossing Railroad Cros	sing	Dam Beav	er Dam 🔲	Geological Forn	nation 🔲 C	Other:		
	SHAPE:	#BARRELS:	MATERIAL:	ALIG	NMENT:	DIMENSIO	NS: (if va	ıriable, ske	etch)
	Arch Bottomless	Single	Concrete Concrete Concrete Concrete Concrete Concrete Concrete Concrete Concrete Concrete Concrete Concrete Concrete Concrete Concrete Concrete Concrete Concrete Concrete Concrete Concrete Concrete Concrete Concrete Concrete Concrete Concrete Concrete Concrete Concrete Concrete Concrete Concrete Concrete Concrete Concrete Concrete Concrete Concrete Concrete Concrete Concrete Concrete Concrete Concrete Concrete Concrete Concrete Concrete Concrete Concrete Concrete Concrete Concrete Concrete Concrete Concrete Concrete Concrete Concrete Concrete Concrete Concrete Concrete Concrete Concrete Concrete Concrete Concrete Concrete Concrete Concrete Concrete Concrete Concrete Concrete Concrete Concrete Concrete Concrete Concrete Concrete Concrete Concrete Concrete Concrete Concrete Concrete Concrete Concrete Concrete Concrete Concrete Concrete Concrete Concrete Concrete Concrete Concrete Concrete Concrete Concrete Concrete Concrete Concrete Concrete Concrete Concrete Concrete Concrete Concrete Concrete Concrete Concrete Concrete Concrete Concrete Concrete Concrete Concrete Concrete Concrete Concrete Concrete Concrete Concrete Concrete Concrete Concrete Concrete Concrete Concrete Concrete Concrete Concrete Concrete Concrete Concrete Concrete Concrete Concrete Concrete Concrete Concrete Concrete Concrete Concrete Concrete Concrete Concrete Concrete Concrete Concrete Concrete Concrete Concrete Concrete	, ,	ow-aligned	Barrel diam	eter: _	40"	_(多)
FOR ROAD/	Box ☐ Elliptical ☐ Circular	☐ Double☐ Triple☐	☐ Metal		ot flow-aligned	Н	eight:		_(ft)
RAILROAD	Other:	Other:	Other:	∐ Do	not know				
CROSSINGS	CONDITION: (Evidence of)	1	1.	CIIIA	/ERT SLOPE: Culvert le		gth:		(ft)
ONLY	Cracking/chipping/corrosi	on Downstream	n scour hole	☐ Fla		W	/idth: _		_(ft)
· ·	Sediment deposition	☐ Failing emb		☐ Sli	ght $(2^{\circ} - 5^{\circ})$				
	Other (describe):			☐ Ob	vious (>5°)	Roadway el	evation:		(ft)
					!				
POTENTIAL I	RESTORATION CANDIDATE	Fish barrier re	emoval 🔲 Culv	ert repair/re	placement 🔲 U	Jpstream stor	rage retro	fit	
⊠ no		Local stream	repair 🔲 Othe	er:					
Is SC ACTING	G AS GRADE CONTROL	□ No □ Y	es 🔲 Unk	nown					
	EXTENT OF PHYSICAL BI			BLC	CKAGE SEVER	ITY: (circle	#)		
	☐ Total ☐ Partia		A structure such	asa dam or	A total fish blocka	geona /	A temporary	/ barrier suc	ch as a
If yes for	☐ Temporary ☐ Unknown If yes for fish barrier CAUSE:			3rd order or	tributary that woul	d isolate a			
fish barrier				ocking the ent of	significant reach of or partial blockage			ad of a strea able fish hat	
		Drop:(in)	anadromous fish;		interfere with the ranadromous fish.	migration of a	above it; na as waterfall:	tural barrier	s such
	☐ Flow too shallow Water☐ Other:	Depth: (in)	passage device p	ileseiii.	anautomous iisii.		as waterials	, ,	
N			5		4 3	2	<u> </u>	1	
NOTES/SKET	CH:							-	
		•							
			•						
								•	
					-			П.v. г	ا
7					REPOR	TED TO AUTH	ORITIES	□ YES [∃No↓





				
SURVEY REACH ID:	8 WTRSHD/SUBSHD:	B	DATE: 1 /39 /0]	<u> </u>
START TIME: 2	:30 AM/M LMK:	END TIME:3		LMK: GPS ID:
LAT41 . 49 . 27	" LONG D . 44 . 57 "	LAH 049 6	78 " Long <u>† 2</u> °_4	45 · 05 " CM
		DESCRIPTION: 10		4 (1) ent
DESCRIPTION: Med IV	nah De	DESCRIPTION D	musky intr	T (N CINI)
		Description of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of	☐ Heavy rain 🖾	Steady rain Intermittent
Rain in last 24 hours		PRESENT CONDITIONS		Overcast
	☑ Intermittent ☐ Trace	□ Clear		
SURROUNDING LAND USE:	: 🗆 Industrial 🗎 Commercial			Forested Institutional Other:
	☐ Golf course ☐ Park	☐ Crop		
AVERAGE CON	DITIONS (check applicable)	·	SKETCH AND SITE IN	
Base Flow as % 🗆 0-)-25% 50%-75%	Simple planar sketch	of survey reach. Track loc ach (OT FR IRSC 11T T	ations and IDs for all site impacts R, MI) as well as any additional
	5-50 %	features	deemed appropriate. Indi	cate direction of flow
DOMINANT SUBSTRATE				
☐ Silt/clay (fine or slick)				
☐ Sand (gritty)	□ Boulder (>10")			
☐ Gravel (0.1-2.5")	☐ Bed rock			
	Description of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the			
	lear Turbid (suspended matter)			
	lly colored) 🔲 Opaque (milky)			
Other (chemicals, dyes)		_		
AQUATIC PLANTS Atta	ached: □ none 🗷 some □ lots			
	oating: Kanone 🗆 some 🗀 lots			
Ævi	ridence of)			
WILDLIFE IN OR	Fish ☐ Beaver 🕏 Deer			
AROUND STREAM S	Snails 2 Other:	_		
65/1	Mostly shaded (≥75% coverage)			
STREAM SHADING 🗆 1	Halfway (≥50%)			
	Partially shaded (≥25%)			
	Unshaded (< 25%)			
CHANNEL	Downcutting Bed scour			A /2 -08-11
DYNAMICS	Widening Bank failure	:		11 /2 VBY
DIMANGO	Headcutting Bank scour		2-1 ann	_ /\display \tau^2
	Aggrading Slope failure			
Unknown	Sed. deposition	<u> </u>	_TOB8	, · /// (
BANK GUI He	eight: LT bank 20 (ft)			100
CHANNEL "O" Her		\perp \sim	() 2,	leas/
DIMENSIONS	RT bank(ft)	(1.7)	المرس	d MeainAh O
(FACING Wi-	idth: Bottom(ft]) /~	late After	W/
DOWNSTREAM)	- Top (ft)		31
REAC	CH ACCESSIBILITY			3//
Fair	r: Forested or Difficult. Must cross	\dashv		\$1
Good: Open area in deve	veloped area wetland, steep slope, o			11
auffiniant coom to	acent to stream. sensitive areas to get to stream. Few areas to	0		1
stockpile materials,	cess requires tree stream. Few areas to stockpile available			
easy stream channel	dscaped areas. and/or located a great			
access for heavy Stor	ockpile areas distance from stream.			
evieting made or trails Still	all or distant from Specialized heavy			
Sile	eam. equipment required.		.	
NOTES: (higgest problem	you see in survey reach) \moke	ed buffer d	ve to reso	ential litures AR
LALL N	you see in survey reach) Impact M PARTICULAR, Some	RIP-RAP M	, both banks	-, EAST OF MAPLE AN
Lebi some	1. I well contained on the		-	•
				
			REPORTEI	D TO AUTHORITIES 🔲 YES 🔲 N



	Outmal	Subontimel	Marginal	Poor	
IN-STREAM	Optimal Greater than 70% of substrate	Suboptimal 40-70% mix of stable habitat; well-	Marginai	7 001	
HABITAT (May modify criteria based on appropriate habitat regime)	tavorable for epifaunal colonization and fish cover; mix of snags, submerged logs, undercut banks, cobble or other stable habitat and at stage to allow full colonization potential (i.e., logs/snags that are <u>not</u> new fall and <u>not</u> transient).	suited for full colonization potential; adequate habitat for maintenance of populations; presence of additional substrate in the form of newfall, but not yet prepared for colonization (may rate at high end of scale).	20-40% mix of stable habitat; habitat availability less than desirable; substrate frequently disturbed or removed.	Less than 20% stable habitat; lack of habitat is obvious; substrate unstable or lacking.	
,	20 19 18 17 16	15 14 (13) 12 11	10 9 8 7 6	5 4 3 2 1 0	
VEGETATIVE PROTECTION (score each bank, determine sides by facing downstream)	More than 90% of the streambank surfaces and immediate riparian zone covered by native vegetation, including trees, understory shrubs, or nonwoody macrophytes; vegetative disruption through grazing or mowing minimal or not evident; almost all plants allowed to grow naturally.	70-90% of the streambank surfaces covered by native vegetation, but one class of plants is not well-represented; disruption evident but not affecting full plant growth potential to any great extent; more than one-half of the potential plant stubble height remaining.	50-70% of the streambank surfaces covered by vegetation; disruption obvious; patches of bare soil or closely cropped vegetation common; less than one-half of the potential plant stubble height remaining.	Less than 50% of the streambank surfaces covered by vegetation; disruption of streambank vegetation is very high; vegetation has been removed to 5 centimeters or less in average stubble height.	
	Left Bank 10 9	8 7 6	5 4 3	2 1 0	
	Right Bank 10 9	8 7 6	5 4 3	2 1 0	
BANK EROSION (facing downstream)	Banks stable; evidence of erosion or bank failure absent or minimal; little potential for future problems.	Grade and width stable; isolated areas of bank failure/erosion; likely caused by a pipe outfall, local scour, impaired riparian vegetation or adjacent use.	Past downcutting evident, active stream widening, banks actively eroding at a moderate rate; no threat to property or infrastructure	Active downcutting; tall banks on both sides of the stream eroding at a fast rate; erosion contributing significant amount of sediment to stream; obvious threat to property or infrastructure.	
	Left Bank 10 9	® 7 6	5 4 3	2 1 0	
	Right Bank 10 9	® 7 6	5 4 3	2 i 0	
FLOODPLAIN CONNECTION	High flows (greater than bankfull) able to enter floodplain. Stream not deeply entrenched.	High flows (greater than bankfull) able to enter floodplain. Stream not deeply entrenched.	High flows (greater than bankfull) not able to enter floodplain. Stream deeply entrenched.	High flows (greater than bankfull) not able to enter floodplain. Stream deeply entrenched.	
	20 (19) 18 17 16	15 14 13 12 11	10 9 8 7 6	5 4 3 2 1 0	
	OVER	ALL BUFFER AND FLOODPLA	IN CONDITION		
	Optimal	Suboptimal	Marginal	Poor	
VEGETATED BUFFER WIDTH	Width of buffer zone >50 feet; human activities (i.e., parking lots, roadbeds, clear-cuts, lawns, crops) have not impacted zone.	Width of buffer zone 25-50 feet; human activities have impacted zone only minimally.	Width of buffer zone 10-25 feet; human activities have impacted zone a great deal.	Width of buffer zone <10 feet: litt or no riparian vegetation due to human activities.	
	Left Bank 10 9	8 7 6	5 4 3	2 1 0	
	Right Bank 10 9	8 7 6	<u> </u>		
FLOODPLAIN VEGETATION	Predominant floodplain vegetation type is mature forest	Predominant floodplain vegetation type is young forest	Predominant floodplain vegetation type is shrub or old field	Predominant floodplain vegetation type is turf or crop land	
	20 19 18 17 16	15 14 13 12 11	10 9 8 7 🚳	5 4 3 2 1 0	
FLOODPLAIN HABITAT	Even mix of wetland and non-wetland habitats, evidence of standing/ponded water	Even mix of wetland and non-wetland habitats, no evidence of standing/ponded water	Either all wetland or all non- wetland habitat, evidence of standing/ponded water	Either all wetland or all non- wetland habitat, no evidence of standing/ponded water	
	20 19 18 17 16	15 14 13 12 11	10 9 8 7 6	5 4 3 2 1 0	
	No evidence of floodplain	Minor floodplain encroachment in the	Moderate floodplain encroachment in the form of	Significant floodplain encroachment (i.e. fill material, land development, or man-made	
FLOODPLAIN ENCROACH- MENT	encroachment in the form of fill material, land development, or manmade structures	form of fill material, land development, or manmade structures, but not effecting floodplain function	filling, land development, or manmade structures, some effect on floodplain function	structures). Significant effect on floodplain function 5 4 3 2 1 0	

Sub Total In-stream: 57/80 + Buffer/Floodplain: 27/80 = Total Survey Reach 24/160

WATERSHED	SUBSHED: DIS			DATE: <u> </u>	<u> 130 09 </u>	ASSES	SED BY: C	M+BC
SURVEY REA		Тіме: <u>Э</u> : <u>4</u>			: (Camera-Pic	#)]40)20 /# Oc	2007
SITE ID: (Con	dition-#) SC-	LAT 41049 . 2	2 " LONG	10.45 ·	<i>®</i> 0 " LN	IK	GPS (U	lnit ID)
							*······	
TYPE: K	ad Crossing Railroad	Crossing Manmade	Dam Beav	er Dam 🔲	Geological Form	ation 🔲 🤇	Other:	
	SHAPE:	#BARRELS:	MATERIAL:	ALIG	NMENT:	DIMENSIC	ONS: (if varia	ible, sketch)
1	Arch Bottom	1 === 2	Concrete	⊠ Flo	w-aligned	Barrel dian	neter:	<u>4'</u>
FOR ROAD/	│ □ Box ☑ Elliptic │ □ Circular		☐ Metal		t flow-aligned	H	leight:	(ft)
RAILROAD	Other:	☐ Triple☐ Other:	Other:	□ D₀	not know			
CROSSINGS	CONDITION: (Evidence			CIII V	ERT SLOPE:	Culvert len	gth:	(ft)
ONLY	Cracking/chipping/co		m soour hola	Fla		V	Vidth:	(ft)
	Sediment deposition	Failing emb		☐ Sli	ght (2° – 5°)			
	Other (describe);		, and the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of	□оь	vious (>5°)	Roadway e	levation:	(ft)
	1 , , , , ,				1		·	
POTENTIAL 1	RESTORATION CANDIDA	ATE Fish barrier r	emoval 🔲 Culv	ert repair/re	placement 🔲 U	pstream sto	rage retrofit	
🔯 no		☐ Local stream	repair 🔲 Othe	er:				
Is SC ACTING	G AS GRADE CONTROL	□No □Y	es Unk	nown				
	EXTENT OF PHYSICAL			BLO	CKAGE SEVER	TY: (circle	: #)	
		artial	A structure such	ae a dam or	A total fish blockag	0000	A temporary ha	arrier such as a
1.0	☐ Temporary ☐ U	Inknown	road culvert on a		tributary that would	isolate a	beaver dam or	
If yes for fish barrier	CAUSE:		greater stream blupstream movem		significant reach of or partial blockage		the very head overy little viable	of a stream with
jish burrer	☐ Drop too high Wa	nter Drop: (in)	anadromous fish;	no fish	interfere with the m	igration of	above it; natura	al barriers such
	Flow too shallow Wa	ater Depth: (in)	passage device p	oresent.	anadromous fish.		as waterfalls.	
	Other:		5		4 3		2	1
NOTES/SKET	Сн:	eap Along bo n frested			do o A	~.^ ^	£	
	Rip-A	eap Along bo	th bank	ىك ئىسىدى	VVXIZ. IATES A	WI O	" cul	vert
	-+10.	for Fred	by Per	on Re	B			
	C*(A	N) II constitution			_			
7					REPORT	ED TO AUTI	HORITIES 🗌	Yes 🗌 No

Impacted Buffer

IB

WATERSHED/SUBSHED: TOB			DATE: 130 109	ASSESSED BY: CW/B
URVEY REACH:	TIME:	_:AM/PM	Рното ID: (Camera-P	ic#)149200/# 001,003
SITE ID: (Condition-#) START LA	4741 049 28" I	LONG 72° 4		GPS: (Unit ID)
END LA	ΛΤ <u>" " '</u> Ι	.ong°	'" LMK	
IMPACTED BANK: REASON IN.		vegetation	o narrow Widespread in	avasive plants
LAND USE: Private (Facing downstream) LT Bank RT Bank ✓		rse Park Ot	her Public :	
DOMINANT Paved LAND COVER: LT Bank	Bare ground Turf/lav		Shrub/scrub Trees	Other :: :::::::::::::::::::::::::::::::::
INVASIVE PLANTS: None	☐ Rare ☐ P	artial coverage	☐ Extensive coverage	unknown
STREAM SHADE PROVIDED? Non	e Partial	Full WETL.	ands Present? ☐ No	Yes Unknown
POTENTIAL RESTORATION CANDIDA	TE Active reforestati	ion Greenway d	lesign	ation Invasives removal
RESTORABLE AREA LT BANK RT Length (ft): 70 40 Width (ft):	REFORESTATION POTENTIAL: (Circle #)	Impacted area on pul where the riparian an not appear to be use specific purpose; plei area available for pla	ea does public or private land for any presently used for a purpose; available and	that is land where road; building encroachment or other feature significantly limits available area for planting
widdi (ii).		5	4 3	2 1
POTENTIAL CONFLICTS WITH REFOR Poor/unsafe access to site Existing		idespread invasive vere animal impact		mination
NOTES: NGO/ of Rio	-Rap on both	banks	downstream a	of culvert
LB here is	IANA with	A MARROW	downstream a vegetated buff	an (penate
	e) the RB is			, , , , , , , , , , , , , , , , , , , ,
,				·
•				

P. 1 of 2 TDB, REACH 12.

SURVEY REACH ID: 12 WTRSHI	D/SUBSHD: TDB		SSESSED BY:
START TIME: 2: 30.00/PM	LMK: END TIME: 9	: 30 A Q /PM LMK:	GPS ID:
LAT 41° 48 '23 " LONG 12°	45 10 " LAT41 48 17	17" LONG 12. 45.	<u>04"</u>
DESCRIPTION: ~ 200' South of	DESCRIPTION:	libutary junction	M 24
Sindney R	4	RIG	n+ BANK
(_	Steady rain PRESENT CONDITIONS		ain 🗆 Intermittent
	☐ Trace ☐ Clear	☐ Trace ☐ Overcas	
SURROUNDING LAND USE: Industrial Golf course		☐ Suburban/Res	☐ Institutional
AVERAGE CONDITIONS (check app	plicable) REACH S	SKETCH AND SITE IMPACT	TRACKING
	75-100% within the survey rea	f survey reach. Track locations and ch (OT, ER, IB,SC, UT, TR, MI) as	s well as any additional
☐ Sand (gritty) ☐ Boulde ☐ Gravel (0.1-2.5") ☐ Bed ro	e (2.5 –10") er (>10") ock	leemed appropriate. Indicate direc	ction of flow
WATER CLARITY		1	
AQUATIC PLANTS Attached: none In Stream Floating: In one In Stream	7	1	
WILDLIES IN OR (Evidence of)	Store Rabbit		(EUB)
STREAM SHADING (water surface)		LE SYDEN G	
CHANNEL Downcutting Dynamics Widening Headcutting Aggrading Sed. deposition	Bed scour Bank failure Bank scour Slope failure Channelized Bed scour Channelized Channelized	(
CHANNEL Height: ET bank	42" (ft) IN STREAM	SHAUB	
DIMENSIONS RT bank	(ft)	11	
(FACING Width: Bettern	30' (ft)	}}	
Top	(ft)	[]	
REACH ACCESSIBILITY			\
public ownership, sufficient room to developed area wetl	ficult. Must cross dland, steep slope, or isitive areas to get to	OLD FIELD (SHOUBS + SMAN	
stockbile materials, removal or impact to stock	eam. Few areas to ckpile available	2K10'WDE, 6	HIGH
access for heavy landscaped areas. and	I/or located a great	SINSBURY KA	40
equipment using small or distant from Soc	tance from stream. ecialized heavy	M GONESTED	
T EXISTING (DAGS OF HAIRS, T	uipment required.	7/	
NOTES: (biggest problem you see in survey react		+ - 00	/
loading + increase in -	TRASH/delets (9017 6	alk + bottless. Of	huwise this
Reach is in good on	evall condition.	Reported to aut	HORITIES 🔲 YES 🔲 NO

P.2 32 .TDB, REACHIZ

	,	OVERALL STREAM COND	ITION		
	Optimal	Suboptimal	Marginal	Poor	
IN-STREAM HABITAT (May modify criteria based on appropriate habitat regime)	Greater than 70% of substrate favorable for epifaunal colonization and fish cover; mix of snags, submerged logs, undercut banks, cobble or other stable habitat and at stage to allow full colonization potential (i.e., logs/snags that are not new fall and not transient).	40-70% mix of stable habitat; well- suited for full colonization potential; adequate habitat for maintenance of populations; presence of additional substrate in the form of newfall, but not yet prepared for colonization (may rate at high end of scale).	20-40% mix of stable habitat; habitat availability less than desirable; substrate frequently disturbed or removed.	Less than 20% stable habitat; lac of habitat is obvious; substrate unstable or lacking.	
	20 19 18 17 16	15 14 🚺 12 11	10 9 8 7 6	5 4. 3 2 1 0	
VEGETATIVE PROTECTION (score each bank, determine sides by facing downstream)	More than 90% of the streambank surfaces and immediate riparian zone covered by native vegetation, including trees, understory shrubs, or nonwoody macrophytes; vegetative disruption through grazing or mowing minimal or not evident; almost all plants allowed to grow naturally.	70-90% of the streambank surfaces covered by native vegetation, but one class of plants is not welt-represented; disruption evident but not affecting full plant growth potential to any great extent; more than one-half of the potential plant stubble height remaining.	50-70% of the streambank surfaces covered by vegetation; disruption obvious; patches of bare soil or closely cropped vegetation common; less than one-half of the potential plant stubble height remaining.	Less than 50% of the streambans surfaces covered by vegetation; disruption of streambank vegetation is very high; vegetation has been removed to 5 centimeters or less in average stubble height.	
	Left Bank 10 9	8 7 6	5 4 3	2 1 0	
	Right Bank 10 9	8 0 6	5 4 3	2 1 0	
Bank EROSION (facing downstream) Banks stable; evidence of erosion or bank failure absent or minimal; little potential for future problems. <5% of bank affected.		or bank failure absent or minimal; little potential for future problems.		Active downcutting; tall banks on both sides of the stream eroding a fast rate; erosion contributing significant amount of sediment to stream; obvious threat to property or infrastructure.	
	Left Bank 10 9	8 7 6	5 4 3	2 1 0	
	Right Bank 10	8 7 6	5 4 3	2 1 0	
FLOODPLAIN CONNECTION	High flows (greater than bankfull) able to enter floodplain. Stream not deeply entrenched.	High flows (greater than bankfull) able to enter floodplain. Stream not deeply entrenched.	High flows (greater than bankfull) not able to enter floodplain. Stream deeply entrenched.	High flows (greater than bankfull) not able to enter floodplain. Stream deeply entrenched.	
	20 (19) 18 17 16	15 14 13 12 11	10 9 8 7 6	5 4 3 2 1 0	
	T	ALL BUFFER AND FLOODPLAI		<u> </u>	
	Optimal	Suboptimal	Marginal	Poor	
VEGETATED Buffer Width	Width of buffer zone >50 feet; human activities (i.e., parking lots, roadbeds, clear-cuts, lawns, crops) have not impacted zone.	Width of buffer zone 25-50 feet; human activities have impacted zone only minimally.	Width of buffer zone 10-25 feet; human activities have impacted zone a great deal.	Width of buffer zone <10 feet: little or no riparian vegetation due to human activities.	
	Left Bank 10 9	8 <u>7</u> 🙆	5 4 3	2 1 0	
	Right Bank 10 9	8 💋 6	5 4 3	2 1 0	
FLOODPLAIN VEGETATION	Predominant floodplain vegetation type is mature forest	Predominant floodplain vegetation type is young forest	Predominant floodplain vegetation type is shrub or old field	Predominant floodplain vegetation type is turf or crop land	
	20 19 18 17 16	15 14 13 12 11	(10) 9 8 7 o	5 4 3 2 1 0	
FLOODPLAIN	Even mix of wetland and non-wetland habitats, evidence of standing/ponded	Even mix of wetland and non-wetland habitats, no evidence of	Either all wetland or all non- wetland habitat, evidence of standing/ponded water	Either all wetland or all non- wetland habitat, no evidence of standing/ponded water	
Навітат	water	standing/ponded water	standing/politica Mutor	• •	
Навітат	water 20 19 18 17 16	15 14 13 12 (11)	10 9 8 7 6	= :	
HABITAT FLOODPLAIN ENCROACH- MENT		<u> </u>			

WATERSHED	SUBSHED: TOB			DATE: 12	101109	ASSE	SSED BY:	mtse
SURVEY REA		Тіме: <u>8 : 3</u> 0	2_ 603 /PM	Рното II): (Camera-Pic	#) PCal	o /# a	∞ , ∞
SITE ID: (Con	adition-#) SC-	41-48-2	3" Long 3	<u> 2 ° 45 '</u>	<u>/0</u> ", li	мк	GPS	(Unit ID)
TYPE: X Ros	ad Crossing	ng Manmade	Dam ☐ Beav	er Dam	Geological Form	nation [Other:	
FOR ROAD/	SHAPE: Arch Bottomless Box Elliptical Circular Other:	#BARRELS: Single Double Triple Other:	MATERIAL: Concrete Metal Other:	ALIG ☐ Flo	NMENT: Dw-aligned of flow-aligned onot know		IONS: (if va	riable, sketch) O (ft) (ft)
CROSSINGS ONLY	CONDITION: (Evidence of) Cracking/chipping/corrosion Sediment deposition Other (describe):	Downstrear Failing emb		☐ Fla	☐ Flat ☐ Slight (2° – 5°)		Culvert length: Width: Roadway elevation:	
⊯ n o	RESTORATION CANDIDATE	☐ Fish barrier re☐ Local stream	repair 🗌 Othe	er:	placement U	Jpstream s	torage retro	fit
IS SC ACTING	G AS GRADE CONTROL	□ No □ Y	es Unk					
If yes for fish barrier	EXTENT OF PHYSICAL BLO Total Partial Temporary Unknow CAUSE: Drop too high Water Dr Flow too shallow Water De Other:	vn op:(in)	A structure such a road culvert on a greater stream blu upstream movem anadromous fish; passage device p	as a dam or 3rd order or ocking the ent of no fish	A total fish blockar tributary that woul significant reach of or partial blockage interfere with the r anadromous fish.	ge on a ld isolate a of stream, e that may	A temporary beaver dam the very hea very little via	v barrier such as a or a blockage at ad of a stream with ble fish habitat tural barriers such s.
Notes/Svet			5	·	4 3		2	1
NOTES/SKET	CAN See Bish an how	Light -	through	Sage.				T For

Storm Water Outfalls



WATERSHED/SUBSHED: TDG	3	DATE: 12 / 01 /09 Ass	SESSED BY: CM/B6		
SURVEY REACH ID: /2	TIME: <u>7</u> : <u>15</u> 1000 PM	PHOTO ID: (Camera-Pic#)			
SITE ID (Condition #): OT-	TAT 41 º 48 ' 32 "I	LONG 70 45 07" LM	GPS: (Unit ID)		
BANK: X LT RT Head Closed pipe Moderate R Closed pipe C	MATERIAL: ☐ Concrete ☐ Metal ☐ PVC/Plastic ☐ Brick ☐ Other: ☐ Concrete ☐ Earther	☐ Circular ☐ Double ☐ Elliptical ☐ Triple ☐ Diame ☐ Other:	NSIONS: SUBMERGED: No ter:(in) Partially Fully (in)		
Substantial Open Storm SubMelseo channel	Other:	Parabolic Width (Top) Other: " (Bottom)			
CONDITION: None Chip/Cracked Peeling Paint Corrosion Other: Condition: Odor: Rancid/So Sewage Rancid/So Corrosion Other: Other:	☐ None ☐Oily	VEGGIE DENSITY: None Normal Inhibited Excessive PIPE B Other POOL C	ENTHIC GROWTH: None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None Non		
FOR COLOR: Clear Brown Grey Yellow Green Orange Red Other FLOWING TURBIDITY: None Slight Cloudiness Cloudy Opaque ONLY FLOATABLES: None Sewage (toilet paper, etc.) Petroleum (oil sheen) Other. OTHER Excess Trash (paper/plastic bags) Dumping (bulk) Excessive Sedimentation CONCERNS: Needs Regular Maintenance Bank Erosion Other:					
POTENTIAL RESTORATION CANDID	ATE Discharge investigat	ion Stream daylighting Local s	stream repair/outfall stabilization		
☐ no If yes for daylighting: Length of vegetative cover from outfall	Storm water retrofit ft Type of exi	Other:	Slope:°		
If yes for stormwater: Is stormwater currently controlled? ☐ Yes ☐ No ☐ Not investigated	Land Use d Arca availa				
SEVERITY. strong smell. The amo	unt of discharge is significant int of normal flow in receiving ears to be having a nstream.	discharge; flow mostly clear and odorless. If the arge has a color and/or odor, the amount of arge is very small compared to the stream's base and any impact appears to be minor / localized.	discharge; staining; or appearance of causing any erosion problems.		
SKETCH/NOTES:	5 4	3			
		REPORTED	TO AUTHORITIES: YES NO		

Impacted Buffer

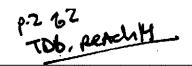
IB

WATERSHED/SUBSHED: +0	B		DATE: 17 0	/ 09 ASS	SESSED BY: CM/O
URVEY REACH:	TIME: 7	: <u>/</u> /\$_ (M)PM			2010 #007
SITE ID: (Condition-#) START LA		Long 72 ° 45		1K	GPS: (Unit ID)
B MISSE END LA	······································	LONG °		 1K	
PRESIDENTES. CHRISTIAN POLICY STREET					
IMPACTED BANK: REASON IN	ADEQUATE: Lack of	vegetation 🔼 Too y planted 💆 Oth		pread invasive p	blants
LAND USE: Private	Institutional Golf Cou		her Public	•	
(Facing downstream) LT Bank		_'	□:		
RT Bank			<u> </u>	0.1	
DOMINANT Paved LAND COVER: LT Bank	Bare ground Turf/lav		Shrub/scrub Tre	es Other	
RT Bank		, ⊔] Ø}-]	
INVASIVE PLANTS: None	☐ Rare 🗹 P	artial coverage	Extensive cov	erage unl	known
STREAM SHADE PROVIDED? Non	e ⊠Partial □	Full WETL	ANDS PRESENT? [□ No □ Y	es Unknown
POTENTIAL RESTORATION CANDIDA	TE Active reforestat	ion Greenway d	esign Natural i	egeneration _	Invasives removal
no ·	Other:	Ϋ́ _Α	Hang GC		
RESTORABLE AREA		Impacted area on put		rea on either	Impacted area on private
LT BANK RT	REFORESTATION	where the riparian are not appear to be used		ivate land that is sed for a specific	land where road; building encroachment or other
Length (ft):	POTENTIAL: (Circle #)	specific purpose; pler area available for plan	nty of purpose; av	ailable area for	feature significantly limits available area for planting
Width (ft):	(Cirolo II)	5	nting planting ad		2 1
Portion and a second series with a second		<u> </u>			
POTENTIAL CONFLICTS WITH REFOR ☐ Poor/unsafe access to site ☐ Existing		despread invasive p vere animal impacts			n Lack of sun
NOTES: (1) PASTURE (ground of D LB impart du	uality habitar) Le to Rip-Rap	lant this ~3' hi x52	chereford of	2 beginn 41°48'32'	11/79 95 07 "
·					
			•		
					· ·
7					

P.162 Retch 14



SURVEY REACH ID:TRD 14 WTRSHD/SUBSHD: TUP	1 BLEDOWA BLE DATE: 12/1/09 ASSESSED BY:
START TIME: 9:30 (D)PM LMK:	END TIME: 0: 30 AD PM LMK: GPS ID: LAT 4 9 48 54 " LONG 70 945 00 "
LAT 41° 48 ' 37" LONG 72° 45 ' 04" DESCRIPTION: CONFLUENCE (R)	DESCRIPTION: GOLF GUASE POND
DESCRIPTION: ZOUFLUENCE (C)	DESCRIPTION. GOLF EGULTS - PUNC
RAIN IN LAST 24 HOURS Heavy rain Steady rain	PRESENT CONDITIONS ☐ Heavy rain ☐ Steady rain ☐ Intermittent
□ None □ Intermittent □ Trace SURROUNDING LAND USE: □ Industrial □ Commercial	☐ Clear ☐ Trace ☐ Overcast ☐ Partly cloudy ☐ Urban/Residential ☐ Suburban/Res ☐ Forested ☐ Institutional
SURROUNDING LAND USE:	□ Crop
AVERAGE CONDITIONS (check applicable)	REACH SKETCH AND SITE IMPACT TRACKING
BASE FLOW AS % □ 0-25% □ 50%-75% CHANNEL WIDTH □ 25-50 % ▼ 75-100%	Simple planar sketch of survey reach. Track locations and IDs for all site impacts within the survey reach (OT, ER, IB,SC, UT, TR, MI) as well as any additional features deemed appropriate. Indicate direction of flow
DOMINANT SUBSTRATE □ Cobble (2.5 - 10") □ Silt/clay (fine or slick) □ Cobble (2.5 - 10") □ Sand (gritty) □ Boulder (>10") □ Gravel (0.1-2.5") □ Bed rock	
WATER CLARITY	
AQUATIC PLANTS Attached:	
WILDLIFE IN OR AROUND STREAM (Evidence of) ☐ Fish ☐ Beaver ☐ Deer ☐ Snails ☐ Other: MUSSELS, HER	NOWN ON PARTY
☐ Mostly shaded (≥75% coverage) STREAM SHADING ☐ Halfway (≥50%) (water surface) ☐ Partially shaded (≥25%) ☐ Unshaded (<25%)	PURCHAT TOWN MONN
CHANNEL DYNAMICS Widening Headcutting Headcutting Was a part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part	STONES - SIDNES - SURUBBY
CHANNEL DIMENSIONS (FACING DOWNSTREAM) Height: LT bank RT bank (2.5')(ft) (2.5')(ft) Width: Botom Top (ft)	THUB. SHAUBC,
REACH ACCESSIBILITY	SUNVES, OUTNORON'N FIELDS,
Good: Open area in developed area Difficult. Must cross wetland, steep slope, or	SUNDES, OUTHOROWN FIELDS, YOUNG FOREST
public ownership, sufficient room to Access requires tree adjacent to stream. sensitive areas to get to stream. Few areas to	FOREST ()
stockpile materials, removal or impact to stockpile available	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \
access for heavy stocknile areas distance from stream.	/mis
equipment using small or distant from Specialized heavy	
stream, equipment required.	how or C
NOTES: (biggest problem you see in survey reach) GOLF GO	INSE NUMOFF + RIPNAP
	<u> </u>
	REPORTED TO AUTHORITIES YES NO



		OVERALL STREAM CONDI	ITION		
·	Optimal	Suboptimal	Marginal	Poor	
IN-STREAM HABITAT (May modify criteria based on appropriate habitat regime)	Greater than 70% of substrate favorable for epifaunal colonization and fish cover; mix of snags, submerged logs, undercut banks, cobble or other stable habitat and at stage to allow full colonization potential (i.e., logs/snags that are not new fall and not transient).	40-70% mix of stable habitat; well-suited for full colonization potential; adequate habitat for maintenance of populations; presence of additional substrate in the form of newfall, but not yet prepared for colonization (may rate at high end of scale).		Less than 20% stable habitat; lack of habitat is obvious; substrate unstable or lacking.	
	20 19 (18) 17 16	15 14 13 12 11	10 9 8 7 6	5 4 3 2 1 0	
VEGETATIVE PROTECTION (score each bank, determine sides by facing downstream)	More than 90% of the streambank surfaces and immediate riparian zone covered by native vegetation, including trees, understory shrubs, or nonwoody macrophytes; vegetative disruption through grazing or mowing minimal or not evident; almost all plants allowed to grow naturally.	70-90% of the streambank surfaces covered by native vegetation, but one class of plants is not well-represented; disruption evident but not affecting full plant growth potential to any great extent; more than one-half of the potential plant stubble height remaining.	50-70% of the streambank surfaces covered by vegetation; disruption obvious; patches of bare soil or closely cropped vegetation common; less than one-half of the potential plant stubble height remaining.	Less than 50% of the streambank surfaces covered by vegetation; disruption of streambank vegetation is very high; vegetation has been removed to 5 centimeters or less in average stubble height.	
	Left Bank 10 🕖	8 7 6	5 4 3	2 1 0	
	Right Bank 10 9	8 7 6	5 4 3	2 1 0	
BANK EROSION (facing downstream)	areas of bank failure/erosion; likely or bank failure absent or minimal; little potential for future problems. little potential for future problems. little potential for future problems.			Active downcutting; tall banks on both sides of the stream eroding at a fast rate; erosion contributing significant amount of sediment to stream; obvious threat to property or infrastructure.	
	Left Bank 10	8 7 6	5 4 3	2 1 0	
	Right Bank 10 9	8 7 6	5 4 3	2 1 0	
FLOODPLAIN CONNECTION	High flows (greater than bankfull) able to enter floodplain. Stream not deeply entrenched.	High flows (greater than bankfull) able to enter floodplain. Stream not deeply entrenched.	High flows (greater than bankfull) not able to enter floodplain. Stream deeply entrenched.	High flows (greater than bankfull) not able to enter floodplain. Stream deeply entrenched. Bank	
	20 (19) 18 17 16	15 14 13 12 11	10 9 8 7 6	5 4 3 2 1 , 0, time;	
	OVER	ALL BUFFER AND FLOODPLAI	N CONDITION	in the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of	
	Optimal	Suboptimal	Marginal	Poor	
VEGETATED Buffer Width	Width of buffer zone >50 feet; human activities (i.e., parking lots, roadbeds, clear-cuts, lawns, crops) have not impacted zone.	Width of buffer zone 25-50 feet; human activities have impacted zone only minimally.	Width of buffer zone 10-25 feet; human activities have impacted zone a great deal.	Width of buffer zone <10 feet: little or no riparian vegetation due to human activities.	
	Left Bank 10	8 7 6	5 4 3	2 1 0 %	
	Right Bank 10	8 7 6	5 4 3	2 1 0	
FLOODPLAIN VEGETATION	Predominant floodplain vegetation type is mature forest	Predominant floodplain vegetation type is young forest	Predominant floodplain vegetation type is shrub or old field	Predominant floodplain vegetation type is turf or crop land	
	20 19 18 17 16	15 14 13 12 11	10 9 8 7 6	5 4 3 2 1 0	
FLOODPLAIN HABITAT	Even mix of wetland and non-wetland habitats, evidence of standing/ponded water	Even mix of wetland and non-wetland habitats, no evidence of standing/ponded water	Either all wetland or all non- wetland habitat, evidence of standing/ponded water	Either all wetland or all non- wetland habitat, no evidence of standing/ponded water	
	(20) 19 18 17 16	15 14 13 12 11	10 9 8 7 6	5 4 3 2 1 0 %	
FLOODPLAIN ENCROACH- MENT	No evidence of floodplain encroachment in the form of fill material, land development, or manmade structures	Minor floodplain encroachment in the form of fill material, land development, or manmade structures, but not effecting floodplain function	Moderate floodplain encroachment in the form of filling, land development, or manmade structures, some effect on floodplain function	Significant floodplain encroachment (i.e. fill material, land development, or man-made structures). Significant effect on floodplain function	
<u> </u>	20 19 18 (17) 16	15 14 13 12 11	10 9 8 7 6	5 4 3 2 1 0	
Sub Total In-str	ream: <u>15</u> /80 + Bi	ıffer/Floodplain: 65 /80	= Total Survey	Reach 140 /160	

Storm Water Outfalls

OT

WATERSHED/SUBSHED	: TOB		DATE:	ASSESSED BY:	Cm+BB	
SURVEY REACH ID:	IH TIN	ие: <u>9</u> : <u>45 (</u> Дурм	РНОТО ID: (Camera-Pi	ic#) /# /	rene	
SITE ID (Condition-#): O	T- LA	r°_ See 🛷	loro	' LMK	GPS: (Unit ID)	
BANK: Head FLOW:	TYPE:	MATERIAL: Concrete Me PVC/Plastic Brid	-	DIMENSIONS: Diameter: (in)	SUBMERGED: No Partially Fully	
None Marickle Marickle Substantial Other:	Open channel	☐ Concrete ☑ Earth ☐ Other:	en Parabolic y	Depth: (in) Vidth (Top): (in) " (Bottom): (in)	NOT APPECABLE	
CONDITION: None Chip/Cracked Peeling Paint Corrosion Other:	ODOR: NO Gas Sewage Rancid/Sour Sulfide Other:	DEPOSITS/STAINS: None Oily Flow Line Paint Other:	VEGGIE DENSITY: None Normal Inhibited Excessive Other:	PIPE BENTHIC GRO Brown Orang Other: POOL QUALITY: Good Odors Suds Algae Other:	ge Green No pool Colors Goils	
FOR COLOR: Clear Brown Grey Yellow Green Orange Red Other: FLOWING TURBIDITY: None Slight Cloudiness Cloudy Opaque ONLY FLOATABLES: None Sewage (toilet paper, etc.) Petroleum (oil sheen) OTHER CONCERNS: Needs Regular Maintenance Bank Erosion Other: POTENTIAL RESTORATION CANDIDATE Discharge investigation Stream daylighting Local stream repair/outfall stabilization						
	er from outfall:	Storm water retrofi	t Other:	Slope:		
If yes for stormwater: Is stormwater currently c ☐ Yes ☐ No ☐ Not		Land Uş Area ava	e description:ilable:			
SEVERITY: cor (circle #) stre		f discharge is significant normal flow in receiving to be having a	mall discharge; flow mostly clear and scharge has a color and/or odor, the a scharge is very small compared to the low and any impact appears to be mind	mount of discharge; stream's base	s not have dry weather staining; or appearance any erosion problems.	
SKETCH/NOTES: ①	stormund	er input on	RBD 41042'47"	/220451-1		
	SKETCH/NOTES: 1) Stockmarter input on RBD 41048'43"/12045'07" D Swale / Stockmarter input on RBD 41048'53"/72045'01" Potential input on nutrient loading. Since this stream Reach is belatively open-comprised and Tin nutrients can read to regelerative exceptive open-the open-the open-the open-the open-the open-the open-the open-the open-the open-the open-the open-the open-the open-the open-the open-the open-the open-the open-the open-the open-the open-the open-the open-the open-the open-the open-the open-the open-the open-the open-the open-the open-the open-the open-the open-the open-the open-the open-the open-the open-the open-the open-the open-the open-the open-the open-the open-the open-the open-the open-the open-the open-the open-the open-the open-the open-the open-the open-the open-the open-the open-the open-the open-the open-the open-the open-the open-the open-the open-the open-the open-the open-the open-the open-the open-the open-the open-the open-the open-the open-the open-the open-the open-the open-the open-the open-the open-the open-the open-the open-the open-the open-the open-the open-the open-the open-the open-the open-the open-the open-the open-the open-the open-the open-the open-the open-the open-the open-the open-the open-the open-the open-the open-the open-the open-the open-the open-the open-the open-the open-the open-the open-the open-the open-the open-the open-the open-the open-the open-the open-the open-the open-the open-the open-the open-the open-the open-the open-the open-the open-the open-the open-the open-the open-the open-the open-the open-the open-the open-the open-the open-the open-the open-the open-the open-the open-the open-the open-the open-the open-the open-the open-the open-the open-the open-the open-the open-the open-the open-the open-the open-the open-the open-the open-the open-the open-the open-the open-the open-the open-the open-the open-the open-the open-the open-the open-the open-the open-the open-the open-the open-the open-the open-the open-the open-the open-the open-the op					
	51 7	in nutriced	s can lead !	re vegeta-in	c exercise	
		4		REPORTED TO AUTHORI	TIES: YES NO	

Impacted Buffer | IB

			•	· I ———
WATERSHED/SUBSHED:	<u> </u>		DATE: D O	100-00
JURVEY REACH: 14	TIME:	2:30 (M)/PM		ASSESSED BY: CM/
SITE ID: (Condition +) START	LAT41 048.57 "	Long 72 ° 45	PHOTO ID: (Camera-Pic	#) P(Ø10 /# O18 GPS: (Unit ID)
TD 14.12 1		Long°		= GIS. (Onli 1D)
		LONG	<u>'" LMK</u>	
IMPACTED BANK: K LT RT Both REASON INADEQUATE: Lack of vegetation Too narrow Widespread invasive plants				
Recently planted Other: Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip - Rip -				
LAND USE: Private (Facing downstream) LT Bank	Institutional Golf Co	urse Park Otl	her Public /	7.00
RT Bank				
DOMINANT Paved	Bare ground Turf/la		: □ 1/	
LAND COVER: LT Bank				Other
RT Bank				<u></u>
INVASIVE PLANTS: None		Partial coverage		
STREAM SHADE PROVIDED TO THE STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET S				
STREAM SHADE PROVIDED? None Partial Full WETLANDS PRESENT? No Yes Unknown				
POTENTIAL RESTORATION CANDIDA	ATE Active reforestat	ion MGraenway de	d- DN 1	
По	Other:	ion Dicheenway de	sign Natural regeneration	□ Invasives removal
RESTORABLE AREA				
LT BANK RT	REFORESTATION	Impacted area on publi where the riparian area	c larid Impacted area on either does public or private land that	Impacted area on private
Length (ft):	POTENTIAL:	not appear to be used if specific purpose; plenty	or any presently used for a speci	fic encroachment or other
Vidth (ft);	(Circle #)	area available for planti	of purpose; available area for planting adequate	feature significantly limits available area for planting
		5	4 3	2
POTENTIAL CONFLICTS WITH REPORTS ATION				
Severe animal impacts (deer, beaver) Other:				
NOTES:				
·				
				,
•				,
•				
	Y			
			•	