SURVEY/REACH Dr. 442-1 WTRSHD/SUBSHD:	DATE: 11/23/09 ASSESSED BY:
START TIME: 10:15 AM/PM LMK: OLMOCK END TIME	E: 11 :45 AM/PM LMK: ASLANAM GPS ID:
LAT 41 ° 43 ' 04 " LONG 72 ° 43 ' 24" LAT 41 ° 48	18 " LONG 72° 43, 34"
DESCRIPTION: DESCRIPTION:	
RAIN IN LAST 24 HOURS  Heavy rain  Steady rain  PRESENT CONDITIO	ons
□ None □ Intermittent □ Trace □ Clear	☐ Trace ☐ Overcast ☐ Partly cloudy
SURROUNDING LAND USE:    Industrial    Commercial    Urban/Residentia	al Suburban/Res Forested Institutional
☐ Golf course ☐ Park ☐ Crop	☐ Pasture ☐ Other:
AVERAGE CONDITIONS (check applicable)	CH SKETCH AND SITE IMPACT TRACKING
The state of the s	ich of survey reach. Track locations and IDs for all site impacts
CHANNEL WIDTH 25-50 % within the survey	reach (OT, ER, IB,SC, UT, TR, MI) as well as any additional
DOMINANT SUBSTRATE	res deemed appropriate. Indicate direction of flow
☐ Silt/clay (fine or slick) ☐ Cobble (2.5 –10")	
☐ Sand (gritty) ☐ Boulder (>10")	THE CONTRACT CARD
☐ Gravel (0.1-2.5") ☐ Bed rock Sime	PONTACE ROAM  YX 8' MEM 12'WIDE
	DIONIET VI
WATER CLARITY  ☐ Clear ☐ Turbid (suspended matter) ☐ Stained (clear, naturally colored) ☐ Opaque (milky)	(3.   April
Other (chemicals, dyes)	11 / ISCOND
AQUATIC PLANTS Attached: In none   some   lots	410 45" 14.9"
routing. Let note it some it lots	ANT 1 APE-1 072043'31.9"
WILDLIFE IN OR	JOHN DISMIKENSSIONE
AROUND STREAM Snails DOther: Ducks provis while	provide J SANKEROSIONE 31.9"
Mostly shaded (≥75% coverage)	1 1
STREAM SHADING  Halfway (>50%)	RESIDENTIAL WANNS
(water surface) ☐ Partially shaded (≥25%)	\ \ \
☐ Unshaded (< 25%)	11048/11/N
CHANNEL Downcutting Bed scour	91.48.11.79
DYNAMICS Widening Bank failure	013.613.38
Headcutting Bank scour	
Unknown Aggrading Slope failure Channelized	
	de Provine of
CHANNEL Height: LT bank RF 30 (ft)	1 Plante
DIMENSIONS RT bank (ft)	
(FACING DOWNSTREAM) Width: Bottom 39 66 (ft)	11
Top(ft)	//
REACH ACCESSIBILITY	//
Good: Open area in Fair: Forested or Difficult. Must cross	
public ownership, developed area wetland, steep slope, or	SUMM VACOURTHS
stocknile materials Access requires tree   stream. Few areas to	Wan
easy stream channel removal or impact to stockpile available	71
equipment using Stockpile areas distance from stream.	[[
existing roads or trails. small or distant from Specialized heavy	\\
stream.   equipment required.	<u></u>
NOTES: (biggest problem you see in survey reach)	
IMPACTED BUFFEL - NESIDENTIAL LAWAS	
	Denontron to the Control of the Cont

	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.
<del>_</del>	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 macrophyles; 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	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.
	OVE	ALL BUFFER AND FLOODPLAX	n Condition	
THE PROPERTY OF THE PROPERTY O	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	<b>(3)</b> 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	3 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

Impacted	Ruffer
mpacieu	

IB

WATERSHED/SUBSHED: NGP	,		DATE: <u></u>	123/09		ESSED BY: CM/B			
SURVEY REACH: 4	Тіме: <u>//</u>	:_ <i>00</i> _a <b>Q</b> /pm		<b>):</b> (Camera-Pi					
	т <u>41°48'10"</u> I т <u>41°48' 8</u> " I	LONG <u>72 ° 43</u> LONG <u>72 ° 43</u>		LMK <u>Por</u>		GPS: (Unit ID)			
LT RT Both		y planted Otherse Park O				ants WMS+YAND WAS DUMP			
DOMINANT Paved  LAND COVER: LT Bank  RT Bank  INVASIVE PLANTS: None		wn Tall grass	Shrub/scrub		Other :	nown			
STREAM SHADE PROVIDED? None Partial Full WETLANDS PRESENT? No Yes Unknown  POTENTIAL RESTORATION CANDIDATE Active reforestation Greenway design Natural regeneration Invasives removal Other:									
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 pu ed for any pr enty of pu	npacted area on eith ublic or private land resently used for a s urpose; available are anting adequate	that is pecific	Impacted area on private land where road; building encroachment or other feature significantly limits available area for planting			
Width (ft):		5	4	3	2				
POTENTIAL CONFLICTS WITH REFOR Poor/unsafe access to site Existing	ESTATION Wighter Windows Cover Se	idespread invasive vere animal impac	plants   ts (deer, beav	Potential containver)	mination	Lack of sun			
NOTES: Residential yard-space up to top of Bank, Areas are morn actively tograss is short (""). Yard waste dumping in Repairan area t in places at Bank top to even in water channel.  It see photo PB 230010. Jpg for minor Bank exession									

Impacted Buffer	acted B	uffer
-----------------	---------	-------

IB

WATERSHED/SUBSHED: NBP	DATE: \ / JZ /09 ASSESSED BY: 000	186
	: ORM/PM PHOTO ID: (Camera-Pic #) cm /# PB2	
CRVB1 Addition	ONG 072 043 132 " LMK GPS: (Unit IL	
	ong ° ' ' LMK	
END LAT,,,	ONG	
☐ RT ☐ Both ☐ Recently	vegetation Too narrow Widespread invasive plants  planted Other: Residential Plante Plantes  rse Park Other Public	sent
LAID USE.		
(Facing downstream) LT Bank		
DOMINANT Paved Bare ground Turf/lav		
LAND COVER: LT Bank		ł
. RT Bank 🔲 🖂		
INVASIVE PLANTS: None Rare P	artial coverage	
STREAM SHADE PROVIDED? None Partial	Full WETLANDS PRESENT? ♣No ☐ Yes ☐ Unknown	1
***************************************	on Greenway design ANatural regeneration Invasives remov	al
no Other:		
RESTORABLE AREA	Impacted area on public land where the riparian area does land that is land where road; but	
Length (ft): KT BANK RT REFORESTATION POTENTIAL:	not appear to be used for any presently used for a specific encroachment or of	ther
Length (ft): _/S (Circle #)	specific purpose; plenty of purpose; available area for planting area available for planting adequate for planting adequate	
Width (ft):		
POTENTIAL CONFLICTS WITH REFORESTATION W	idespread invasive plants Potential contamination Lack of su	un
☐ Poor/unsafe access to site ☐ Existing impervious cover ☐ Se	vere animal impacts (deer, beaver)	
NOTES: M. O.C. : ALO MAH LOW D.DE	located Approximiately 5 feets can just see it in the plant	-
I WERE IS AN ONIGIONS PAR	and and it is the death	_
upstreating of the erosian yar	CAM MIST SEE IT IN THE PUBLIC	
[PK1 30011])		
1		
This is residential pervale	property.	
·		
·		
	•	
	e e	
F		

_	WATERSHED/SUBSHED: NBP						DATE:   / 6	33/09	ASSESSE	ED BY:	36/cm
	SURVEY REA		4.	Тім	E::AM/PN	1	<b>РНОТО ID:</b> (С	Camera-Pic#	)	/#	
	SITE ID (Condition-#): OT-			LAT	41.48.6.	]" Lo	NG 72 · 43	<u>1259"</u>	LMK	G	PS: (Unit ID)
	BANK:  LT ART  FLOW:  None	Head Trickle	TYPE:  Closed pipe		MATERIAL:  Concrete  PVC/Plastic  Other:	Metal Brick		Double	DIMENSIO Diameter:_		SUBMERGED:  No Partially
☐ Moderate ☐ Substantial ☐ Other: Channe		Open channel		Concrete 🔼 Ea	arthen	☐ Trapezoid ☐ Parabolic ☐ Other:		h: th (Top): Bottom):		Fully	
CONDITION:  None  □ Chip/Cracked □ Peeling Paint □ Corrosion □ Other:  □ Other:  ODOR: ☑ □ Gas □ Sewage □ Rancid/S □ Sulfide □ Other:		Sour	DEPOSITS/STAINS  None Oily Flow Line Paint Other:	S:	VEGGIE DENS  ☑ None ☐ Normal ☐ Inhibited ☐ Excessive ☐ Other:	· I	PIPE BENTI Brown Other: POOL QUAI Good Suds Other:	Orange  LITY:   Odors	No pool Colors		
ŀ	FOR COLOR: Clear Bro				☐ Brown ☐ G	rev [	Yellow T	Green 🔲 O	rangé 🗆 R	ed 🗀 Otho	
	FLOWING	TURBIDI		•	Slight Clouding	-		Opaque	Tange 🔲 K		a
	ONLY FLOATABLES: None Sewage (to			Sewage (toilet	paper, e	tc.) 🔲 P	etroleum (oi	sheen)	Oth	er:	
	OTHER				-		Excessive Se Other:	dimentation			
1	POTENTIAL R	ESTORAT	ION CANDI	DATE	☐ Discharge inve	stigation	n Stream dayl	ighting 🔲	Local strear	n repair/ou	fall stabilization
ı	no				☐ Storm water retr		Other:	0 0 -		<b>F T</b> •	
	If yes for dayle Length of veget		r from outfa	11:	ft Type	of exist	ing vegetation:	.,.		Slope: _	
	If yes for storn	nwater:									
	Is stormwater co		ntrolled?		Land	Use des	cription:				
	☐ Yes ☐ No	☐ Not i	nvestigated			ıvailabl					
SEVERITY: storing sites. The amount of niscitarge is significant compared to the amount of niscitarge is significant did did did did did did did did did di				discharç discharç	Small discharge; flow mostly clear and odorless. If the discharge has a color and/or odor, the amount of discharge is very small compared to the stream's base flow and any impact appears to be minor / localized.  Outfall does not have dry discharge; staining; or appoint of causing any erosion profile.			ning; or appearance			
L				5	4	ļ	3		2		<u>(1)</u>
	SKETCH/NOTI	ES: T					)	- '7		,	
	*	, , , , , , , , , , , , , , , , , , ,	1								; · · · · ·
								111		1 .	
ľ					i		·	٠ ١	٠.	1	
	** . Y							Rei	PORTED TO A	UTHORITII	:s: 🗌 yes 🔲 no
	7			"							

OT

WATERSHED/SUBSHED: NG	2	DATE: 1 3 D ASSESSED BY: CM/BG				
SURVEY REACH ID: 4	<b>Тіме:</b>	<b>PHOTO ID:</b> (Camera-Pic #) /#				
SITE ID (Condition-#): OT-	LAT 41 ° 48 ' 11 "I	ong <u>72 ° 43 ' 28 "</u> LM	<b>GPS</b> : (Unit ID)			
BANK:  LT RT Head  FLOW:  None Trickle		Circular Double	NSIONS: SUBMERGED:  ter: \( \sqrt{\phi} \) (in) \( \sqrt{\phi} \) Partially \( \sqrt{\phi} \) Fully			
☐ Moderate ☐ Substantial ☐ Op Cher: Cha	en	☐ Trapezoid Depth: ☐ Parabolic Width (Top) ☐ Other: " (Bottom)	(in) (in) (in) (in)			
☐ Chip/Cracked ☐ Gas	wage	□ None □ Brown   □ Normal □ Other   □ Inhibited POOL 0   □ Excessive □ Goo	ENTHIC GROWTH: None  In Orange Green  CUALITY: No pool  I Odors Colors Oils  Algae Floatables			
FOR COLOR: SCIENT Brown Grey Yellow Green Grange 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:						
POTENTIAL RESTORATION C	ANDIDATE Discharge investigat  Storm water retrofit	ion Stream daylighting Local Other:	stream repair/outfall stabilization			
If yes for daylighting:	outfall:ft Type of ex	isting vegetation:	Slope:°			
If yes for stormwater:  Is stormwater currently controlled  Yes No Not investigated		lescription: Residential				
SEVERITY: strong smell. 1 compared to the stream; discharge discha	he amount of discharge is significant the amount of normal flow in receiving large appears to be having a lact downstream.	Il discharge; flow mostly clear and odorless. If the large has a color and/or odor, the amount of large is very small compared to the stream's bas and any impact appears to be minor / localized.	discharge; staining; or appearance of causing any erosion problems.			
SKETCH/NOTES:	5 4	<u>(3)</u>	2 1			
bank erosic	& ApproximateoC M + Kesidential	5' upstream of 2 cannot	Minds			
		REPORTE	D TO AUTHORITIES: \( \subseteq \text{YES } \subseteq \text{NO}			

WATERSHED/SUBSHED	: NBP		DATE: 1/23 /09 ASSESSED BY: CM (66)					
		ME::AM/PM	<b>Рното ID:</b> (Camera-Pi					
SITE ID (Condition-#): O	T- <u>C</u> LA	T41 <u>° 48 ' 14,9 "</u>	LONG 72 · 43 · 31.7 ·	LMK	GPS: (Unit ID)			
BANK:  LT RT Head  FLOW: None Trickle Moderate	TYPE: Closed pipe	MATERIAL:  ☐ Concrete. ☐ Me ☐ PVC/Plastic ☐ Bri ☐ Other:	ck	Diameter: 🖟 (i	SUBMERGED:  No in) Partially  Fully			
Substantial Other:	Open channel	☐ Concrete ☐ Earth ☐ Other:	Parabolic W	epth: (in) /idth (Top); (in) / (Bottom): (in)	NOT APPENCABLE			
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 G Brown Ora Other:  POOL QUALITY: Good Odors Suds Algae Other:	nnge ☐ Green ☐ No pool ☐ Colors ☐ Oils			
FOR   COLOR:   Color:   Brown   Grey   Yellow   Green   Orange   Red   Other:								
POTENTIAL RESTORAT	ION CANDIDATE	Discharge investigation	ation Stream daylighting  Other:	Local stream repai	ir/outfall stabilization			
If yes for daylighting: Length of vegetative cover	from outfall:	ft Type of e	existing vegetation:	Slope	::°			
If yes for stormwater:  Is stormwater currently controlled?  Land Use description:  Yes \( \text{No} \) Not investigated  Area available:								
SEVERITY: strong comp stream		discharge is significant discharge is significant normal flow in receiving be having a	nall discharge; flow mostly clear and ox charge has a color and/or odor, the am charge is very small compared to the s w and any impact appears to be minor	nount of discharge	pes not have dry weather e; staining; or appearance g any erosion problems.			
	5	· 4	3	2				
ž:·	Pipe is jutting out stightly, Applacex 5'							
					,			
	<del></del> :		R	REPORTED TO AUTHOR	RITIES: YES NO			

#### Stream Crossing

<b>3</b> U	

WATERSHED				ATE: 📗	23/0	ASSE	SSED BY:	66 CW
- STATES STORMERS AND STORE DESCRIPTIONS OF THE STATES AND STORE STORE AND STORE STORE AND STORE	.cн ID: <i>N</i> ВР-4	TIME: 11:45			: (Camera-Pic	#) 12	/#	•
SITE ID: (Con	dition:#) SC-Mane LAT	410 48. 12	<u> 5 " Long 72</u>	· 43	<u>34</u> " LI	YOUTH OF	GPS	(Unit ID)
TYPE: TYPE:	ad Crossing Railroad Cross	1	<u> </u>	ſ	Geological For			
	SHAPE:	#BARRELS:	MATERIAL:		NMENT:			riable, sketch)
	☐ Arch ☐ Bottomless ☐ Elliptical	☐ Single☐ Double	☐ Concrete	1	w-aligned t flow-aligned	Barrel dia	_	(ft)
FOR ROAD/	☐ Circular	Triple	Other:	1	not know		Height: _	<b>8</b> (ft)
RAILROAD	Other:	Other: 4				Culvert le		~64 <sup>1</sup> (ft)
CROSSINGS ONLY	<b>CONDITION:</b> (Evidence of)			Culy Uffa	ERT SLOPE:		width:	2'x4_(ft)
J CIVE	Cracking/chipping/corrosic			1 —	ght (2° – 5°)		wiuii. •	
	☐ Sediment deposition☐ Other (describe):	Failing emb	ankment		vious (>5°)	Roadway	elevation:	(ft)
	U Other (describe).							
POTENTIAL I	RESTORATION CANDIDATE	☐ Fish barrier re	moval  Culvert	repair/rep	placement 🔲 🛭	Jpstream st	orage retro	fit
no		Local stream	repair					
Is SC ACTING	G AS GRADE CONTROL	□No □Y	es Unkno	wn				
	EXTENT OF PHYSICAL BLO	OCKAGE:		BLO	CKAGE SEVE	RITY: (circ	le #)	
	☐ Total ☐ Partial		A structure such as a	a dam or	A total fish blocks	аде оп а	A temporary	barrier such as a
If yes for	☐ Temporary ☐ Unkno	wn	road culvert on a 3rd	l order or	tributary that wou	ld isolate a	beaver dam	or a blockage at
fish barrier	CAUSE:		greater stream block upstream movement		significant reach or partial blockag			ad of a stream with able fish habitat
Ĭ	Drop too high Water D	•	anadromous fish; no passage device pres		interfere with the anadromous fish.	migration of	above it; na as waterfall	tural barriers such
	☐ Flow too shallow Water D☐ Other:	epth:(in)	passage device pies	ent.		•	as waterias	o.
NOTES/SKET	· <del></del>		5		4 3		2	
NOTES/SKET	2000 O	4- BAY CO	Noneth Bo	x co	iven, i	UD IMP	Act 70	From
	0/L 1154	PASSAGE						
		•						
				٠				
			•					
		-						
	•							
		•						
						4		
								•
7					D==			□vec□ve
					KEPOR	CTED TO AU	THORITIES	YES No

SURVEY REACH	D: 9 wt	RSHD/SUBSHD: N	3P	DATE: 11 /23 /	Assessed a	Y
LAT 41047 1	e: <u>0 30 am/em</u> <u>54 "</u> Long <u>7</u>     Veat / PoAcl	2042 146"	END TIME: 3  LAT 4 47 4  DESCRIPTION: 42	8 " LONG 32 °	LMK: 43 ·06 " rputs	GPS ID:
RAIN IN LAST 24 HO ☐ None	DURS  Heavy rain  Intermittent	Steady rain Trace	PRESENT CONDITIONS  ☐ Clear	-		artly cloudy
SURROUNDING LAN	☐ Golf cou	rse 🗆 Park	☐ Urban/Residential ☐ Crop ☐		Forested	stitutional
ÄVERAGE	CONDITIONS (che	k applicable)	REACHS	KETCH AND SITE I	mpact Tracki	NG
BASE FLOW AS % CHANNEL WIDTH	□ 0-25% □25-50 %	□ 50%-75% <b>⊈</b> 75-100%	within the survey rea	f survey reach. Track lo ch (OT, ER, IB,SC, UT, leemed appropriate. Ind	TR, MI) as well as a	ny additional
DOMINANT SUBSTR  ☐ Silt/clay (fine or ☐ Sand (gritty) ☐ Gravel (0.1-2.5	slick) $\square$ Co	obble (2.5 –10") oulder (>10") d rock				
	GCLear □Turbic aturally colored) □ dyes)	· •				
AQUATIC PLANTS IN STREAM		e ⊠ some □ lots c □ 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	) 1 (≥25% )	REAL	wat Ball	war BANK	
CHANNEL DYNAMICS	Downcutting Widening Headcutting	☐ Bed scour☐ Bank failure☐ Bank scour☐		S Ha	(spha)	لىم.
Unknown	Aggrading Sed. deposition	Slope failure Channelized	S. W. W.	//	Jamo de	(spart)
CHANNEL DIMENSIONS	Height: LT bank RT bank	(ft)		PA->	3 Hours	
(FACING DOWNSTREAM)	Width: Bottom Top	(ft)	TOUR POINTS	* <b>*</b>	16	
T .	REACH ACCESSIBILI			·	74 \	20
Good: Open area in public ownership, sufficient room to	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			PIOES	(b)
stockpile materials, easy stream channel access for heavy	removal or impact to landscaped areas.  Stockpile areas	stockpile available and/or located a great distance from stream.				$\nearrow$
equipment using existing roads or trails.	small or distant from stream.	Specialized heavy equipment required.		0.0		
NOTES: (biggest pro	blem you see in survey NAH AL	reach) 50VVQ (WNeW) -	infacted in difficult	ACCESSALI	CIARON	U.H. AGUND
bed ROCK RestorAty	Substeal	e would b	Red Myrc.	HALL A POC	OR'C ANCLI OTO AUTHORITIES	YES NO

#10115#11:1115#### #C#18#1-18#1	Augustino et januaria januari Augustino januaria j	Suboptimal	Marginal	Poor	
IN-STREAM HABITAT (May modify criteria based	Optimal  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	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	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.	
on appropriate habitat regime)	colonization potential (i.e., logs/snags that are not new fall and not transient).	not yet prepared for colonization (may 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)	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; vegetatior 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 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 (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 🕡 16	15 14 13 12 11	10 9 8 7 6	5 4 3 2 1 0	
	OVER	ALL BUFFER AND FLOODPLAI	N CONDITION		
S (	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 <b>(5)</b> 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	
	No evidence of floodplain encroachment in the form of fill	Minor floodplain encroachment in the form of fill material, land	Moderate floodplain encroachment in the form of filling, land development, or	Significant floodplain encroachment (i.e. fill material, land development, or man-made	
FLOODPLAIN ENCROACH- MENT	material, land development, or manmade structures  20 19 18 17 (16)	development, or manmade structures, but not effecting floodplain function  15 14 13 12 11	manmade structures, some effect on floodplain function	structures). Significant effect on floodplain function  5 4 3 2 1 0	

Sub Total In-stream: 1/80

Buffer/Floodplain:

<u>55</u>/80

Total Survey Reach 127/160

# Impacted Buffer

IB |

WATERSHED/SUBSHED:	NSP				DATE	11 133100	Ass	SESSED BY: CM/BO
SURVEY REACH:	9		TIME:	_:AM/PM	Рнот	o <b>ID:</b> (Camera-Pi	ic #)	/# PB23003
SITE ID: (Condition-#)	START LA	T 41 ° 47	' <u>54</u> " I	LONG 72 °	12 1 46	' LMK		GPS: (Unit ID)
B- 4	END LA	т <u>41°47</u>	' 56 " I	ONG <u>72</u> °_	42.57	' LMK		
	REASON INA					√ Widespread in		
LT 🔼 RT 🗌 Both							n is	+444 ~ 10'L
LAND USE: (Facing downstream) LT Bank		nstitutional	Golf Cou	rse Park ] □	Other Pub			
RT Bank	_	Ø				· -		
DOMINANT	Paved	Bare ground	Turf/lav		ss Shrub/s		Other	
LAND COVER: LT Bank	· 🗆				区	L 🗆	□:	
RT Bank			₽	<u> </u>			:	
Invasive Plants:	☐ None	☐ Rare	Ø₽₽	artial coverage	☐ E2	tensive coverage	unl	known
STREAM SHADE PROVIDE	D? None	e 🗷 Parti	al [	Full Wi	ETLANDS P	RESENT? No	Y	Yes Unknown
POTENTIAL RESTORATIO	n Candida	ΓΕ ∐Activ	e reforestati	on Greenw	ay design (	Natural regenera Natural ⊼	tion 🛭	KInvasives removal
no		Other	:					
RESTORABLE AREA		e.		Impacted area o		Impacted area on eith		Impacted area on private
LT BANK	RT ,	REFORESTA		where the riparia not appear to be		public or private land presently used for a s		land where road; building encroachment or other
Length (ft):	200	POTENTIAL (Circle #)	:	specific purpose area available fo		purpose; available are planting adequate	ea for	feature significantly limits available area for planting
Width (ft):		(0., 0,0 ,,)		5	i planting	planting adequate		2 1
Down and the second sec				<del></del>	!1 <b>-</b> -	Detected conto		
POTENTIAL CONFLICTS W Poor/unsafe access to site				despread invas vere animal im				n Lack of sun
								the side
				LAUDAI I	TI IVOLEY C	11100 ( 5	V( D	1001 3100
on U-Haret 60	nd cu	ampus	•					•
~ Landwarek	- P	start	to	B = 8	-6AU	culvert/5	trop	AM CLOSSIM
J. DANGGONIO F	- 01	ا الم	. ^	and to Ot	Ţ			J
that mar	yks the	. start	0+	peren 1				
+ LANDANASK					tout	over DASS (	مايده	dre
- The white	- 6			2.(144	~ <del>~ ~ ~</del> .			3
	-							

# Impacted Buffer

IB

1.00			DATE:	1/23/09	ASSESSED BY: CM BG
WATERSHED/SUBSHED: NBP				<del></del>	
SURVEY REACH:	TIME:	_:AM/PM		ID: (Camera-Pic:	#) /# PQ2300 \(\bar{C}\)
	141 ° 47'54" I				- GIS. (Omi 1D)
B- 6 END LA	ат <u> 41°47'52"</u> I	ong <u>72°43</u>	<u>'' 000 '''</u>	LMK	
LT RT Both		planted Oth		idential	
LAND USE: Private	Institutional Golf Cou			<del>-</del>	
RT Bank	2 W-Hnet-Faed [				cliff on RB
DOMINANT Paved	Bare ground Turf/lav	Ü	_	crub Trees C	Other
LAND COVER: LT Bank					□: Ø: Bedfock cliff
RT Bank		] 🗀			
INVASIVE PLANTS: None		artial coverage			unknown
STREAM SHADE PROVIDED? Non	e 🖾 Partial	Full   WETL	ANDS PR	ESENT? No	Yes Unknown
POTENTIAL RESTORATION CANDIDA  no	TE Active reforestati	ion Greenway o	lesign [	Natural regeneratio	on  Invasives removal
RESTORABLE AREA  Length (ft):   LT BANK RT  Length (ft):   Length	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 od for any nty of	Impacted area on either public or private land that presently used for a sper purpose; available area to planting adequate	at is land where road; building cific encroachment or other
Width (ft):		5	· 4	. 3	2
POTENTIAL CONFLICTS WITH REFOR Poor/unsafe access to site Existing	g impervious cover Se	vere animal impact	ts (deer, b	eaver) Other:	nation
NOTES: IMPACTED ARE	a is located	on pa	whe	property	/ + is A
MANTANIEN	Lawn w/ so	we JAto	d u	paste disp	osal at
edge ob Rive	r. the Righ	ert Baul	- is	. A bedic	och eliff
·					
				•	
1					
·					

WATERSHED/SUBSHED: N	BP	DATE: 11 /23 /09\ ASSESSED BY: CM/66						
SURVEY REACH ID:	TIME::AM/PM	РНОТО ID: (Camera-Pic #) /# РВЭЗОЗ /						
STTE ID (Condition-#); OT- A	LAT41 047 154 "	LONG 2042 , 46"						
Hararda occido de cararda a martina de la companya	76880G							
BANK: TYPE:	MATERIAL: ☐ Concrete ☑Met	SHAPE: Single al Circular Double	DIMENSIONS: SUBMERGED:					
LT RT Head	sed PVC/Plastic Bric		Diameter (in) Partially					
FLOW: pip	e Other:	Other:	☐ Fully					
Moderate		☐ Trapezoid De	epth: (in)					
Substantial Ope	en Concrete Earthe	Parabolic W	idth (Top): (in) NOT APDECABLE					
Control.		Other:	(Bottom): (in)					
	: \(\overline{\text{DEPOSITS/STAINS:}}\)	VEGGIE DENSITY:	PIPE BENTHIC GROWTH: None					
None ☐ Gas ☐ Chip/Cracked ☐ Sev	I ₩ '	✓ None  ☐ Normal	☐ Brown ☐ Orange ☐ Green ☐ Other:					
1 — ·	cid/Sour	☐ Inhibited	POOL QUALITY: No pool					
☐ Corrosion ☐ Sul	<b></b>	Excessive	☑ Good ☐Odors ☐Colors ☐Oils					
Other: Oth	er: Other:	Other:	Suds Algae Floatables					
	· · · · · · · · · · · · · · · · · · ·		Other:					
FOR COLOR:	☑ Clear Brown — Grey	100 100 100 100 100 100 100 100 100 100	Orange Red Other:					
FLOWING TURBIDITY:	None Slight Cloudiness							
ONLY FLOATABLES:	None Sewage (toilet paper (paper/plastic bags) Dump	oing (bulk)	(oil sheen)					
OTHER		· / —						
POTENTIAL RESTORATION CA	NDIDATE Discharge investiga	ation Stream daylighting	Local stream repair/outfall stabilization					
□ no	Storm water retrofit	Other:						
If yes for daylighting:		!-A!	Clamat 9					
Length of vegetative cover from o	outfall:π Type of e	existing vegetation:	° Slope:°					
If yes for stormwater:								
is stormwater currently controlled		description: U- HARTA	id CAMPUS					
Yes No Not investiga	so with a distinct color and/or a							
Strong smell. T	he amount of discharge is significant	all discharge; flow mostly clear and or charge has a color and/or odor, the arr	ount of Outlan does not have dry wearner					
	disc	charge is very small compared to the s wand any impact appears to be minor.	tream's base of causing any procion amblems					
	act downstream.							
SKETCH/NOTES: Dros	Jed with the	9- LAN CONVERT	that marks the ene there is also					
DESCRIPTION NO.	the with the		4 - 1 - 0					
avision be	tween Reaches	9+10 (NBP) wh	ere there is also					
An 8-647	culveit.							
			·					
		•						
		F	REPORTED TO AUTHORITIES: YES NO					



	WATERSHED/SUBSHED: NGP			D	DATE: 11 /23 /09 ASSESSED BY: CM/ BO			
	SURVEY REACH ID:		ие::ам/Рм	ı P	PHOTO ID: (Camera-Pic	#) /#		
Ì	SITE ID (Condition-#): O'	1-6 HC 12			37) · 42 · 5/"	LMK	GPS: (Unit ID)	
	BANK:  LT RT Head  FLOW:	TYPE:  Closed pipe	☐ PVC/Plastic ☐	S Metal [ Brick [	HAPE: Single Circular Double Elliptical Triple	DIMENSIONS: Diameter:(i	SUBMERGED:  No  Partially	
	None Trickle Moderate Substantial Other:	Open channel	Other:	arthen [	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:		/EGGIE DENSITY:  None  Normal Inhibited Excessive Other:	PIPE BENTHIC G  Brown Ora Other:  POOL QUALITY: Good Odors Suds Algae Other:	□ 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 CONCERNS: December Plastic bags Dumping (bulk) Excessive Sedimentation  Other: Other:							
	POTENTIAL RESTORA	TION CANDIDATE	☐ Discharge inve		Stream daylighting [	Local stream repa	ir/outfall stabilization	
	If yes for daylighting: Length of vegetative cover	er from outfall:				Slop	e:°	
	If yes for stormwater:  Is stormwater currently co  ☐ Yes ☐ No ☐ Not			Use descri available:	iption:			
	SEVERITY: stro con stre	npared to the amount of eam; discharge appears nificant impact downstre	of discharge is significant normal flow in receiving to be having a am.	discharge discharge flow and a	harge; flow mostly clear and or has a color and/or odor, the arr is very small compared to the s ny impact appears to be minor	nount of tream's base / localized.	loes not have dry weather ge; staining; or appearance ng any erosion problems.	
	SKETCH/NOTES:	5	<u> </u>	4	3	2	1	
	SKEICH/NOIES:							
		·						
				-a <u></u> ,	<u> </u>	REPORTED TO AUTHO	ORITIES: YES NO	

Storm Water Outlalis

	`	П
l	J	L

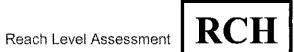
WATERSHED/SUBSHED: WSP		DATE: 11/23/01 ASSESSED BY: 34/0M			
SURVEY REACH ID:	Тіме::Ам/РМ	Рното ID: (Camera-Pic#) /# P633 0633			
SITE ID (Condition-#): OT	LAT41 . 47 . 56 " LO	ONG <u>72 ° 42 ' 57 " LMK GPS: (Unit ID)</u>			
BANK:  LT ART Head  FLOW:  None Trickle  Moderate Substantial  Closed pipe  Characte	MATERIAL:  Concrete Metal  PVC/Plastic Brick  Other:	SHAPE: Single DIMENSIONS: SUBMERGED: Circular Double No Elliptical Triple Diameter: (in) Partially Other: Fully Trapezoid Depth: (in) NOT APPECABLE			
Other: channel	2 Other: Led Rock	Other: " (Bottom): (in)			
CONDITION:  None □ Chip/Cracked □ Peeling Paint □ Corrosion □ Other: □ Other: □ Other:	⊠ None □Oily	VEGGIE DENSITY:			
FOR COLOR:	Clear Brown Grey	☐ Yellow ☐ Green ☐ Orange ☐ Red ☐ Other:			
FLOWING TURBIDITY:	None Slight Cloudiness	Cloudy Opaque			
	None Sewage (toilet paper, er/plastic bags) Dumpin				
OTHER	· • · · · · · · · · · · · · · · · · · ·	8			
the contract of the contract o		on Stream daylighting Local stream repair/outfall stabilization			
Ø-no	Storm water retrofit	Other:			
If yes for daylighting: Length of vegetative cover from outfal	ll:ft Type of exis	sting vegetation:°			
If yes for stormwater:  Is stormwater currently controlled?	Land Use de	escription:			
Yes No Not investigated	Area availab	ole:			
SEVERITY: strong smell. The arr compared to the arre	ount of discharge is significant discharge ount of normal flow in receiving discharge pears to be having a	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.  Outfall does not have dry weather discharge; staining; or appearance of causing any erosion problems.			
	5 4	3 2 1			
SKETCH/NOTES: aut 6 All	pipe worked A	ppriox, 20' from top to Bul.			
		REPORTED TO AUTHORITIES: YES NO			

WATERSHED/SUBSHED: NBP		DATE: 13/9) ASSESSED BY: BG/CM			
SURVEY REACH ID:	TIME::AM/PM	Рното ID: (Camera-Pic#) /# PB 230537			
SITE ID (Condition-#): OTE	LAT 41 0 47 1 48 " LO	ong <u>72°43 '06 "</u>	LMK GPS: (Unit ID)		
BANK: TYPE:  LT RT Head  FLOW: pipe  None Trickle	MATERIAL:  ☑ Concrete	SHAPE: ☐ Single ☐ Circular ☐ Double ☐ Elliptical ☐ Triple ☐ Other:	DIMENSIONS: SUBMERGED:  No ~ 20'   Diameter: (in) Partially  ☐ Fully		
☐ Moderate       ☐ Substantial     ☐ Open       ☐ Other:     channel	☐ Concrete ☐ Earthen ☐ Other:	Parabolic W	epth: (in) (idth (Top): (in) (Bottom): (in)		
CONDITION:  None  Chip/Cracked Peeling Paint Corrosion Other:  Condition Other: Condition O	None □Oily	VEGGIE DENSITY: None Normal Inhibited Excessive Other:	PIPE BENTHIC GROWTH:		
FLOWING TURBIDITY:	None Slight Cloudiness None Sewage (toilet paper, or plastic bags) Dumping	Cloudy Opaque etc.) Petroleum ( g (bulk) Excessive S			
POTENTIAL RESTORATION CANDID	Storm water retrofit	Other:	Local stream repair/outfall stabilization  Slope:°		
If yes for stormwater: Is stormwater currently controlled?  Yes No No Not investigated	Land Use des Area availabl	•			
SEVERITY: strong smell. The am	ount of normal flow in receiving pears to be having a wristream.	lischarge; flow mostly clear and oc ge has a color and/or odor, the am ge is very small compared to the st d any impact appears to be minor /	discharge; staining; or appearance of causing any erosion problems.		
SKETCH/NOTES:	5 4	3	2 1		
this outback	Pipe is located	h near the	-rap 16 A bedrock		
			a water 2 time		
10 Asserment	(rear bankbull	). Located.	Applex, 40' from		
end to peren a	^	,			
<u> </u>		R	REPORTED TO AUTHORITIES: YES NO		

# Stream Crossing

SC

111111111111111111111111111111111111111				DATE: _	11/23/09	ASSES	SED BY: CM 186
SURVEY REA	SURVEY REACH ID: BREAK betwee 9+10 TIME: 2:30 AMPR				<b>ID:</b> (Camera-Pic	c #)	# PB 230031
SITE ID: (Con	dition#) SC-126 LAT	41 - 47 - 54	<u> " Long 72</u>	<u> </u>	<u>' 46" Li</u>	MK	GPS (Unit ID)
TYPE: Ros	ad Crossing Railroad Crossi						
	SHAPE:  Arch Bottomless	#BARRELS:	MATERIAL:	ALI ATI FALI	IGNMENT: Flow-aligned	Barrel dian	ONS: (if variable, sketch) neter: 30 (ft)
	Box Elliptical	Double	Metal Will	M 0	Not flow-aligned		Height:(ft)
FOR ROAD/ RAILROAD	Circular Other:	☐ Triple ☑ Other:	Other:	ים	Do not know		
CROSSINGS	CONDITION: (Evidence of)	Exomer 8		CIII	LVERT SLOPE:	Culvert len	ngth:(ft)
ONLY	Cracking/chipping/corrosion	n Downstream	n scour hole	ים	Flat .	1	Width:(ft)
	Sediment deposition	☐ Failing emb			Slight (2° – 5°)		
	Other (describe):				Obvious (>5°)	Roadway e	elevation:(ft)
DOTESTIAL 1	RESTORATION CANDIDATE	Fish barrier re	emoval [] Culve	ert renair/	replacement 🔲 l	Instream sto	orage retrofit
no	RESTORATION CANDIDATE	Local stream		_	pressuont L	_ pour emii ott	
	G AS GRADE CONTROL						
1550 ACTIN	EXTENT OF PHYSICAL BLO				LOCKAGE SEVER	RITY: (circle	e #)
	☐ Total ☐ Partial		A structure such a	s a dam or	A total fish blocka	age on a	A temporary barrier such as a
If you for	☐ Temporary ☐ Unkno	wn	road culvert on a 3	3rd order or	tributary that wou	lid isolate a	beaver dam or a blockage at the very head of a stream with
If yes for fish barrier	Cause:		greater stream blo upstream moveme	ent of	significant reach or partial blockag	e that may	very little viable fish habitat
	☐ Drop too high Water D ☐ Flow too shallow Water D	rop: (in)	anadromous fish; a passage device pr		interfere with the anadromous fish.	- 1	above it; natural barriers such as waterfalls.
		·=·	5	***	4 3		2 1
NOTES/SKET	CH: Caracatra	A1M1 A	10 - L = 100 l	cu li	ner to	D O D OF	n 9 (NBP)
	- Downsie	6	D- While	0		100)-100	box n x n
	Lucktream is	Reach 1	o the	Kenc	1 4 5 m	che wa	5 JAPOTACO
NOTES/SKETCH: Downstream of 8-boy culvert is reach 9 (NBP)  + upstream is reach to the reach 9 side was worked  + upstream is reach to the reach 9 side was worked							
stre Rip-RAP in the channel, velocity is high, and immediately downstream (An ~ 201) is EliAllow; Rither rower, which is deeper, slower zowe, upstream (Readn) of when is deeper, slower							
	immediately d	ouns then	M (COL)	الب	veit is	deeper	r, slower
-	zove, upstrem	n (ReAd	10) 6	<i></i>		•	
	+ ponded.						
	Athere is also	l	valer in	· (	24" Meto	er Le	ie .
	- 10000 12 HIZE 1	r Staemu	water bib		Vision (		
	•	•	9				
							•
					•		•
					REPOR	RTED TO AUT	HORITIES YES NO



SURVEY REACH I		BP DAT	re: <u>\\ /23 /0</u> 5	ASSESSED BY/BG	
START TIM	E: 1 : 45 AM/M LMK:	END TIME: 3:3			
LAT4 947 DESCRIPTION: AT	40 " Long 72 · 42 · 32 ·		Long 70.42	- 400 " CW	ا (ل
DESCRIPTION AT	Junation	KC/AS/	raiver		
RAIN IN LAST 24 HO	OURS ☐ Heavy rain ☐ Steady rain ☐ Intermittent ☐ Trace		Heavy rain ■Stead	ly rain ☐ Intermittent reast ☐ Partly cloudy	
SURROUNDING LAND			ourban/Res		
AVERAGE	CONDITIONS (check applicable)	REACHSKET	CH AND SITE IMPA	OTTRACKING	
BASE FLOW AS % CHANNEL WIDTH	□ 0-25% □ 50%-75% □ 25-50 % ■ 75-100%	· ·		I) as well as any additional	;
DOMINANT SUBSTR.  ☐ Silt/clay (fine or ☐ Sand (gritty) ☐ Gravel (0.1-2.5	slick)				
I *	Clear		RIPLAP ON COLETE BONK PICK	MUNICAL CALLEST, AT	curry
AQUATIC PLANTS IN STREAM	Attached: ☐ none ⊠ some ☐ lots Floating: ☑ none ☐ some ☐ lots		RIPAP.	5//	ā
WILDLIFE IN OR AROUND STREAM	(Evidence of) □ Fish □ Beaver □ Deer □ Snails ☑ Other: Elly pho MAY	avos	Serve (t)		
STREAM SHADING (water surface)	Mostly shaded (≥75% coverage)  ☐ Halfway (≥50%)  ☐ Partially shaded (≥25%)  ☐ Unshaded (<25%)				
CHANNEL DYNAMICS Unknown	Downcutting Widening Headcutting Aggrading  Bed scour Bank failure Bank scour Slope failure	الرعم	Mish Joseph		
CHANNEL DIMENSIONS (FACING DOWNSTREAM)	Height: LT bank (ft)  RT bank (ft)  Width: Bottom (ft)  Top (ft)			SM, MUSUTAN	ry
	REACH ACCESSIBILITY	<del>(111</del>			
Good: Open area in public ownership, sufficient room to stockpile materials, easy stream channel access for heavy equipment using existing roads or trails.	Fair: Forested or developed area adjacent to stream. Access requires tree removal or impact to landscaped areas. Stockpile areas small or distant from stream.  Stream.  Difficult. Must cross wetland, steep slope, or sensitive areas to get to strockpile available and/or located a great distance from stream. Specialized heavy equipment required.		BANK &	nosion. QUENTRACT	
NOTES: (biggest proi	blem you see in survey reach) IMPA	ded Gutter Ad	ly Aceust to	PARKING	
			REPORTED TO A	AUTHORITIES 🗌 YES 🔲 N	oio

	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 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 streambanl 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 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 0 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 (6)	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: littl or no riparian vegetation due to human activities.	
	Left Bank 10 S	8 7 6	5 4 3	2 1 0	
		<b>3</b> 7 6	5 4 3	2 1 0	
LOODPLAIN EGETATION	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	
<del></del> _	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: 1/80

Buffer/Floodplain:

<u>50</u>/80

Total Survey Reach 152 /160

Utility Impacts

UT	

WATERSHED/SUBSH	IED: NBP	DATE:	DATE: 1 / 23 / 07 ASSESSED			Q			
SURVEY REACH ID:	, ,	TIME::_	_AM/PM	<b>Рното ID:</b> (Са	umera-Pic #)	# PB23003			
SITE ID: (Condition-#)	UT- LAT	11047.53	_" Long <u>7</u> 2	10 42 , 44	' LMK:	GPS: (Unit ID)			
TYPE:  Leaking sewer Exposed pipe Exposed manhole Other:	MATERIAL:  Concrete Corrugated metal Smooth metal PVC Other:	LOCATION:  ☐ Floodplain ☐ Stream bank ☐ Above stream ☐ Stream botton ☐ Other:	Yes CONDIT	FION:	Diamete Length of failure	IMENSIONS: er:in exposed:ft corrosion/cracking hole cover absent			
EVIDENCE OF DISCHARGE: Dark Brown  Lt Brown  Yellowish  Greenish  Other:  DISCHARGE: DEPOSITS  None  Tampons/Toilet Paper  Lime  Surface oils  Stains  Other:  POTENTIAL RESTORATION CANDIDATE  Structural repairs  Pipe testing  Citizen hotlines  Dry weather sampling  Ino  Other:									
· -	Vater Drop: (ir	n)							
UTILITY IMPACT SEVERITY: (Circle #)	stream; a long stream where nearly	partially exposed to immediate threat to undermined and b immediate future. is that the pipe ma	y long section of pipe is ossed but there is no nreat that the pipe will be and break in the uture. The primary concern to make the primary concern fish movements and the primary concern to the primary conc		od pipe, stream bank near the s across the bottom of the portion of the top of the pipe cosed but is reinforced with susing a blockage to upstream ole stack that is at the edge of t extend very far out into the				
Leaking= 5	failure. 5	·	4	3	2				
NOTES: NOT 8-6AY CU (NBP).	critical, bu duent which located un	ger ban Hyster Thomas	potion the 1 rectives	) LOCATED DREAM DO (LANDEN	L downstr etween r work)	eAM & eAches 9+1¢ THORITIES □ Yes □ No			

### Severe Bank Erosion



WATERSHED/SUE	BSHED: NBP			DATE: 11 / 2	3/09 AS	SSESSED BY: 0	WIRE
SURVEY REACH:		TIME:	AM/PM	Рното ID (Са			23003
SITE ID: (Condition			<u> </u>	12:37"		GPS: (Unit	$\frac{15000}{ID}$
er- (an/y )	END LAT_		LONG	1 11	LMK		,
	STREET, LINE BAI		20110				
PROCESS:	Currently unknown			RT Both			
Downcutting	☐ Bed scour			☐ Straight section	Steep slope	/valley wall L_C	other:
☐ Widening		DIMENSIONS			s ( -	N 4.1.1	
☐ Headcutting	Bank scour	1		t and/or RT		Bottom width	
Aggrading	Slope failure	Bank Ht		t and/or RT		op width	1
Sed. deposition	Channelized	Bank Angle	1	° and/or RT		Vetted Width	11
LAND OWNERSHI	P: Private Publi	ic Unknown	LAND COVER	: 🛛 Forest 🔲	Field/Ag	Developed:	
	ORATION CANDIDAT		•	Bank stabilization	on		
No Tune AT To Prov	PERTY/INFRASTRUCT	Other		he):			
		_	_ ,	•			
EXISTING RIPARI			☐ 25 - 50 ft	□ 50-75ft 🛮 🗖 7	5-100 <del>ft</del> □>	-100ft	
EROSION	Active downcutting; tall bar of the stream eroding at a	fast rate; erosion	Pat downcutting evid widening, banks activ			h stable; isolated areas	
SEVERITY(circle#)	contributing significant amo stream; obvious threat to p		moderate rate; no th			likely caused by a pipe riparian vegetation or	
Channelized= 1	infrastructure.		infrastructure				,
Accres-	5 Good access: Open area		4 G	nd or douglossed area	2 Difficult acces	1 s. Must cross wetland,	steep slope or
ACCESS:	ownership, sufficient room materials, easy stream cha	to stockpile	adjacent to stream. A			areas to access stream available and/or locate	
	heavy equipment using exi		removal or impact to Stockpile areas small	landscaped areas. Il or distant from stream.	distance from st	tream section. Specia	
٠	trails.	4	(3	2)	equipment requ	irea.	
Notes/Cross Se	CTION SKETCH:	) loored	l in st	20800			
	·		~ (01 5"				
. '							
					•		
				•			
				•			
				•			
					Dones	O AUTHORITIES	Ivre DNo

Impacted Buffer

| IB |

									[45]
	<u> 184</u>				DATE:	<u> </u>	\ Assi	ESSED BY:	11Bby
SURVEY REACH: \O			TIME:	_:AM/PM	Рното 1	<b>ID:</b> (Camera-l	ic #) ρ(	32300/#27	• •
SITE ID: (Condition-#)	TART LA	T 41 047	146 " I	LONG 72 º 43		LMK		GPS: (Unit.	
				LONG 72 042		LMK			
	ND LA	1 71 77	70 1	JUNG 10 10		EMIK			
Inchi comp Danie. D	EACON IN	DEOLLATE		vegetation  To		Widespreed i	nyosiya n	lante	
IMPACTED BANK: R  □ LT FART □ Both	EASON INA			y planted ☑ Oth					املم دما
<del></del>	Private I	nstitutional			ther Public		<u> av icce</u>	TC " 0 1	we see
LAND USE: (Facing downstream) LT Bank						J			
RT Bank		<b>⊒</b>	· •		:				
DOMINANT	Paved	Bare ground				ub Trees	Other		
LAND COVER: LT Bank				. <u>-</u>		ub 11€€3 <b>⊠</b>	□:		
				. —			□:		
RT Bank				<del></del>	<u> </u>				
Invasive Plants:	☐ None	Rare		Partial coverage	∐ Exte	nsive coverage	unk	nown	
STREAM SHADE PROVIDEI	? Non	e 🗘 Parti	ial [	Full WETL	ANDS PRE	ESENT? □ No	□ Y	es 🔲 Unknov	vn
				l		<del></del>			
POTENTIAL RESTORATION	CANDIDA	TE Activ	e reforestat	ion Greenway	design $\square$	Natural regener	ation	Invasives remo	val
	Cinibibil	Othe				·			
no			<u> </u>				1		
RESTORABLE AREA				Impacted area on pu where the riparian a		Impacted area on ei public or private lan		Impacted area on land where road; i	
LT BANK	RT	REFOREST		not appear to be use	ed for any	presently used for a	specific	encroachment or	
Length (ft):		POTENTIAL	<b>.:</b>	specific purpose; ple		purpose; available a	rea for	feature significant	• "
Width (ft):		(Circle #)		area available for pla	anung	planting adequate	<u>.</u>	available area for	planting
Width (It)				5	4	3	2		1
POTENTIAL CONFLICTS WI				idespread invasive		Poten <u>tia</u> l cont		Lack of	sun
Poor/unsafe access to site									
Notes:		""		· · · ·			1	0.1	,
Dio-RAP	Mu		0 00	10 -					
		11128 0	4 (6)	novett, o	X /2054	ed con a	rete,	PARKI	11 lot,
10.1	, 0000	inks o	+ (4)	noiete, o	x pose	ed Conc	rete,	PARKA	5
and la	uv1	inks o	+ 0	noieth, o	x pose	ed Cond	rete,	PARKA	5 5
and la	v/\	in/es o	<i>+</i> W	noveth, e	X P05+	ed cond	iete,	parkai	1) (1)
and la	w1	inks o	+ 0	noiete, o	X P054	ed Conc	iete,	PARIA	15 lot,
and la	uvi	inks o	<i>F</i> C1	novete, o	'x ροs*	ed Cond	rete,	PARIA	1) (1)
And la	uvi	in/s o	<i>+</i> C	navete, o	'X ρο <sub>&gt;</sub>	ed Conc	irete,	PARIA	1) (1)
and la	uv1	inks o	* •	novete, o	'x ρο <i>&gt;</i> *	ed Cond	iete,	PARIA	1) by
and la	uv1	inks o	* •	novete, o	'x ρο <i>&gt;</i> *	ed cond	refe,	PARIA	1) (1)
and la	uvi	inks o				ed Cond	rete,	PARIA	1) (1)
And la	uvi	inks o		novete, o		ed Cond	rete,	PARIA	1) (1)
And la	uvi	in/4s o				ed cond	rete	PARIA	1) (1)
and la	uv1	inks o				ed Cond	rete	PARIA	1) (1)
and la	uvi	inks o				ed Cond	rete,	PARIA	1) (1)
and la	uvi	inks o				ed Cond	rete	PARIA	1) (1)
and la	uvi	inks o				ed Cond	vete,	PARIA	1) (7)
and la	uv\	inks o				ed cond	rete,	PARIA	1) (T)
and la	uv\	in/4s o				ed Cond	rete	PARIA	1) (1)
and la	uvi	in/4s o				ed Cond	rete,	PARIA	1) (1)
and la	uv\	inks o				ed Cond	rete	PARIA	1) (T)



WATERSHED/	SUBSHED	: NBP				DATE: 128/09 ASSESSED BY: CM/BG					
SURVEY REA	CH ID:	10	Tin	ME::AM/PN	1	PHOTO ID: (Camera-Pic#) /# PB33007					
SITE ID (Condi	tion-#): O	TA	La	T41047 4	<u>"</u> " Lo	ong <u>72 ° 42 ° 43</u>	" LMK		PS: (Unit ID)		
FLOW:	LT			MATERIAL: Concrete PVC/Plastic Other: Concrete End		Parabolic v	Diameter:@ Depth:  Vidth (Top):	24 (in) (in) (in)	SUBMERGED:  No Partially Fully  NOT APPECABLE		
CONDITION: None Gas Chip/Cracked Peeling Paint Corrosion Other: Other:			DEPOSITS/STAINS: None Oily		VEGGIE DENSITY:  ☐ None ☐ Bro ☐ Oth ☐ Inhibited ☐ Excessive ☐ God		DL QUALITY: No pool Good Odors Colors Oil Guds Algae Floatables				
FOR FLOWING ONLY OTHER CONCERNS:	TURBIDITY:   None   Slight Cloudiness   Cloudy   Opaque										
POTENTIAL R	ESTORAT	TION CANDI	DATE	☐ Discharge inve	_	on Stream daylighting Other:	Local stream	m repair/ou	tfall stabilization		
If yes for dayl	-	r from outfa	11:			ting vegetation:		_ Slope:	0		
If yes for storm Is stormwater of Yes \[ \] No	arrently co			Land Area a	Use des	scription: <u>NEAR PA</u> R le:	Kinj, h	lostly	forestal		
OUTFALL SEVERITY: (circle #)	EVERITY: strong smell. The amount of discharge is significant compared to the amount of normal flow in receiving				dischar dischar flow an	fischarge; flow mostly clear and c ge has a color and/or odor, the ar ge is very small compared to the d any impact appears to be minor	mount of stream's base / localized.	discharge; sta	ot have dry weather ining; or appearance erosion problems.		
SKETCH/NOTES: 5 4						<u>(3)</u>	2		1		
Reported to authorities: □ yes □ no											

	WATERSHED/S	VATERSHED/SUBSHED: NBP					DATE: 1 /23 /99   ASSESSED BY: CM /B6				
	SURVEY REAC	H ID:	10	Tin	1E;	M/PM	PHOTO ID: (Camera-Pic#) /# P62300 28				
	SITE ID (Condit	ion-#): <b>O</b>	г- <u>В</u>	La	r41047	' <u>47</u> "1	ong <u>72 ° 42</u>	<u>. 45 "</u>	LMK_		GPS: (Unit ID)
-	BANK: TYPE:  LT RT Head  FLOW: pipe  None Trickle  Moderate Substantial Other: Open channel		 1	MATERIAL: Concrete PVC/Plast Other: Concrete Other:	☐Metal ic ☐Brick	Circular Elliptical Dother:	] Triple Dep Wid	DIMENSIO	30 "(in) (in) (in)	SUBMERGED:  No Partially Fully	
	CONDITION:  ✓ None  ☐ Chip/Cracked  ☐ Peeling Paint  ☐ Corrosion  ☐ Other:  ✓ ODOR: ✓  ☐ Gas  ☐ Rancid/ ☐ Rancid/ ☐ Other:  ☐ Other:		age id/Sour ide	DEPOSITS/S None Oily Flow Line Paint Other:		VEGGIE DENS None Normal Inhibited Excessive Other:		PIPE BENTHIC GROWTH: ☑ None  ☐ Brown ☐ Orange ☐ Green ☐ Other:  POOL QUALITY: ☐ No pool ☐ Good ☐ Odors ☐ Colors ☐ Oi ☐ Suds ☐ Algae ☐ Floatables ☐ Other:		ge	
	FOR COLOR: Clear Brown Grey FLOWING TURBIDITY: None Slight Cloudiness ONLY FLOATABLES: None Sewage (toilet pap OTHER Excess Trash (paper/plastic bags)					loudiness	Cloudy C	Opaque Petroleum (o	Orange 1		Other:
	OTHER CONCERNS:		ds Regular			Bank E	- · · ·	Other:			
	Æno If yes for daylı	ighting:			Storm wa	ter retrofit	Other:				outfall stabilization
	If yes for storm ls stormwater of Yes \( \sum \) No	nwater: urrently c	ontrolled?	,	ft		isting vegetation:lescription:lble:			_ Slope:	
	OUTFALL SEVERITY: (circle #)  Heavy discharge with a distinct color and/or a strong smell. The amount of discharge is significant compared to the amount of normal flow in receiving stream; discharge appears to be having a significant impact downstream.				ificant disclusiving disclusiving	Il discharge; flow mostly harge has a color and/or harge is very small comp and any impact appears	odor, the amo pared to the str s to be minor /	ount of ream's base localized.	discharge; of causing	es not have dry weather staining; or appearance any erosion problems.	
	SKETCH/NOT	es: He	Polus	All	+ ov46	lan	p.pe 101	chled	~ 101	WAR	h Gran
	Channel										
D								R	EPORTED TO	AUTHOR	JTIES: ☐ YES ☐ NO

#### Reach Level Assessment



	SURVEY REACH I	<b>D:</b> <u>II</u> Wт	RSHD/SUBSHD: N	ş- <b>ρ</b>	DATE: 1 / ⊋3	Asses	MIB6
	START TIM	E: : COO AM/PM	LMK: <u>kr</u>	END TIME:	1 : 46 AM/EM	LMK: <u>T</u> v	
	LAT: 41 0 47 1	<u> 5  </u> " Long∃	<u>2 · 42 · 30 "</u>			· 42·3	L" (CM)
	DESCRIPTION:	R-TRAX		DESCRIPTION:	bioing M	Ain Stew	м
r							
	RAIN IN LAST 24 HO	•	■ Steady rain	PRESENT CONDITIONS	-	-	☐ Intermittent
-	□ None	☐ Intermittent		Clear		Overcast	☐ Partly cloudy  ☐ Institutional
	SURROUNDING LAN		l ☐ Commercial	<ul><li>□.Urban/Residential</li><li>□ Crop</li></ul>	•	Forested Other:	W Hyper Ford
ļ		CONDITIONS (che		Brach!	SKETCH AND SITE	Olf Carallana (National Property	
į	CHEST CONTROL	□ 0-25%	□ 50%-75%		of survey reach. Track	andoonne ee ee ee ee	TRICTETE JATOTES (TETES AS PRANJANAS PANANAS PANANAS AND ANTONIO AN
	BASE FLOW AS % CHANNEL WIDTH	□ 0-25% □25-50 %	<b>⊠</b> .75-100%	within the survey red	ach (OT, ER, IB,SC, U	T, TR, MI) as we	ll as any additional
-	DOMINANT SUBSTR			jeatures d	deemed appropriate. I	naicate airectioi –	SHALL STATE
	☐ Silt/clay (fine or		obble (2.5 –10")			• •	F
	Sand (gritty)		oulder (>10")				I COMM
	☐ Gravel (0.1-2.5	·") 🗆 🖪 🗷	ed rock			,	P14.
	WATER CLARITY					(	<u> </u>
	☐ Stained (clear, no ☐ Other (chemicals,		Opaque (milky)			).	1
-	U Otter (chemicais,					(1	` }
ľ	AQUATIC PLANTS		e ⊠ some □ lots			ا رخ	+
.	IN STREAM	(Evidence of)	e 🗆 some 🗆 lots				1 7
ł	WILDLIFE IN OR	☐ Fish ☐ Beav	er 🗆 Deer		•	، سے لے	SEVERE
)	AROUND STREAM	☐ Snails ☐ Other	r:			1 \ '	BANK EMISUN
İ	Power and City Division	☐ Mostly shaded				ASIVE)	DOWNCOMING +
1	STREAM SHADING (water surface)	☐ Halfway (≥50% Partially shaded			sff (	ies ( )	, pamping
		☐ Unshaded (< 25			\	· )/	
	CHANNEL	Downcutting	Bed scour			(4	
1	DYNAMICS	Widening	Bank failure			)	
	_	☐ Headcutting ☐ Aggrading	Bank scour Slope failure		EYNING /	V	INV ASIVES
	Unknown	Sed. depositio	· = ·	1	CRETA TI	) F	
İ		Height: Height	<b>3</b> <sup>(7)</sup> (ft)	1	Marker !	كسمه	
ŀ	CHANNEL DIMENSIONS	RThel	(ft)		***	•	· ·
	(FACENS	Width: Bottom	(ft)		/ / /		
	2 and hall	Тор	(ft)	16		\	
		REACH ACCESSIBILI	TY	N. STAR	S SECULATED SECULATION	4	
Ì	Good: Open area in	Fair: Forested or	Difficult. Must cross	2	To los		
	public ownership, sufficient room to	developed area adjacent to stream.	wetland, steep slope, or sensitive areas to get to		C DISMAN		
	stockpile materials,	Access requires tree removal or impact to	stream. Few areas to stockpile available	1 7 LES	Ster		
	easy stream channel access for heavy	landscaped areas	and/or located a great				
	equipment using	Stockpile areas small or distant from	distance from stream.  Specialized heavy	TEND			
ļ	existing roads or trails.	stream.	equipment required.		•		
,	NOTES: (biggest prob	<u> </u>		NO FLACIM	Dow, 1871	WWW.	PIANTS,
)			CENIME	UT LAD			, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
			2011/14	יין יין יין			, <u> </u>
		•			DEPORT	ED TO ALITHOD	TITLES [] VES [] NO

IN-STREAM HABITAT  (May modify criteria based on appropriate habitat regime)  VEGETATIVE PROTECTION  (score each bank, determine sides by facing	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 19 18 17 16  More than 90% of the streambank surfaces and immediate riparian zone	Suboptimal  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).  15 14 13 12 11	Marginal  20-40% mix of stable habitat; habitat availability less than desirable; substrate frequently disturbed or removed.	of habitat is obvious; substrate		
PROTECTION  (score each bank, determine	More than 90% of the streambank	15 14 13 12 11		unstable or tacking.  UNSTANSE WIM  VINTANCHNE RAKS		
PROTECTION  (score each bank, determine			10 9 8 7 6	5 4 3 2 1 0		
downstream)	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	<b>3</b> 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	8 7 .6	5 4 3	2 1 0		
	Right Bank 10 9	8 7 6	5 4 3	<u> </u>		
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.		
	OVER	ALL BUFFER AND FLOODPLAI	N CONDITION			
1	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; hurnan activities have impacted zone a great deal.	Width of buffer zone <10 feet: little or no riparian vegetation due to human activities.		
<b>⊢</b>	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		
	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		
HARITAT	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		
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		
<u>l</u> _	20 19 18 17 16	(15) 14 13 12 11	10 9 8 7 6	5 4 3 2 1 0		

Trash and Debris

TR

WATERSHED/SUI	BSHED: NBP		DATE: 1 / 2	DATE: 1 / 23 / 0   ASSESSED BY:					
SURVEY REACH	ID: //	TIME:AM/PM	PHOTO ID: (Camera-Pic #) PB2300/# 16						
SITE ID: (Condition	749) TR- A LAT	41 . 47 . 50 "LONG	32·42·30	_" LMK_	GPS: (Unit ID)				
TYPE:  Industrial Commercial Residential	☐ Appliances ☐ Y	Paper	SOURCE:  Unknown  Flooding  Ullegal dump  Local outfall	LOCATION:  Stream Riparian Ar  Lt bank Rt bank	A negotiation (ii no ii ii ii				
POTENTIAL REST	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:		rash bags 🔲 Unkno Bov 🔲 Hazmat Te		DUMPSTER WITHIN 100 FT: ☐ Yes ☑ No ☐ Unknown				
CLEAN-UP POTENTIAL:	A small amount of trash (i.e. than two pickup truck loads) ic inside a park with easy access	ocated a long period of time but	nay have been dumped ov it could be cleaned up in	ver area, where a	nt of trash or debris scattered over a large coess is very difficult. Or presence of drums of hazardous materials				
(Circle #)	5	1	/3\	2	·				
NOTES: Delaciós includes sciepping cart, chates, -lines, Railrord très, plastic bottles, broken glass, etc.									
			• •••	Reporte	D TO AUTHORITIES YES NO				

Trash and Debris

TR

SURVEY REACH ID:   TIME: :_AM/PM PHOTO ID: (Camera-Pic #)  # PAQL  SITE ID: (Condition #) TR_B LAT 4  0 47 . 440 " LONG 32 0 42 . 32 " LMK GPS: (Unit ID)  TYPE:	WATERSHED/SUB	SHED: NBP			DATE: 1/2	3/09	ASSESSED BY: CM/BG		
TYPE:   Industrial   Plastic   Paper   Metal   Unknown   Stream   Private   Medical   Illegal dump   Local outfall   Lt bank   Dumpster with easy access from two pickup truck loads) cost from the work with easy access is very difficult. Or presence of drums or indicators over all lifes   Metal   Unknown   Private   Location   Private   Medical   Illegal dump   Lt bank   Dumpster with easy access is very difficult. Or presence of drums or indicators over all lifes   Metal   Dumpster with a small backnown   Dumpster with 100 FT:   Volunteers   Location   Dumpster with 100 FT:   Volunteers   Volun			TIME:	:AM/PM	Рното ID: (Са.	mera-Pic #)	14 nane		
Paper	SITE ID: (Condition	#) <b>TR</b> L/	т <u>41.47.</u>	46 "LONG	G 12 ° 42 ' 27 " LMK GPS: (Unit ID)				
Other:   If yes for trash or debris removal	☐ Industrial ☐ Commercial ?	☐ Plastic ☐ Tires ☐ Appliances ☐	Construction Yard Waste	☐ Medical	☐ Unknown ☑ Flooding ☐ Illegal dump	Stream Riparian Are	Public Unknown Private  AMOUNT (# Pickup truck		
WHO CAN DO IT: Volunteers Local Gov Hazmat Team Other Ves 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  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 a long period of time but it could be cleaned up in a few days, possibly with a small backhoe.  NOTES: plastic bottles + plastic claffer were pried or indications of hazardous materials  Fallen free this has been dumped Ploaded + Settled here indicates over the little problem + which noting									
CLEAN-UP POTENTIAL: (Circle #)  A small amount of trash (i.e., less than two pickup truck loads) located inside a park with easy access  The potential inside a park with easy access  A large amount of trash or debris scattered over a large with easy access. Trash may have been dumped over a long period of time but it could be cleaned up in a few days, possibly with a small backhoe.  NOTES: plastic bottles + plastic claffer when piked up a park with easy access is very difficult. Or presence of drums or indications of hazardous materials  1 NOTES: plastic bottles + plastic claffer when piked up a park with easy access. Trash may have been dumped over a large amount of trash or debris scattered over a large amount of trash or debris scattered over a large area, where access is very difficult. Or presence of drums or indications of hazardous materials  1 NOTES: plastic bottles + plastic claffer when piked up a park with easy access. Trash may have been dumped over a large amount of trash or debris scatter				<u> </u>	·	<del></del>			
NOTES: plastic bottles + plastic clates have piled up against A fallen tree this has been dumped / Plozobod + settled here— indicates oversel little problem + worth noting.	POTENTIAL:	than two pickup truck load	(i.e., less with ear	sy access. Trash r period of time but	nay have been dumped of it could be cleaned up in	ver area, where ac	cess is very difficult. Or presence of drums		
	<b>,</b>	5		4	3	2	ı		

# Stream Crossing

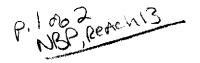
SC

WATERSHED	WATERSHED/SUBSHED: NBP DATE: 11 / 23 / 29 ASSESSED BY: CM / BG									
SURVEY REA	an anno ann an ann an Aireanna an Aireann an Aireann an Aireann an Aireann an Aireann an Aireann an Aireann an			юто ID: (Camera-	Pic #) <b>PB</b> 2					
SITE ID: (Con	dition-#) SC- <u>A</u>	LAT 4 0 47 5	" Long <u>7</u> 3 "	42 30 "	LMK	GPS (Unit ID)				
TYPE: Roa	d Crossing Railroad	d Crossing	Dam Beaver I	Dam Geological F	ormation	Other:				
FOR ROAD/ RAILROAD	SHAPE: Arch Botton Box Ellipt Circular Other:	#BARRELS:	MATERIAL:  ☑ Concrete  ☐ Metal ☐ Other: STONE	ALIGNMENT:  Flow-aligned  Not flow-aligned  Do not know	Barrel dia	Height:(ft)				
CROSSINGS ONLY	CONDITION: (Evidence   Cracking/chipping/c   Sediment depositio   Other (describe):	corrosion Downstream		Cliabe (20 50)		ength:(ft) Width:(ft) elevation:(ft)				
POTENTIAL RESTORATION CANDIDATE										
Is SC ACTING	G AS GRADE CONTRO	L No Y	es Unknov							
If yes for fish barrier NO	CAUSE: Drop too high Flow too shallow	Partial Unknown  Water Drop:(in)	A structure such as a road culvert on a 3rd greater stream blockii upstream movement anadromous fish; no to passage device prese	order or tributary that wang the significant real or partial block interfere with the control of	ckage on a yould isolate a ch of stream, rage that may he migration of	A temporary barrier such as a beaver darn or a blockage at the very head of a stream with very little viable fish habitat above it; natural barriers such as waterfalls.				
	Other:		.5	4 3		2 1				
Notes/Sket	CH: upstream Bank (s	n of Rk c	but this	nere is con	cretc spect of	reach 11.				
	ā									
				Rep	ORTED TO AU	THORITIES YES NO				

# Stream Crossing

SC

WATERSHEI	WATERSHED/SUBSHED: NGP DATE: 11/3/09 ASSESSED BY: 0M/BG									
SURVEY REA		A second	TIME::_			): (Camera-Pi	c #) <b>PB &gt;</b> 3			
SITE ID: (Co	idition-#) SC-	LAT	41 . 47 . 41	" LONG 7	2. 4p.	<u>32 " Li</u>	MK	GPS (Unit ID)		
Type:0X Ro	ad Crossing	Railroad Crossii	ng	Dam Beave	r Dam 🔲	Geological Fon	mation $\square$	Other:		
FOR ROAD/ RAILROAD	SHAPE: Arch Box Circular Other:	Arch ☐Bottomless ☐ Box ☐ Elliptical ☐ Circular		MATERIAL: Concrete Metal Other:	ALIG	NMENT; ow-aligned of flow-aligned o not know	DIMENSE Barrel dia	IONS: (if variable, sketch)		
CROSSINGS ONLY		-	□ Downstrean □ Failing emb		☐ Fla	CULVERT SLOPE;    Flat   Slight (2° - 5°)   Obvious (>5°)		elevation:(ft)(ft)		
POTENTIAL I	Restoratio	N CANDIDATE	Fish barrier re Local stream t	-	_	placement 🔼	Upstream st	torage retrofit		
IS SC ACTIN	G AS GRADE	CONTROL	□ No □ Ye	es 🔲 Unkı						
EXTENT OF PHYSICAL BLOCKAGE:  Total Partial Temporary Vunknown  A structure such as a dam or road culvert on a 3rd order or greater stream blocking the upstream movement of anadromous fish; no fish passage device present.  BLOCKAGE SEVERITY: (circle #)  A total fish blockage on a tributary that would isolate a significant reach of stream, or partial blockage that may interfere with the migration of anadromous fish.  A temporary barrier such as a deaver dam or a blockage at the very head of a stream with very little viable fish habitat above it; natural barriers such as waterfalls.										
	Other:			5		4 3		2 1		
PA CM	upstream his sha ssage for not sec	he tuethes	given	the In	u lig	yent per	NOTRA	n Acceptable tion (you		
Spe	AK)									
				•		Repor	RTED TO AU	THORITIES  YES NO		





REPORTED TO AUTHORITIES YES NO

SURVEY REACH I	D: NBP-13 WT	rshd/Subshd: /	UBP	DATE: 11 / 24 /	ASSESSED BY:	8G+CM
	E: <u>12 : <b>30</b> am/@</u>	LMK:	END TIME:	. <u>05</u> AM/(N)	LMK:	GPS ID:
LAT92.46 1	<u> </u>	2.42.33	· LAT <u>41 ° 47 ' C</u>	24 " LONG 12	<u>°42 '28 "</u>	
DESCRIPTION: Por	ential versial A	201 (Photo #	DESCRIPTION: RAC	. 44 over pas	5	Com
	<u> </u>		<u> </u>			
RAIN IN LAST 24 HO	URS   Heavy rain	Steady rain	PRESENT CONDITIONS	☐ Heavy rain ☐	🗆 Steady rain 🗀 Inter	mittent
□ None	☐ Intermittent		☐ Clear			ly cloudy
SURROUNDING LANI		☐ Commercia		•	Forested Institution of the Inst	tutional
Average	CONDITIONS (che	ck applicable)	REACH S	SKETCH AND SITE	IMPACT TRACKING	;
Base Flow as % Channel Width	□ 0-25% □25-50 %	□ 50%-75% <b>□ 7</b> 5-100%	within the survey rea	ich (OT. ER. IB.SC, UT	locations and IDs for all F, TR, MI) as well as any ndicate direction of flow	
DOMINANT SUBSTR ☐ Silt/clay (fine or ☐ Sand (gritty) ☐ Gravel (0.1-2.5	slick) ☐ Be	obble (2.5 –10") oulder (>10") ed rock		POUTE 44		į
WATER CLARITY  ☐ Stained (clear, n ☐ Other (chemicals,	aturally colored)   dyes)	Opaque (milky)	PANNING			
AQUATIC PLANTS IN STREAM		e □ some □ lots e □ some □ lots	'  ~ //		INSTITUTED	, al
WILDLIFE IN OR AROUND STREAM	(Evidence of)  ☐ Fish ☐ Beav ☐ Snails ☐ Other		Moore	MOODED	MSTITUTE	
STREAM SHADING (water surface)	☐ Mostly shaded ☐ Halfway (≥50% ☐ Partially shaded ☐ Unshaded (< 25	5) I ( <u>&gt;</u> 25% )		Week part	and the second	
CHANNEL DYNAMICS	Downcutting Widening Headcutting	Bed scour Bank failure Bank scour	(1	2		
Unknown	Aggrading Sed. depositio	Slope failur  Channelize		7116		
CHANNE	Height: LT bank	(ft	WATER			
DIMENSIONS	RT bank	(fi	/ Commanda (A)		•	
(FACING	Width: Bottom	<b>5</b> ](fi				
DOIVNSTREAM)	MKFUL Top	(f	t)			
I	REACH ACCESSIBILI	TY	$\neg$			
Good: Open area in public ownership, sufficient room to stockpile materials, easy stream channel access for heavy equipment using existing roads or trails.	Fair: Forested or developed area adjacent to stream. Access requires tree removal or impact to landscaped areas. Stockpile areas small or distant from stream.	Difficult. Must cross wetland, steep slope, sensitive areas to get stream. Few areas to stockpile available and/or located a great distance from stream. Specialized heavy equipment required.	0			·
Notes: thiggest pro 1/2 of Myl Repark	blem you see in survey A BANL B	reach) Debais Thus acach	, parking lot stormulater	adjacent out fall p	to nearly pipes in need	. of

p.2002 repens

OVERALL STREAM CONDITION						
	Optimal	Suboptimal	Marginal	Poor		
HABITAT favorable for epifaunal colonization and fish cover, mix of snags, submerged logs, undercut banks, cobble or other criteria based on appropriate colonization potential (i.e., logs/snags)		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	(5) 14 13 12 11	10 9 8 7 6	5 4 3 2 1 0		
(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 I 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	<b>3</b> 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 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 fe or no riparian vegetation de human activities.			
	Left Bank (6°) 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- MEN'T	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: 68 /80 + Buffer/Floodplain: 67 /80 = Total Survey Reach 135 /160						

$\mathbf{\Omega}$ T	
$\mathbf{O}\mathbf{I}$	

WATERSHED/SUBSHED: Nβρ			DATE: 11 124 10°	DATE: 11 124 109 ASSESSED BY: CM 186			
SURVEY REACH ID: 13 TIME: 12:35 AM/EM		PHOTO ID: (Camera-Pi	PHOTO ID: (Camera-Pic#) PBJ 0/# 72				
SITE ID (Condition-#): OTA		LAT <u>41 ° 47 ' 00 " Long 72 ° 42 ' 25 " LMK GPS:</u> (Unit II			GPS: (Unit ID)		
BANK: TYPE:  LT RT Head  FLOW: Closed pipe		MATERIAL:  ⊠ Concrete □Mo □ PVC/Plastic □Br □ Other:	ick	DIMENSIONS: Diameter: (in)	SUBMERGED: No Partially Substituting Fully		
Moderate Substantial Other:	Open channel	☐ Concrete ☐ Eart☐ Other:	hen Trapezoid D	repth:         (in)           /idth (Top):         (in)           ' (Bottom):         (in)	NOT APPENCABLE		
CONDITION:  None Chip/Cracked Peeling Paint Corrosion Other: detached The falure  Condition Corrosion Corr		☑ None ☐ Oily	VEGGIE DENSITY:  None  Normal Inhibited Excessive Other:	PIPE BENTHIC GRO Brown Grang Other:  POOL QUALITY: Grang Good Godors Grang Suds Algae Grang Other:	ge ☐ Green  **No pool ☐Colors ☐Oils		
FOR D COLOR:		Clear Brown Gre	y Yellow Green	Orange Red Or	ther:		
FLOWING TURBID		Ione 🔲 Slight Cloudiness	☐ Cloudy ☐ Opaque				
1 1	BLES: \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	= '		(oil sheen)	ther:		
	TION CANDIDA		gation  Stream daylighting	☑ Local stream repair/o	outfall stabilization		
☐ no  If yes for daylighting:		Storm water retrof	it Other:				
1	r from outfall:	ft Type of	existing vegetation:	Slope:	<u> </u>		
If yes for stormwater:							
Is stormwater currently co	ontrolled?	Land Us	e description:				
Yes No Not	investigated	Area ava	ilable:	·····			
SEVERITY:  (circle #)  stream; the amount of oscillage is significant compared to the amount of normal flow in receiving discharge appears to be baying a stream; discharge appears to be baying a			scharge has a color and/or odor, the an scharge is very small compared to the s	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.  Outfall does not have dry weather discharge; staining; or appearance of causing any erosion problems.			
		5 4	3	2	1		
NOT CLEAR Whether outfall water can reach the river except though seepage or extreme are blow.							
though seepinge or extreme are blow.							
		•					
	Reported to authorities:  Ves  No						



	WATERSHED/SUBSHED: NBP			Γ	DATE: 11 124 107 ASSESSED BY: CM 186			
	SURVEY REACH ID:		ME::AM/PM	F	PHOTO ID: (Camera-l	Pic#) none	#	
	SITE ID (Condition-#): O	T- <u>&amp;</u> LA	T41 º 47 · 01	_" Lone	672 º42 · 26	_" LMK	GPS: (Uni	t ID)
	BANK:  LT RT Head  FLOW: None Trickle Moderate Substantial	TYPE:  ☑ Closed χユ pipe  ☐ Open	☐ PVC/Plastic ☐ Other: ☐ Concrete ☐ Ea	Metal×2 [ Brick [ 	<b>¬</b>	le l	O <sup>''</sup> (in)	ally
	Other:	channel	Other:		Other:	" (Bottom):	(in)	
	CONDITION: None Chip/Cracked Peeling Paint Corrosion Other:	ODOR: No Gas Sewage Rancid/Sour Sulfide Other:	DEPOSITS/STAINS  None □Oily □ Flow Line □ Paint □Other:	( <u>)</u>	VEGGIE DENSITY: None Normal Inhibited Excessive Other:	Brown Other:  POOL QUAI	HIC GROWTH: ☑ N ☐ Orange ☐ Green  LITY: ☑ No pool  Odors ☐ Colors  Algae ☐ Floatables	Oils
		ITY: None	e		Cloudy Opaque ) Petroleur pulk) Excessiv		ed Other:	
į	POTENTIAL RESTORAT	FION CANDIDATE	E ☐ Discharge inves ☐ Storm water retr		_ Stream daylighting ☐ Other:	Local stream	n repair/outfall stabil	ization
	If yes for daylighting:	•						
	Length of vegetative cove	π from outfall:	ft Type	of existing	g vegetation:		Slope:	_°
	If yes for stormwater:  Is stormwater currently controlled?  Land Use description:  Yes No Not investigated  Area available:							
	SEVERITY: strong sneet. The amount of discharge is significant compared to the amount of normal flow in receiving discharge appears to be having a			discharge i discharge i	all discharge; flow mostly clear and odorless. If the charge has a color and/or odor, the amount of charge is very small compared to the stream's base v and any impact appears to be minor / localized.  Outfall does not have dry weather discharge; staining; or appearance of causing any erosion problems.			earance
ļ		5	4		3	2	1	
	SKETCH/NOTES:	re on Re	B + corres	povo	ling one	m us		
			•					
						REPORTED TO A	AUTHORITIES:	□NO



WATERSHED/SUBSHED:	5P	DATE: 11/24/9 ASSESSED BY: CM/B4			
		PHOTO ID: (Camera-Pic #	PHOTO ID: (Camera-Pic#) /#		
SITE ID (Condition-#): OT-	LAT 41 0 47 00 "	LONG 72.42 .27"	LMK GPS: (Unit ID)		
BANK: TYPE:  LT RT Head  FLOW: pipe  None Trickle Moderate Substantial  Open	MATERIAL: ☐ Concrete ☑Met	SHAPE: Single  al Circular Double  ck Elliptical Triple  Other:  Trapezoid Dep	DIMENSIONS: SUBMERGED:  Diameter: 10 "(in) Partially  Fully  th: (in)		
Other: chann		☐ Parabolic Wid	hth (Top): (in) NOT APPECABLE (Bottom): (in)		
CONDITION:  None  □ Chip/Cracked □ Peeling Paint □ Corrosion □ Other: □ Other	None Oily Flow Line Paint	VEGGIE DENSITY:  None Normal Inhibited Excessive Other:	PIPE BENTHIC GROWTH: None  Brown Orange Green Other:  POOL QUALITY: No pool Good Odors Colors Oils Suds Algae Floatables 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 Excess Trash (paper/plastic bags) Dumping (bulk) Excessive Sedimentation  CONCERNS: Needs Regular Maintenance Bank Erosion Other:					
POTENTIAL DESTORATION CAN	NINATE Discharge investige	ation Stream daylighting	Local stream repair/outfall stabilization		
no	Storm water retrofit		Local sucam repair/outian stabilization		
If yes for daylighting: Length of vegetative cover from out	fall:ft Type of e	xisting vegetation:	° Slope:°		
If yes for stormwater:         Is stormwater currently controlled?       Land Use description:         Yes □ No □ Not investigated       Area available:					
OUTFALL SEVERITY: (circle #)  Heavy discharge with a distinct color and/or a strong smell. The amount of discharge is significant compared to the amount of normal flow in receiving stream; discharge appears to be having a significant impact downstream.  Small discharge; flow mostly clear and odorless. If the discharge has a color and/or odor, the amount of discharge; staining; or appears to be minor / localized.  Outfall does not have dry weat discharge is very small compared to the stream's base flow and any impact appears to be minor / localized.					
	5 4	3	2 1		
SKETCH/NOTES:					
			·		
		RE	PORTED TO AUTHORITIES: YES NO		



WATERSHED/SUBSHED:	NBP		DATE: 11 124 100	DATE: 11/04/07 ASSESSED BY: Om /BG			
SURVEY REACH ID:	13 Тім	E::AM/PM	PHOTO ID: (Camera-Pic	:#) have /#			
SITE ID (Condition-#): OT-	LAT	· •	"LONG°'"	LMK GPS: (Unit ID)			
LT RT Head	ZLClosed	MATERIAL:  ☐ Concrete ☐ Mo ☐ PVC/Plastic ☐ Br ☐ Other:		DIMENSIONS: SUBMERGED:  Diameter: O (in) Partially  NO Pully  Fully			
Moderate Substantial Other:	Open channel	☐ Concrete ☐ Eartl ☐ Other:	Parabolic W	cpth: (in) idth (Top): (in) (Bottom): (in)			
□ Chip/Cracked     □ Peeling Paint	☐Gas ☐ Sewage ☐Rancid/Sour	DEPOSITS/STAINS:  ☑ None ☐ Oily ☐ Flow Line	VEGGIE DENSITY:  ☑None ☐ Normal ☐ Inhibited	PIPE BENTHIC GROWTH: None Brown Orange Green Other:  POOL QUALITY: No pool			
Corrosion [ Other:	Sulfide Other:	☐ Paint ☐Other:	Cther:	Good Godors Colors Goils Suds Algae Floatables 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:  OTHER CONCERNS: Needs Regular Maintenance Bank Erosion Other:							
POTENTIAL RESTORATIO	POTENTIAL RESTORATION CANDIDATE ☐ Discharge investigation ☐ Stream daylighting ☐ Local stream repair/outfall stabilization ☐ no ☐ Storm water retrofit ☐ Other:						
If yes for daylighting: Length of vegetative cover	from outfall:	ft Type of	existing vegetation:	Slope:°			
	If yes for stormwater:  Is stormwater currently controlled?  Land Use description:  Yes \( \sum \) No \( \sum \) Not investigated  Area available:						
SEVERITY: strong s (circle #) strong s compar stream;		discharge is significant ormal flow in receiving be having a	mall discharge; flow mostly clear and od scharge has a color and/or odor, the am scharge is very small compared to the st ow and any impact appears to be minor /	ount of discharge; staining; or appearance of causing any erosion problems			
	5	. 4	3	2 1			
SKETCH/NOTES: \oca	HEOL APP	ex 3' high		·			
				·			
,			R	EPORTED TO AUTHORITIES: YES NO			

P. 1862 NBP, REPENILY

RCH

			,							
	SURVEY REACH D	D: <u>/4</u>	WTRSI	HD/SUBSHD: NR	P	DATE: 11 / 24	<u>/01</u>	Assessed by:	نعا	
7	START TIME	: 10 : SP 6	Ø/PM	LMK:	END TIME:	12:30 AM/	LMK	÷	GPS 1D:	
	LAT4 0 46 13	ل " Lo	NCO)	· 42 · 04 "	LATED . Lite	Se " Long 7	2 ·42	· 23 "	(em)	:
1	DESCRIPTION: -TR				DESCRIPTION:			Adu To		ı
Ĺ	DESCRIPTION - (PC)	watthen "	<u>riput</u>	<del></del>	1000000	TENTIFIC VELINA	re hoof i	RIGHT-BAYK	<del>1</del> )	
ſ	RAIN IN LAST 24 HO	IIRS [] Heavy	rain	Steady rain	PRESENT CONDITIONS	S ☐ Heavy rain	□ Steady	rain 🗆 Intern	nittent	
	□ None	☐ Interm		☐ Trace	☐ Clear	☐ Trace	☑ Overc		y cloudy	
İ	SURROUNDING LAND			· · · · · · · · · · · · · · · · · · ·	☐ Urban/Residential					
	DOMINO DINO DINO			□ Park	☐ Crop	☐ Pasture	☐ Other:		*************	
t	AVERAGE	CONDITIONS	(check o	unnlicable)	REACH	SKETCH AND SI	TE ÎMPAC	T TRACKING		
-	BASE FLOW AS %	□ 0-25%		□ 50%-75%	Simple planar sketch					
-	CHANNEL WIDTH	□ 0-23% □25-50 %		<b>■</b> 75-100%		each (OT, ER, IB,SC,				
}				43475 10070	features	s deemed appropriate	. Indicate di	rection of flow		
	DOMINANT SUBSTRA  ☐ Silt/clay (fine or s		æ Cobb	ole (2.5 –10")						ı
1	☐ Sand (gritty)			der (>10")						ı
	☐ Gravel (0.1-2.5)		□ Bed					ħ		
ŀ	W.mm C		د الله الله ال		1			//		
	WATER CLARITY Stained (clear, no	-		•						
- 1	Other (chemicals, a	-	,	paque (ming)	7		- CARES	T		ļ
-		Attachad: 💆	I none	□ some □ lots		BON BWOOL	D (0.			
	AQUATIC PLANTS IN STREAM		•	□ some □ lots	4	//	ANT IND	كالما		
	TO TREAT	(Evidence of)	none i	RACOS	LANDE	ale on Burgos	2 ( ) <b></b> (		,	
1	WILDLIFE IN OR	<b>⊠</b> Fish □	Beaver	Deer Myssel	ESTATES					
	AROUND STREAM	☐ Snails 🙀	Other: 😤	lallands, woodchus MA! MATYMMAIS		VEM			INS	לעסידעדדי
		Mostly sh	aded (≥7	75% coverage)		OUD				l
	STREAM SHADING (water surface)	☐ Halfway (		250/ \	Grant .	FOREST			at in	
	(water surface)	☐ Partially s ☐ Unshaded			- anter	<b>11</b>		J"	WAR OF	JE
			1		TO BINGS MIN	1/	stown	-	W	
	CHANNEL	☐ Downcut		☐ Bed scour☐ Bank failure		- 11 .	10 P		1	
	DYNAMICS	Headcutt		Bank scour		يو الم	10	<b>1</b>	[	
		Aggradia	- 1	Slope failure	1/1	11 MENTER	<b>7</b> /	)		
	Unknown	Sed. dep	osition	Channelized	\ \frac{1}{2}	\\ @ \$\\	7	- (		V See
		Height: LT	hank		]	\\_J" <b>/</b>	l	`	) / / / / ·	PILES
	CHANNEL	•	bank	(ft)		16			1/	Horse
	DIMENSIONS	Width; Bet	•	55 (ft)		\\ <i>JI</i>				\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\
	POWNSTREAM)			,				<b>6</b>	- TH	. `
	BANKFULL	Ter		(ft)	-			ACARS	5	1
		Fair: Forested of		Difficult, Must cross	-			STREAM	//	
	Good: Open area in public ownership,	developed area		vetland, steep slope, or				CAUSEUM		
	sufficient room to	adjacent to stre Access requires		ensitive areas to get to tream. Few areas to	<u> </u>			Anna 1. a. o. Andreas i.	7/(	
	stockpile materials,	removal or impa		tockpile available					0	
	easy stream channel access for heavy	landscaped are	as. a	ind/or located a great						
	equipment using	Stockpile areas small or distant		listance from stream. Specialized heavy	Ì					
	existing roads or trails.	stream.		equipment required.	_					}
	5	4 3	2	<u> </u>	10,000	chio-Cari-	∞ ا بمن	talact m	I sur in	ł
	NOTES: (biggest prot	blem you see in	survey re L	ach) TRASH I	in water (i.e.,	STY KOTOANY C	C+ F	SHAKZ I H.	W. Tillian	
	particularly	MOM H	ne le	FT BANK IN	oversel the	formalation	Diest	offer Ma	Hav	
	trees DBH	> 30" 4	excel	leurt RIPARIA	n wildlife ha	Heint Am				
	liefers makes	- wr 1	W/ 146!		y	REPO	RTED TO AU	JTHORITIES 🔲	YES 🗌 No	



OVERALL STREAM CONDITION					
Optimal		Suboptimal	Marginal	Poor	
IN-STREAM HABITAT 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 of the suited for fine adequate in populations substrate in colonization potential (i.e., logs/snags on to yet presented in the suited for fine adequate in the suited		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.	
EROSION or bank failure absent or minimal; little potential for future problems. <5% of bank affected. areas of bank failure/erosion; likely caused by a pipe outfall, local scour, impaired riparian vegetation or adjacent use.		5 4 3	2 1 0		
		5 4 3	2 1 0		
		areas of bank failure/erosion; likely caused by a pipe outfall, local scour, impaired riparian vegetation or	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	<b>3</b> 7 6	5 4 3	2 1 0	
	Right Bank 10 9	<b>3</b> 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		
		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	<b>3</b> 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 (8) 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 (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 🕚 18 17 16	15 14 13 12 11	10 9 8 7 6	5 4 3 2 1 0	
Sub Total In-si	tream: <u>6</u> /80 + B	uffer/Floodplain: 12 /80	= Total Survey	Reach 141 /160	

WATERSHED/SUBSHED: NBP			DATE:	11/24/09	ASSESSED BY: CM 16G	
SURVEY REACH: 14	TIME:	AM/PM			PB2400 #58,59,60,61	
SITE ID: (Condition-#) START I	AT See . NOTES " I	LONG °	, ,,	LMK	GPS: (Unit ID) +	
IB- Sheet only END L		LONG°	, ,,	LMK		
IMPACTED BANK: REASON IN	NADEQUATE: Lack of				-	
LAND USE: Private		y planted 🔼 Oth	ner: <u>See</u> ther Public		elm	
(Facing downstream) LT Bank						
RT Bank			<u></u> :			
<b>DOMINANT</b> Paved	Bare ground Turf/lav	wn Tall grass	Shrub/scr		her	
LAND COVER: LT Bank					<u>_</u> :	
RT Bank		<u> </u>		<del></del>	<u>]:</u>	
INVASIVE PLANTS: None		artial coverage			unknown	
STREAM SHADE PROVIDED? No	ne 🗌 Partial 💆	Full WETL	ANDS PRE	SENT? No	4-Yes Unknown	
POTENTIAL RESTORATION CANDIDA	ATE Active reforestati	ion DGreenway	design 🗆	Natural regeneration	☐ Invasives removal	
Z no	Other:	iondicchway	ucsign	ivaturar regeneration	Invasives removal	
RESTORABLE AREA		Impacted area on pu	rblic land	Impacted area on either	Impacted area on private	
LT BANK RT	REFORESTATION	where the riparian at	rea does	public or private land that i	s land where road; building	
Length (ft):	POTENTIAL:	not appear to be use specific purpose; ple	enty of	presently used for a specif purpose; available area for	feature significantly limits	
Width (ft):	(Circle #)	area available for pla		planting adequate	available area for planting	
		5	4	3	2 1	
POTENTIAL CONFLICTS WITH REFORM Poor/unsafe access to site  Existing		idespread invasive vere animal impac			ation Lack of sun	
NOTES: @ MINOR WANK	erosion to Ri	3 AdjAcent	-10	brick MAN	sion (see pic. 58)	
, but good wildli property so pesto	fe habitar, so	me invasi	vie pl	Auts here,	Private	
@ permant stan	e Musau bizi	dges 410	40 4.	o"/72°42'	07" - See pic. 60	
(3) TRASh belinged	L law-incorne	- harein				
3 TRASH belind law-income housing						
@ very minor bank erosion on RB bout Tooks like good wildlife habitury						
(overhanging roots, cover habitar) + not easy accest so low restoration potential of 41°46'45" /70°42' 12" - King fisher burrow here						
(8) paragrant stone MASON beidge 2) 41°46'95"/42°42'26"						
B remnant stone MASON bridge 2 41°46'95"/42°42'26"						
@ comma edges	96 m			. 00 . 14.	- OnAnla	
There iss	ues are mi	nor And		NAU TM	s Reach is Mostly A Diameter the Roodplain	
is in 9	ood condition	The Val	yeyen ac	in th	A Diameter	
MATURE	+ladrim V	theat ,	t The	MON an	the Roadplan	
a brev	kst Height	130 KM	-500			

_
$\mathbf{\Omega}\mathbf{T}$
<b>U</b> I

WATERSHED/SUBSHED: NSF	•	DATE: 11/24/07 ASSESSED BY: CM/BG			
SURVEY REACH ID: 14	TIME::AM/PM	PHOTO ID: (Camera-Pic #) Pβ24co /# 59			
SITE ID (Condition-#) OII-	LAT 4 0 46 1 40 "L	ONG 72042 106 "	LMK GPS: (Unit ID)		
			G		
BANK: TYPE:    Closed   Dipe   Trickle   TYPE:	MATERIAL:  ☐ Concrete ☐ Metal ☐ PVC/Plastic ☐ Brick ☐ Other:	SHAPE: Single Double Double Triple Other:	DIMENSIONS: SUBMERGED:    No   No   Partially (~ 3		
Moderate   Open   Channel   Substantial   Channel   Channel   Substantial   Channel   Concrete Earthen Other:	☐ Trapezoid Do	cpth: (in) NOT APDELCABLE  (Bottom): (in)			
CONDITION:  None  Gas  Chip/Cracked  Peeling Paint  Corrosion  Other:  Odor:	None □Oily	VEGGIE DENSITY: None Normal Inhibited Excessive Other:	Pipe Benthic Growth: None Brown Orange Green Other: No pool Good Odors Colors Oils Suds Algae Floatables Other:		
FLOWING TURBIDITY:	· · · · · · · · · · · · · · · · · · ·	Cloudy Dpaque etc.) Petroleum og (bulk) Excessive	Orange Red Other:  oil sheen) Other  Sedimentation  MCC IN WAHL (BAW)		
POTENTIAL RESTORATION CANDID	ATE Discharge investigation		Local stream repair/outfall stabilization		
□no	☐ Storm water retrofit	Other:	-		
If yes for daylighting:					
Length of vegetative cover from outfall:	ft Type of exis	ting vegetation:	Slope:°		
If yes for stormwater:  Is stormwater currently controlled?  Land Use description:  Yes \( \text{No} \) No \( \text{Not investigated} \) Area available:					
SEVERITY strong smell. The amo	nt of normal flow in receiving dischargers to be having a	discharge; flow mostly clear and or rge has a color and/or odor, the am rge is very small compared to the s id any impact appears to be minor	ount of discharge; staining; or appearance of causing any erosion problems		
	5 4	3	2 1		
SKETCH/NOTES: LOCATED	belind 10-5	body building.			
			,		
		· R	EPORTED TO AUTHORITIES: YES NO		

$\Lambda$ T	
<b>\</b> / /	

WATERSHED/SUBSHED:		DATE: 1 / 24 / 09   ASSE	SSED BY: 64/cm		
SURVEY REACH ID: 14	TIME::AM/PM	Рното ID: (Camera-Pic #)	100# 64		
SITE ID (Condition-#): OT- B	LAT°' LO	DNG°'_" LMK	GPS: (Unit ID)		
BANK:  LT RT Head  FLOW: None Trickle  TYPE:  Closed pipe	MATERIAL: Concrete Metal PVC/Plastic Brick Other:	SHAPE: Single DIMENS Circular Double Elliptical Triple Diameter Other:	□ N <sub>a</sub>		
☐ Moderate       ☐ Substantial     ☐ Open channel	Concrete Earthen Other:	☐ Parabolic Width (Top):_ ☐ Other: " (Bottom):_			
CONDITION:  None Chip/Cracked Peeling Paint Corrosion ODOR: Sewage Rancid/S Sulfide Other: See Notes	None Oily	None Brown Normal Other:  Inhibited POOL QU Excessive Good	UALITY: No pool  Odors Colors Oils  Algae Floatables		
FOR COLOR: Clear Brown Grey Yellow Green Orange Red Other.  FLOWING TORBIDITY: None Slight Cloudiness Cloudy Opaque  FLOATABLES: None Sewage (toilet paper, etc.) Petroleum (oil sheen)  OTHER Excess Trash (paper/plastic bags) Dumping (bulk) Excessive Sedimentation  CONCERNS: Needs Regular Maintenance Bank Erosion Other:					
POTENTIAL RESTORATION CANDIDATE       □ Discharge investigation □ Stream daylighting       □ Local stream repair/outfall stabilization         □ no       □ Storm water retrofit       □ Other:         If yes for daylighting:       □ Storm outfall: □ ft       Type of existing vegetation: □ Slope: □ °					
If yes for stormwater:  Is stormwater currently controlled?  □ Yes □ No □ Not investigated  Area available:					
SEVERITY: strong smell. The am	ount of discharge is significant discharged in the following and discharged in the following a	discharge; flow mostly clear and odorless. If the rge has a color and/or odor, the amount of rge is very small compared to the stream's base d any impact appears to be minor / localized.	Outfall does not have dry weather discharge; staining; or appearance of causing any erosion problems.		
SKETCH/NOTES:	ale like en	me kind ap	La Adusale		
SKETCH/NOTES: This books like some kind of headware with an overflow Phop- however - it was closed to didn't look like it functions properly (?) boxated belund some kind of medical facility.					
·		REPORTED T	TO AUTHORITIES: YES NO		



WATERSHED/SUBSHED:	NBP		DATE: 11 / 24 / 0"	Assessed by: cm /86		
SURVEY REACH ID: 14	TIME	::AM/PM	PHOTO ID: (Camera-Pi	c#) PB2400 /# bl + 62-		
SITE ID (Condition-#): OT-	<b>6</b> Lat	41 0 46 1458 "LO	ONG 72 0 42 08.6"			
LT RT Head	Z Closed	MATERIAL:  ☑ Concrete	SHAPE: Single Double Double Triple Other:	DIMENSIONS:  Diameter: (in)  Diameter: Fully		
Moderate Substantial Other:	~ <u>_</u>	Concrete Earthen Other:	Parabolic W	epth: (in) /idth (Top): (in) / (Bottom): (in)		
□ None         □ Gas           □ Chip/Cracked         □ Sewage           □ Peeling Paint         □ Rancid/Sour           □ Corrosion         □ Sulfide		DEPOSITS/STAINS: None Oily Flow Line Paint Other:	VEGGIE DENSITY: None Normal Inhibited Excessive Other:	PIPE BENTHIC GROWTH: ☑ None  ☐ Brown ☐ Orange ☐ Green ☐ Other:  POOL QUALITY: ☐ No pool ☐ Good ☐ Odors ☐ Colors ☐ Oils ☐ Suds ☐ Algae ☐ Floatables ☐ Other:		
FOR COLOR:						
POTENTIAL DESTORATIO	on Candidate [	Digabarga investigatio	n Stroom doulighting	I coul stream renair/outful stabilization		
no	POTENTIAL RESTORATION CANDIDATE ☐ Discharge investigation ☐ Stream daylighting ☐ Local stream repair/outfall stabilization ☐ no ☐ Storm water retrofit ☐ Other:					
If yes for daylighting:						
Length of vegetative cover fi	rom outfall:	ft Type of exist	ting vegetation:	Slope:		
If yes for stormwater:  Is stormwater currently controlled?  Land Use description:  Yes □ No □ Not investigated  Area available:						
SEVERITY: strong sr compare (circle #) stream; c	lischarge with a distinct mell. The amount of dis ed to the amount of non discharge appears to b nt impact downstream.	scharge is significant discharge is a significant mal flow in receiving discharge having a	lischarge; flow mostly clear and or ge has a color and/or odor, the am ge is very small compared to the s d any impact appears to be minor.	ount of discharge; staining; or appearance of causing any employees		
		4	3	2 1		
SKETCH/NOTES: CONCLETE CHUNKS AROUND ONTGARLS SLOPPI						
		•				
·			R	REPORTED TO AUTHORITIES: YES NO		



WATERSHED/SUBSHED:						
BANK:						
Concrete   Metal   Circular   Double   Diameter:						
Substantial						
None       Gas       None       Brown       Orange       Green         Chip/Cracked       Sewage       Oily       Normal       Other:       Other:         Peeling Paint       Rancid/Sour       Flow Line       Inhibited       Pool QUALITY:       No pool         Corrosion       Sulfide       Other:       Other:       Other:       Good Odors Colors Oils         Other:       Other:       Other:       Other:       Other:     Flow Line    Double   D						
FLOWING						
POTENTIAL RESTORATION CANDIDATE Discharge investigation Stream daylighting Local stream repair/outfall stabilization						
no Storm water retrofit Other:						
If yes for daylighting:  Length of vegetative cover from outfall:ft Type of existing vegetation: Slope:°						
If yes for stormwater:  Is stormwater currently controlled?  Land Use description:  Yes \( \sum \) No \( \sum \) Not investigated  Area available:						
Heavy discharge with a distinct color and/or a strong smell. The amount of discharge is significant compared to the amount of normal flow in receiving stream; discharge appears to be having a significant impact downstream.  Small discharge; flow mostly clear and odorless. If the discharge has a color and/or odor, the amount of discharge; staining; or appearance of causing any erosion problems.						
5 4 3 2 1						
SKETCH/NOTES:						
Reported to authorities:  ves  no						



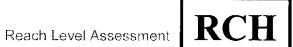
WATERSHED/SUBSHED: NBP		DATE: 11/24/09 ASSESSED BY: CM/BG			
SURVEY REACH ID: 14	Гіме::ам/рм	PHOTO ID: (Camera-Pic #)	nare /#		
SITE ID (Condition-#): OT-	LAT 4) 0 46 148 " LO	ONG 720 42 17 " I	MK GPS: (Unit ID)		
Himzentalandi Sictional 12300 albe Munclauli					
BANK: TYPE:  □LT □RT □ Head  FLOW: □ Trickle    Closed pipe	MATERIAL:  Concrete		MENSIONS: SUBMERGED:		
☐ Moderate           ☐ Open           ☐ Other:           ☐ Channel	Concrete Earthen Other:		(in) Top): (in) NOT APPE (CABLE tom): (in)		
CONDITION:  None □ Chip/Cracked □ Peeling Paint □ Corrosion □ Other: □ Other: □ Other: □ Odor: No □ Sas □ Sewage □ Rancid/Sou □ Sulfide □ Other:	None Oily	None Normal Inhibited Excessive Other:	E BENTHIC GROWTH: None  Brown Orange Green  Other:  DL QUALITY: No pool  Good Odors Colors Oils  Suds Algae Floatables  Other:		
Clear					
POTENTIAL RESTORATION CANDIDATE ☐ Discharge investigation ☐ Stream daylighting ☐ Local stream repair/outfall stabilization ☐ no ☐ Storm water retrofit ☐ Other:					
If yes for daylighting:  Length of vegetative cover from outfall:ft Type of existing vegetation: Slope:°					
If yes for stormwater:  Is stormwater currently controlled?  Land Use description:  Yes No Not investigated  Area available:					
	of discharge is significant of normal flow in receiving a discharge is to be having a	lischarge; flow mostly clear and odorless. ge has a color and/or odor, the amount of ge is very small compared to the stream's d any impact appears to be minor / localiz	discharge; staining; or appearance of causing any erosion problems		
	4	3	2 1		
SKETCH/NOTES: LOCATED an both banks Appleximately 10' dawn- stream of the OT, there are 2 sower hotes lone on each banks the one on the lebt Bank was open - both surreccol like sound.					
the one on the	lebt Bank wa	s open - both	smerco		
wire semage,			·		
,					
		REPOR	TED TO AUTHORITIES: YES NO		

|--|

WATERSHED/SUBSHED: NG	•	DATE: 1/ /24 /09	ASSESSED BY: CM/BG			
SURVEY REACH ID: 14	TIME: 12:00 AM/PM	Рното ID: (Camera-Pic	:#) nave/#			
SITE ID (Condition-#): OT- <u>É</u>	LAT 41 0 46 . 46	"LONG 72 . 42 . 20,5"	LMK GPS: (Unit ID)			
BANK: TYPE:  LT RT Head  FLOW: pipe  None Trickle	MATERIAL:  Concrete M  PVC/Plastic B:  Other:		DIMENSIONS: SUBMERGED:  No Diameter: (in) Partially Fully			
☐ Moderate ☐ Substantial ☐ Other: chann	☐ Concrete ☑ Earlel ☐ Other:	then Parabolic Wi	cpth:(in)			
CONDITION:		VEGGIE DENSITY:  None Normal Inhibited Excessive Other:	PIPE BENTHIC GROWTH: None Brown Orange Green Other:  POOL QUALITY: No pool Good Odors Colors Oils Suds Algae Floatables 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 RESTORATION CANDIDATE Discharge investigation Stream daylighting Local stream repair/outfall stabilization						
no Storm water retrofit Other:						
If yes for daylighting:  Length of vegetative cover from outfall:ft Type of existing vegetation: Slope:°						
If yes for stormwater:  Is stormwater currently controlled?  Land Use description:  Yes ☐ No ☐ Not investigated  Area available:						
SEVERITY: strong smell. The compared to the a	amount of discharge is significant mount of normal flow in receiving appears to be having a	Small discharge; flow mostly clear and od discharge has a color and/or odor, the am discharge is very small compared to the st low and any impact appears to be minor /	ount of discharge; staining; or appearance of causing any erosion problems			
	5 4	3	2 1			
SKETCH/NOTES:						
		R	EPORTED TO AUTHORITIES: YES NO			



WATERSHED/SUBSHED: NGP		DATE: 1/24/09 A	SSESSED BY: CM/66	
SURVEY REACH ID: 14 TIME: AM/PM		PHOTO ID: (Camera-Pic#)	B2400/# 66	
SITE ID (Condition-#): OT	LAT 41 0 46 . 44 "LO	DNG 72 · 42 · 2/ " LI	MK GPS: (Unit ID)	
BANK: TYPE:  LT RT Head  Flow: Closed pipe	MATERIAL:  Concrete ☐Metal  PVC/Plastic ☐Brick  Other:	Circular Double	MENSIONS: SUBMERGED:  Mo  Meter: 19 (in) Partially	
None Trickle Moderate Substantial Other: Open channel	Concrete Earthen Other:	☐ Trapezoid Depth: ☐ Parabolic Width (To	(in) pp): (in) NOT APPLICABLE m): (in)	
CONDITION:  None Gas Chip/Cracked Sewage Peeling Paint Corrosion Other: Other:	IJ None □Oily	None	L QUALITY: No pool  ood Odors Colors Oils  ids Algae Floatables	
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 CONCERNS: Needs Regular Maintenance Bank Erosion Other:  POTENTIAL RESTORATION CANDIDATE Discharge investigation Stream daylighting Local stream repair/outfall stabilization				
☐ no  If yes for daylighting:  Length of vegetative cover from outfal	Storm water retrofit	Other:		
If yes for stormwater:  Is stormwater currently controlled?  ☐ Yes ☐ No ☐ Not investigated	Land Use des Area availabl	•		
SEVERITY: strong smell. The am	ount of discharge is significant unt of normal flow in receiving dischar dischar pears to be having a	lischarge; flow mostly clear and odorless. If ge has a color and/or odor, the amount of ge is very small compared to the stream's b d any impact appears to be minor / localized	discharge; staining; or appearance	
	5 4	3	2 1	
SKETCH/NOTES: OUT fall &	headurall (le	ected from headed No Plan	dusel + pype	
		REPORT	ED TO AUTHORITIES: YES NO	



REPORTED TO AUTHORITIES YES NO

SURVEY REACH	m. 15	Wangun (Eu 11.0	0	DATE: 11 /24	(A)	ASSESSED BY;	
		WTRSHD/SUBSHD: NB		L		0~~/	BG
	ie: <u>10 : 15 <b>a</b></u>	· .		7 : <b>53. (D)</b> /PM	LM		GPS ID:
LAT41 ° 46 '		10002 412 1 12 "	LAT <u>41°46 ' 3</u>		• <u> </u>	<u>' 04 "</u>	(m)
DESCRIPTION: E	Wabeth	AVEL Expectorer	DESCRIPTION: TR	ibutionly itu	ne-tian	· WIMMING	
RAIN IN LAST 24 HO	OURS □ Heavy	rain Steady rain	PRESENT CONDITIONS	☐ Heavy rain	□ Stea	dy rain 🔲 Intern	
□ None	☐ Interm	• •	□ Clear	☐ Trace	Ø Ove	•	y cloudy
SURROUNDING LAN		estrial	Urban/Residential [ Crop [	□ Suburban/Res □ Pasture	☐ Fores		utional
AVERAGI	E CONDITIONS	(check applicable)	REACH S	KETCH AND SIT	E IMPA	CT TRACKING	!
BASE FLOW AS % CHANNEL WIDTH	□ 0-25% □25-50 %	□ 50%-75% ▲ 75-100%	Simple planar sketch o within the survey rea features d		UT, TR, M	II) as well as any d	
DOMINANT SUBSTR Silt/clay (fine or Sand (gritty) Gravel (0.1-2.5	slick)	□ Cobble (2.5 –10") □ Boulder (>10") □ Bed rock	, , , , , , , , , , , , , , , , , , ,	ooned appropriate	- Travelle	oc. o, j.o.	
	naturally colored)	urbid (suspended matter)  Opaque (milky)		and W			
AQUATIC PLANTS IN STREAM		none some lots		peren 14 here	Les sign	BUTANY	
WILDLIFE IN OR AROUND STREAM	(Evidence of)	Beaver B. Deer Marker Other: SMACK MARNAM	1. Figh.)	MODIFICON	SHUP		
STREAM SHADING (water surface)	✓ Mostly sha  ☐ Halfway (2)	ded (≥75% coverage) :50%) aded (≥25% )		J	t	PANCINO	
CHANNEL DYNAMICS	Downcutt Widening Headcutti	Bank failure  Bank scour		PANL + Syayey Hones			·
Unknown	Aggrading Sed. depo			+ //	PANE	ano	
CHANNEL DIMENSIONS	Height: LTD			LARUNS (	+1A		
BANKTHAN)	Width: Bett	om <u>(e</u> 4 (ft) (ft)					
1	REACH ACCESS	BILITY	]				
Good: Open area in public ownership, sufficient room to stockpile materials, easy stream channel access for heavy equipment using existing roads or trails.	Fair: Forested or developed area adjacent to streat Access requires of removal or impact landscaped areas Stockpile areas small or distant fr stream.	wetland, steep slope, or sensitive areas to get to stream. Few areas to stockpile available and/or located a great distance from stream.		VENERA OF	PE V	<u>(LUM</u> AVE	
5	4 (0)	2 1			- 4×4·	• • • • • • • • • • • • • • • • • • • •	
NOTES: (biggest pro-	blem you see in si I'C PHANT! ISOLATED A	urvey reach) districts wow. V S (J. Knotweed), zehs.	MPHCKA ISUHTEN TRASM, STORM W	2 aug to 19462. Mtfal	pheen c	mors, nunker of	で マンシントストント

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.	
	20 19 18 17 16	15 🐠 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 🕜 6	5 4 3	2 1 0	
	Right Bank 10 9	8 🙆 6	5 4 3	2 1 0	
BANK EROSION (facing downstream) c Most Archs of Sank Failly are good whole	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.	
ARE good wildige	Left Bank 10 9	8 6 6	5 4 3	2 1 0	
history through	Right Bank 10 9	8 💋 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 (8) 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.	
1	Left Bank 10 9	<b>®</b> 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 🔞 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 🐠 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 🗭 12 11	10 9 8 7 6	5 4 3 2 1 0	
Sub Total In-st	ream: <u>(p</u>	suffer/Floodplain: <u>66</u> /80	= Total Survey	Reach 126 /160	

WATERSHED/SUBSHED: NGP	DATE:	11 124 109 A	ASSESSED BY: CM/B
SURVEY REACH: 15 TIME:	:Ам/РМ РНОТО	o <b>ID:</b> (Camera-Pic #)	
SITE ID: (Condition-#) START LAT 41°46'332" L	ong <u>72°42'/2'</u>	LMK	GPS: (Unit ID)
IB END LAT 41 0 46 28 " Lo	ong <u>72 ° 42 '08.9</u>	LMK	
IMPACTED BANK: REASON INADEQUATE: ☐ Lack of v	regetation  Too narrow planted  Other:	Widespread invasion	ve plants
LAND USE: Private Institutional Golf Cour	se Park Other Publ		
(Facing downstream) LT Bank		: PARKing lors	>
RT Bank 🔑 🔲	<u> </u>	•	
DOMINANT Paved Bare ground Turf/law	Ü		
LAND COVER: LT Bank 🔼 🔲 🔯		•	]: ]:
			unknown
STREAM SHADE PROVIDED? None Partial	Full WETLANDS PE	RESENT? No	Yes Unknown
			_
POTENTIAL RESTORATION CANDIDATE	on Greenway design	Natural regeneration	Invasives removal
RESTORABLE AREA	Impacted area on public land	Impacted area on either	Impacted area on private
LT BANK RT REFORESTATION	where the riparian area does	public or private land that is	land where road; building
Length (ft): POTENTIAL:	not appear to be used for any specific purpose; plenty of	presently used for a specific purpose; available area for	
(Circle #)	area available for planting	planting adequate	available area for planting
Width (ft):	5	3	2 1
POTENTIAL CONFLICTS WITH REFORESTATION Wide Poor/unsafe access to site Existing impervious cover Seve	lespread invasive plants ere animal impacts (deer, l		tion    Lack of sun
NOTES: O LEGT GANK (LB) START 410 410 410 110 110 110 110 110 110 110	<u>-</u>		
O Lept BANK (UB) 2 41041	4123.81 /72:4	21 12" due -	to MAINTAINED
LANGS DARLEMANTS	, L	and the s	C conscrate to
(10)	iuasive plants	, chunes o	t conformer, lite
(D)	D 41º46 28	"/72°42 108	2.5"
But at end point	(41.46,38" /7	) (ロー(ロー)コ コ 411 /08 5 5 5	I trace is
Impart to the Rige	at mark 1	RB) due -	, \\ \( \)
1	12400-	KIS) accent	10 P
Re-taining week.			
$\overline{}$			

П	П
_	L

WATERSHED/SUBSHED: N6₽		DATE: 11 124 109   ASSESSED BY: 0m/66			
SURVEY REACH ID: 15 TIME: D: 20 (M)PM		Рното ID: (Camera-Pi			
SITE ID (Condition-4): O	r A La	т <u>41°46 '-04 "</u> L	onc 12.43 · 11 ·	' LMK	GPS: (Unit ID)
BANK:    Carlor   Car	TYPE: Closed pipe	MATERIAL:  ☑ Concrete	☐ Elliptical ☐ Triple ☐ Other:	Diameter: 30 (ir	SUBMERGED:  No Partially  Fully
Substantial Other:	Open channel	Concrete Earthen Other:	Parabolic W	epth: (in) /idth (Top): (in) / (Bottom): (in)	NOT APPAICABLE
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 GR Brown Oral Other:  POOL QUALITY: Good Odors Suds Algae Other:	nge
Clear					
POTENTIAL RESTORAT	ION CANDIDATE	Discharge investigation	on Stream daylighting	Local stream repair	outfall stabilization
по		Storm water retrofit	Other:		
If yes for daylighting: Length of vegetative cover	from outfall:	ft Type of exis	sting vegetation:	Slope:	O
If yes for stormwater:  Is stormwater currently com  ☐ Yes ☐ No ☐ Not in		Land Use de Area availab	-	4.44.4.14.4.4.1	-
SEVERITY: strong comp stream	compared to the amount of normal flow in receiving		discharge; flow mostly clear and o rge has a color and/or odor, the an rge is very small compared to the s nd any impact appears to be minor	nount of discharge of causing	es not have dry weather staining; or appearance any erosion problems.
	5	4	3	. 2	1
SKETCH/NOTES:					
			I	REPORTED TO AUTHOR	ITIES: YES NO



WATERSHED/SUBSHED: NBP			DATE: 11 /24 /00	Assessed by:	im/66
SURVEY REACH ID:	<b>15</b> тіме:	:AM/PM	<b>Рното ID:</b> (Camera-Pio	c#) none /#	
SITE ID (Condition-#)=01	- <u>6</u> Lat41	<u>046 126 "La</u>	" 6.00' CH OCF DNG		GPS: (Unit ID)
FLOW: None Trickle	Closed P	TERIAL: Concrete	SHAPE: Single Circular Double Elliptical Triple Other:	DIMENSIONS: Diameter: 12 (in)	SUBMERGED: No Partially Fully
☐ Moderate ☐ Substantial ☐ Other:	open	Concrete	Parabolic W	epth: (in) (idth (Top): (in) (Bottom): (in)	NOT APPEACABLE
CONDITION:  None Chip/Cracked Peeling Paint Corrosion Other:	☐Gas ☐N Sewage ☐O	ily Tow Line aint	VEGGIE DENSITY:  None Normal Inhibited Excessive Other:	PIPE BENTHIC GRO Brown Orange Other:  POOL QUALITY: Good Odors Suds Algae Other:	e 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 CONCERNS: Sexual Maintenance Bank Erosion Other:					
POTENTIAL RESTORATION In o If yes for daylighting: Length of vegetative cover	s	Storm water retrofit	n Stream daylighting [ Other:	-	utfall stabilization
If yes for stormwater:  Is stormwater currently cor  Yes No Not in	nvestigated	Land Use des Area available			
SEVERITY: strong composition (circle #)	VERITY: strong smell. The amount of discharge is significant compared to the amount of normal flow in receiving discharge appears to be having a		ischarge; flow mostly clear and oc ge has a color and/or odor, the am ge is very small compared to the si d any impact appears to be minor /	ount of tream's base / localized.	not have dry weather aining; or appearance by erosion problems.
SKETCH/NOTES:	12000 CO.O.C 1	e herduse	1 - Ought D	2	1
here.	mege covicted	E PORES COMP	e + puny pi	140 . JAP.	Ruotweed
	·				
			R	EPORTED TO AUTHORIT	IES: YES NO



WATERSHED/SUBSHED: NBP	DATE: 11/34/09	ASSESSED BY: O	m /66	
SURVEY REACH ID: 15	TIME::AM/PM	PHOTO ID: (Camera-Pic #)	PB2400# 5	<del></del> _
SITE ID (Condition-#): OT-	LAT41 .46 .28 "LO	ονο <u>42 ° 42 ' 08.5 "</u>	LMK	GPS: (Unit ID)
BANK:  LT RT Head  FLOW: None Trickle Moderate Substantial Other:  TYPE: Closed pipe  Closed pipe  Closed pipe	MATERIAL: Concrete Metal PVC/Plastic Brick Other: Concrete Earthen Other:	Circular Double Elliptical Triple Other:  Trapezoid Depth Parabolic Width	DIMENSIONS:  Diameter: (in)  i: (in) in (Top): (in) outom): (in)	SUBMERGED:  No Partially Fully  NOT APPECABLE
CONDITION:  None  Chip/Cracked  Peeling Paint  Corrosion  Other:  Odor:   Rancid/S  Rancid/S  Other:	None ☐Oily	VEGGIE DENSITY:  None  Normal Inhibited Excessive Other:	PE BENTHIC GROVE  Brown Corange  Other:  OOL QUALITY: CORANGE  Good Corange  Suds Algae  Other:	Green No pool Colors Oils
FOR COLOR: Clear Brown Grey Yellow Green Grange 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:				
POTENTIAL RESTORATION CANDII			_ocal stream repair/ou	utfall stabilization
If yes for daylighting: Length of vegetative cover from outfal	Storm water retrofit	Other:	Slope: _	0
If yes for stormwater:  Is stormwater currently controlled?  ☐ Yes ☐ No ☐ Not investigated	Land Use de Area availabl		######################################	
SEVERITY: strong smell. The am compared to the amo stream; discharge ap	ERITY: strong smell. The amount of discharge is significant compared to the amount of normal flow in receiving		discharge; sta of causing an	not have dry weather aining; or appearance y erosion problems.
SKETCH/NOTES: NEAR RETAINING WALL				
				·
		Repo	ORTED TO AUTHORITI	ES: YES NO



WATERSHED/SUBSHED: NBP			DATE: \\ / Q	4/00 ASSESSED BY	en /BG	
Ę	SURVEY REACH ID:	\5 T	ГІМЕ:;АМ/РМ	Рното ID: (Ca	umera-Pic#)   /#	
	STEID (Condition-#):	on-19	AT 42 · 46 · 30	"Long 72 .42 .		GPS: (Unit ID)
	BANK:  CLT □ RT □ Head  FLOW: □ None □ Trickle	TYPE:	MATERIAL:  Concrete  PVC/Plastic  Other:	letal 【 Circular 🔲	5/ )	SUBMERGED:  No (in) Partially Fully
	☐ Moderate ☐ Substantial ☐ Other: ₹	Open channel	Concrete Ear	then Trapezoid Parabolic Other:	Depth:         (ir           Width (Top):         (ir           " (Bottom):         (ir	NOT APPECABLE
	CONDITION: None Chip/Cracked Peeling Paint Corrosion Other:	ODOR: NO Gas Sewage Rancid/Sour Sulfide Other:	None ☐Oily	VEGGIE DENSI None Normal Inhibited Excessive Other:	Brown On Other:  POOL QUALITY: Good Godor	: No pool
,	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:					
	_	ATION CANDIDA		<u>—</u>	ghting	air/outfall stabilization
	If yes for daylighting: Length of vegetative co		Storm water retro	<del></del>	Slop	ре:°
	If yes for stormwater:  Is stormwater currently controlled?  Land Use description:  Yes No No Not investigated  Area available:					_
	SEVERITY: strong smeil. The amount of discharge is significant compared to the amount of normal flow in receiving discharge in the service of		Small discharge; flow mostly of discharge has a color and/or or discharge is very small compart flow and any impact appears to	dor, the amount of red to the stream's base of caus	does not have dry weather ge; staining; or appearance ing any erosion problems.	
	SKETCH/NOTES: Adj Acent to A PARKING LOT				1	
				<i>J</i>		
	)				REPORTED TO AUTHO	ORITIES: YES NO



SURVEY REACH ID:	WATERSHED/SUBSHED: NBP			DATE: <u>//</u> /8	24 109	ASSESSED BY:	cm/166
BANK:   TYPE:   MATERIAL:   SHAPE:   Single   DIMENSIONS: SUBMERGED:   MATERIAL:   SHAPE:   Single   Dimensions:   SUBMERGED:   MATERIAL:   SHAPE:   Single   Dimensions:   Material   Material   Substantial   Substantial   Substantial   Open   Oncrete   Earthen   Other:   Other:   Other:   Other:   Fully   Other:	SURVEY REAC	н <b>:</b> 15	TIME: AM/P!	м <b>Рното ID:</b> (	Camera-Pic#)	P32400#	53
PLT   RT   Head   PLOW:   PORP   PORP   PORP   PORP   Port   Partially   Par	SITE ID (Conditi	ол-#): ОТ- <u>Е</u>	LAT 41046 · 3				GPS: (Unit ID)
Other:	FLOW:	Head Closed	Concrete ☐ PVC/Plastic ☐	Metal   Circular	☐ Double ☐ Triple □	Diameter: 54 (in)	No ☐ Partially
Shone   Gas   Sewage   Oily   Normal   Other:   Other   Othe	1 =	-		Parabolic	Width	(Top):( <u>in</u> )	NOT APPRICABLE
FOR   COLOR:     Clear   Brown   Grey   Yellow   Green   Orange   Red   Other:	☑ None ☐ Chip/Cracked ☐ Peeling Paint ☐ Corrosion	☐Gas☐Sewag☐Rancid☐Sulfide	None Oily Flow Line Paint	✓ None  ☐ Normal  ☐ Inhibited  ☐ Excessive	Po	Brown Orang Other:  OOL QUALITY: Good Odors	ge ☐ Green  M. No pool ☐ Colors ☐ Oils
POTENTIAL RESTORATION CANDIDATE   Storm water retrofit   Other:	- Coner.	- Junei.					
Storm water retrofit   Other:	FLOWING   TURBIDITY:   None   Slight Cloudiness   Cloudy   Opaque						
If yes for daylighting:   Length of vegetative cover from outfall:	POTENTIAL RE	STORATION CANE	DIDATE Discharge inve	estigation   Stream day	ylighting L	ocal stream repair/o	outfall stabilization
Length of vegetative cover from outfall:			Storm water ret	rofit Other:			
Is stormwater currently controlled?    Yes   No   Not investigated   Area available:		_	all:ft Type	of existing vegetation:	, , , , , , , , , , , , , , , , , , ,	Slope:	°
SEVERITY: (circle #)  strong smell. The amount of discharge is significant compared to the amount of normal flow in receiving stream; discharge appears to be having a significant impact downstream.  SKETCH/NOTES:  SKETCH/NOTES:  strong smell. The amount of discharge is significant compared to the amount of normal flow in receiving discharge is very small compared to the stream's base flow and any impact appears to be minor / localized.  SKETCH/NOTES:  Outfall does not have dry weather discharge; staining; or appearance of causing any erosion problems.  SKETCH/NOTES:  A 3 2 1  SKETCH/NOTES:  Outfall does not have dry weather discharge; staining; or appearance of causing any erosion problems.	Is stormwater cui	rrently controlled?		-		· 	
there was no con an 11/24/09.	SEVERITY:	OUTFALL SEVERITY:  (circle #)  Heavy discharge with a distinct color and/or a strong smell. The amount of discharge is significant compared to the amount of normal flow in receiving stream; discharge appears to be having a		discharge has a color and/o discharge is very small com	Small discharge; flow mostly clear and odorless. If the discharge has a color and/or odor, the amount of discharge is very small compared to the stream's base		taining; or appearance
there was no con an 11/24/09.	5 4 3 2 1						
Reported to authorities: ☐ yes ☐ no	there was no flow on 11124/09.						
Reported to authorities: ☐ yes ☐ no							
REPORTED TO AUTHORITIES: YES NO	,						
					Repo	ORTED TO AUTHORIT	ries: ☐ yes ☐ no

WATERSHED/SUBSHED: NGP			DATE: 1 24 / 0	ASSESSED BY:	cm/86
SURVEY REACH ID:	16 TI	ME::AM/PM	PHOTO ID: (Camera-Pic	#) PB2400 /# _	<b>55</b>
SUTE ID (Condition-#): O	·	T41 · 46 · 33 ·	LONG 72 . 42 . 06 "	LMK	GPS: (Unit ID)
SILE DA (Contamons an) NOS		·· <u>-1</u>			CURAFREEN
BANK:	TYPE:  Closed pipe	MATERIAL:  ☐ Concrete ☐ Me ☐ PVC/Plastic ☐ Br ☐ Other:	<del></del>	Dimensions:  Diameter: (i	SUBMERGED:  No Partially Fully
Moderate Substantial Other:	Open channel	Concrete Eart	Parabolic W	epth:(in) (idth (Top):(in) (Bottom):(in)	NOT APPACABLE
CONDITION:  None Chip/Cracked Peeling Paint Corrosion Other: Scave	ODOR: NO Gas Sewage Rancid/Sour Sulfide Other:	Oily	VEGGIE DENSITY:  ☐ None  ☑ Normal ☐ Inhibited ☐ Excessive ☐ Other:	PIPE BENTHIC G.  Brown Ora Other:  POOL QUALITY: Good Odors Suds Algae Other:	nnge ☐ Green  No pool ☐ Colors ☐ Oils
FOR COLOR: Clear Brown Grey Yellow Green Orange Red Other  FLOWING TURBIDITY: None Slight Cloudiness Gloudy Opaque  ONLY FLOATABLES: None Sewage (toilet paper, etc.) Petroleum (oil sheen)  OTHER CONCERNS: Needs Regular Maintenance Dumping (bulk) Excessive Sedimentation  Other:  POTENTIAL RESTORATION CANDIDATE Discharge investigation Stream daylighting Local stream repair/outfall stabilization					
no  If yes for daylighting:  Length of vegetative cov	er from outfall:	Storm water retro	fit Other:	Slop	pe:°
If yes for stormwater:  Is stormwater currently controlled?  Land Use description:  Yes No Not investigated  Area available:				does not have dry weather	
SEVERITY: str	rong smell. The amou	nt of discharge is significant to f normal flow in receiving ars to be having a	Small discharge; flow mostly clear and discharge has a color and/or odor, the discharge is very small compared to the flow and any impact appears to be min	amount of discha	rge; staining; or appearance sing any erosion problems.
		54	3		11
SKETCH/NOTES:	steep ga	de, some	scow (see	photo)	
				REPORTED TO AUTI	HORITIES: YES NO



WATERSHED/SUBSHED: NG	<b>a</b>	DATE: 1 / 24 / 59 ASSESSED BY: CM /BG		
SURVEY REACH ID: 15	TIME::AM/PM	PHOTO ID: (Camera-Pic#) Nove /#		
SITE ID (Condition-#): OT-	LAT41 . 46 . 34.9"	LONG 72 . 42 . 04.6" LMK GPS: (Unit ID)		
BANK:   Closed pipe   Closed p	MATERIAL:	ck		
CONDITION:  None  Chip/Cracked Peeling Paint Corrosion Other:  Condition:  Con	None Oily	VEGGIE DENSITY:		
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 Excess Trash (paper/plastic bags) Dumping (bulk) Excessive Sedimentation  CONCERNS: Needs Regular Maintenance Bank Erosion Other:				
POTENTIAL RESTORATION CANDII  no  If yes for daylighting:	DATE Discharge investige Storm water retrofit	ation Stream daylighting Local stream repair/outfall stabilization  Other:		
Length of vegetative cover from outfal	l:ft Type of e	xisting vegetation: Slope:°		
If yes for stormwater:  Is stormwater currently controlled?  ☐ Yes ☐ No ☐ Not investigated	Land Use Area avai	description:lable:		
SEVERITY. strong smell. The am	ount of discharge is significant unt of normal flow in receiving pears to be having a	nall discharge; flow mostly clear and odorless. If the charge has a color and/or odor, the amount of charge is very small compared to the stream's base wand any impact appears to be minor / localized.  Outfall does not have dry weather discharge; staining; or appearance of causing any erosion problems.		
5 4		3 2 1		
SKETCH/NOTES:				
:	· 	REPORTED TO AUTHORITIES: YES NO		

Stream Crossing

SC

	/SUBSHED: NGP	l		DATE: <u>U</u>	/ <u>34</u> /8	1		um/ou
SURVEY REA	CH ID: 15	TIME: 10 : 15	<u>√</u> <b>⊘</b> /PM 1	Рното ID	: (Camera-Pi		1	49
SITE ID: (Con	dition#) SC-ore LAT	41 ° 46 · 23.	<u>8" Long <del>1</del></u>	<u>° 42 '</u>	<u> 15 T</u>	<u>MK</u>	GPS (	Unit ID)
- — — — — — — — — — — — — — — — — — — —	10 1 7 7 7 10 1				~		0.1	
TYPE: K Ros	ad Crossing 🔲 Railroad Crossi							
FOR ROAD/ RAILROAD	SHAPE: Arch Bottomless Box Elliptical Circular Other:	#BARRELS: Single Double Triple Other:	MATERIAL: Concrete Metal Other:	∏ Flo □ No	NMENT: ow-aligned t flow-aligned not know	Barrel dia	Height: _	(ft)
CROSSINGS ONLY	CONDITION: (Evidence of)  Cracking/chipping/corrosio  Sediment deposition  Other (describe):			☐ Fla	ERT SLOPE: t ght (2° – 5°) vious (>5°)		wigth: Width: elevation:	(ft) (ft)
POTENTIAL I	RESTORATION CANDIDATE		emoval Culver		placement []	Jpstream st	orage retrof	it
	G AS GRADE CONTROL	□ No □ Ye						
IJ DO ACTING	EXTENT OF PHYSICAL BLO				CKAGE SEVEI	RITY: (circ	le #)	
If yes for fish barrier	Total Partial Unkno  CAUSE: Drop too high Water D Flow too shallow Water D	wn rop:(in)	A structure such as road culvert on a 3r greater stream bloc upstream movemer anadromous fish; no passage device pre	a dam or d order or king the at of o fish	A total fish blocks tributary that wou significant reach or partial blockag interfere with the anadromous fish.	nge on a ld isolate a of stream, e that may migration of	A temporary libeaver dam of the very head very little viab	parrier such as a or a blockage at I of a stream with the fish habitat ral barriers such
NOTES/SKET	Other:		5		3		2	1
							_	<b>-</b>
					REPOR	TED TO AU	THORITIES [	YES No

PAGE 10/2
for NBP, REACH 10

Reach Level Assessment



SURVEY REACH I	D: <u>\</u>	WTRSHD/SUBSHD:	Note	ROMAGE PAR	DATE: 1 /24	<u>/09</u> As	SSESSED BY:	R(n
START TIM	E: 9:00 M			END TIME: 10	: 15 CD PM	LMK:	OVVIT	GPS ID:
LAT 41 0 46 1		ca2 · 42 · 13		LAT4 046 0		··42 ·	12."	65.00
	<del></del> -			DESCRIPTION: < 0	•		<del></del> _	0000
DESCRIPTION: Me	edical Cen	ter	,	DESCRIPTION. EX	trabeth	PAUL		
RAIN IN LAST 24 HO	URS □ Heavy r	ain 🕰 Steady rai	n Pr	ESENT CONDITIONS	☐ Heavy rain	☐ Steady r	ain 🗆 Intern	nittent
☐ None	☐ Intermit	tent   Trace		Clear	☐ Trace	Overcas	t 🗆 Partly	y cloudy
SURROUNDING LAN		strial <b>E</b> Comme course <b>D</b> Park			] Suburban/Res ] Pasture	☐ Forested ☐ Other:	Institu Medical A	
Average	CONDITIONS	(check applicable)		REACH S	KETCH AND SIT			
BASE FLOW AS %	□ 0-25%	□ 50%-75%	o l	Simple planar sketch of				
CHANNEL WIDTH	□25-50 %	<b>₄</b> Z 75-100	)%	within the survey read	ch (OT, ER, IB,SC, U eemed appropriate.			additional
DOMINANT SUBSTR	ATE BUT MOS	Hy RIP-RAP		jeurures ui	remen approprimie. De		cuon oj jion	
Silt/clay (fine or	slick)	, □ Cobble (2.5 –10")			- 9	'av'		
☐ Sand (gritty)	·	☐ Boulder (>10")			<b>₹</b> .	7,.,4	LUM AN	<b>ب</b>
☐ Gravel (0.1-2.5	5") 🗆	Bed rock			8 1	17		
W. con Co.					₹/	PANKING	<b>;</b>	
WATER CLARITY					[ ]	Lots		
☐ Stained (clear, n☐ Other (chemicals,		⊔ Opaque (milky)			woods)/	1		UMP ON
- Outer (enemicals,	<u> </u>				- //	/		UK S
AQUATIC PLANTS	Attached: 🗹	none □ some □	lots		-11 .	J	, -	DUDY DUT
IN STREAM	Floating: 🔯 1	none 🗆 some 🗀	lots		12			P. (2)
Wilniermon	(Evidence of)				(1)	K-exosic	1.4	- To Manager
WILDLIFE IN OR AROUND STREAM		Beaver Deer	MARK		Work )	\		
	☐ Snails 🔂 🤇	Other: Wood duck	<u> </u>		- Ju	1/2.6	mekinn	
		ded (≥75% coverage	$M_{\rm W}^{\rm W}$ (e	Q.A.		1 Por	]	
STREAM SHADING (water surface)	☐ Halfway (≥		3,100	101-1			ξ.	. ^-
(water surface)	☐ Partially sh☐ Unshaded (		14 35	•	GABION Water at	v=4 <del>(</del> E)	1 080	SiO13
		<u> </u>			WALL S		1/4	
CHANNEL	Downcutt	·   ==	· I		wo	م (الواعان ن	] ] ,	wood ve Th
DYNAMICS	Widening						<del>K)</del>	July 65/
	Headcuttin	·   =	I			1000		Crea
Unknown	☐ Aggrading				سلرهم)	The same of the sa		
	Sed. depo	sition	11200	, nDE	W/S			
CHANISIT	Height: LT b	ank	_(ft)	410PE	-d/ P	AMCENS		
CHANNEL DIMENSIONS	RTb	ank	(ft)	44.4-		075		
(FACING	Width: Bette	٦.	(ft)		Shops	- January		
DOWNSTREAM)					775	575		
Bankfull	Тор		_(ft)			77	LINIM RIPLA	Lø
<u> </u>	REACH ACCESSI Fair: Forested or	Difficult. Must cre		•		END /	+STEEL M	Esh
Good: Open area in	developed area	wetland, steep sk						
public ownership, sufficient room to	adjacent to strear	n. sensitive areas to	get to					
stockpile materials,	Access requires t removal or impac	4	t t					
easy stream channel	landscaped areas							
access for heavy equipment using	Stockpile areas	distance from stre	am.					
existing roads or trails.	small or distant for							
5	stream. 3	equipment require 2 1						
NOTES: (biggest pro-	blem you see in su	rvey reach) \MP	Arted	BUFFER => A banks Resid Hosive Species HOSE + Storn un	PARKINA LOTS	Adlinea	At to BA	KULK,
RIP-RAP MON	in Almost "	entire peaks	1/100-11	1 banks Resid	entral Man	1 IAWA	. YAND.	unte.
dumping, sr	www bilim	, TRASH Idelo	1915, IVN	Histore Species	· (especially	JAP, KU	o-tweed)	1
Unstalde d	named rel	ated to Impac	ted Bu	HER + STORN WA	Here inputs:		. –	
Olys D. Hand		<u>,                                    </u>			REPORT	TED TO AUT	HORITIES 🔲	YES No

	Optimal	Suboptimal	Marginal	Poor
ABITAT  May modify riteria based in 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).	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.  Riport was ducks indi
habitat regime)	20 19 18 17 16	15 14 13 12 11	10 9 8 7 6	(3) 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	<u>O</u> 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 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 🕄	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 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: little or no riparian vegetation due to human activities.
	Left Bank 10 9	8 7 6	5 4 3	(3) 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	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	***************************************		10 9 8 7) 6	5 4 3 2 1 0

~	_	
		_

				T .	1 61	ı		4
WATERSHED/SUBSHED:	NBP			DATE: _			ED BY: CM/(	7
SURVEY REACH: 16		TIME:	_:AM/PM	Рното I	<b>D:</b> (Camera-Pic		0 # 38,39,6	<u>1</u> þ+
SITE ID: (Condition-#)	START LAT 41	046:047"1	LONG 072-0 42	1.13.6"	LMK	G	<b>PS:</b> (Unit'ID)	
IB <del>[}</del>	END LAT41	_046 109.9" L	ONG 572 0 43	<u>'13.8"</u>	LMK	_		
						•		7
IMPACTED BANK:  ☐ LT ☐ RT ☑ Both	REASON INADEQU				Widespread inv			
LAND USE:	Private Institut			ther Public	100,100			1
(Facing downstream) LT Ba	nk 🔽		) 🗆	□:	-			
RT Ba	nk 🔲			<b>⊠</b> :	Parking	LOTS		
DOMINANT		e ground Turf/lav		Shrub/scru		Other		
LAND COVER: LT Ba				堅	<b>Z</b> .	<u> </u>		
RT Ba	<del></del>			<del>/</del> A_	<u>A</u>	:		4
INVASIVE PLANTS:	☐ None ☐	Rare P	artial coverage	Exten	sive coverage	unknov	vn	
STREAM SHADE PROVI	DED? None	Partial	Full WET	LANDS PRES	SENT? No	☐ Yes	Unknown	
D D						<b>5</b> 1.		-
POTENTIAL RESTORAT		☐Active reforestati ☐ Other:	ion Greenway	design [X]	Natural regenerati	on <b>p⊴</b> in∨	asives removal	
RESTORABLE AREA			Impacted area on n	ublic land	mandad ama an aitha	r Imr	acted area on private	1
	DT REE	ORESTATION	Impacted area on p where the riparian a		mpacted area on eithe ublic or private land th		pacted area on private d where road; building	
Length (ft):	Рот	ENTIAL:	not appear to be us specific purpose; pl	enty of p	resently used for a sp urpose; available area	for fea	croachment or other ture significantly limits	
Width (ft):	(Circ	le #)	area available for p	anting p	lanting adequate	ava	ilable area for planting	4
	L		5	ري	3	<u> </u>	<u></u>	┨
POTENTIAL CONFLICTS  Poor/unsafe access to s					Potential containver)	ination	Lack of sun	
NOTES: 10 UDS	ream of laing lot, ethining was culvest r	The r	Direct o	a Iho	LR +	here	15 A	
DAR	lains law	as the a	a other		121Ann 14	zith	screen tren	رز لد
\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	ما ما ما	00 Fr 100	ise pin-	0 NA (	yel selection	ulis	~ ~ 30/ UD	Ste
/ <del>+</del>  C	ETYTINI ING WA	rece 1 - 100	Je Pip	in the fi	SOTOL O.		30 -4	7
of	culvet r	the constant	, with	m 6 - 15	mq ,	. 1		
@ Resta	Al satuak	the Act 1	aceut -	to RB	+ PARK	1 CM	OTS AdjAc	eh-
	UB. Leaf/					J	,	
						,		
(3) BAN	K failure	DRB (	see phon	0 40)-	) 41° 46'0	5.9 1/7	3042/17/1"	
					•	,	10 1 7.1	
• <b>•</b> ••	A		ν C.	0	\ \ .			
- V	ch 200d	CHANGU OLA	+x " " " " " " " " " " " " " " " " " " "	kes-talla	show.			
	•							

WATERSHED/SUBSHED: NBP		DATI	E: 11/24/09	ASSESSED BY: CM/66
SURVEY REACH:	TIME:			#)PB)400/# 44
Ţ <u></u>	AT 41 ° 46 ' 11 " I			GPS: (Unit ID)
' -	AT 41 046 12 " I			<del>-</del>
			·	
	ADEQUATE: Kack of			
LT RT Both		planted Q Other: Q		uire Mesch
LAND USE: Private (Facing downstream) LT Bank	Institutional Golf Cou	rse Park Other Pul 1	oli¢ ∃:	
RT Bank			 :	
DOMINANT Paved	Bare ground Turf/lav	vn Tall grass Shrub	scrub Trees	Other
LAND COVER: LT Bank			T	<u>:</u>
RT Bank			•	
INVASIVE PLANTS: None	Rare P	artial coverage 🙀 E	extensive coverage	unknown
STREAM SHADE PROVIDED? No	ne 😡 Partial 🗆	Full WETLANDS I	PRESENT? No	☐ Yes ☐ Unknown
			-	
POTENTIAL RESTORATION CANDIDA	<u> </u>	on Greenway design	Natural regeneration	on X Invasives removal
no	Other:			
RESTORABLE AREA	REFORESTATION	Impacted area on public land where the riparian area does	Impacted area on either public or private land the	
LT BANK RT Length (ft):	POTENTIAL:	not appear to be used for any	presently used for a spe	cific encroachment or other
	(Circle #)	specific purpose; plenty of area available for planting	purpose; available area planting adequate	for feature significantly limits available area for planting
Width (ft):		5	4 3	2 1
POTENTIAL CONFLICTS WITH REFORM Poor/unsafe access to site  Existin		despread invasive plants /ere animal impacts (deer		ination    Lack of sun
NOTES: 1 Impacts to	both banks	· Associated :	with Rip	- RAP
conved wi	_	,	•	
Drivier bank	Lelesian j	ust upstrem	mof end	L GR HARK.
				·
				l
·				

WATERSHED/SUBSHED: NBP			DATE:	11/24/09	Ass	ESSED BY: OWN /R
SURVEY REACH:	Тіме:	:AM/PM	Рното	ID: (Camera-Pi	ic#) n	ove#
	T41 046 108.7" L	ONG72 042	·18_"	LMK		GPS: (Unit ID)
	T 41 046 109.9" L			LMK		
	· — — — — — — — — — — — — — — — — — — —					
IMPACTED BANK: REASON INA  LT □ RT □ Both	DEQUATE:  Lack of Recently	planted \( \overline{\over	ier: see	below	vasive p	olants
		_	ther Public			
(Facing downstream) LT Bank			□: □:			
RT Bank DOMINANT Paved	Bare ground Turf/law				Other	
DOMINANT Paved  LAND COVER: LT Bank				····	□:	
RT Bank				<u>Z</u>	<u> </u>	
INVASIVE PLANTS: None	Rare P	artial coverage		ensive coverage	unk	
STREAM SHADE PROVIDED? None	e 🖾 Partial 🗌	Full WET1	ANDS PRI	ESENT? No	□ Y	Yes Unknown
				3		)
POTENTIAL RESTORATION CANDIDA'		ion Greenway	design 🔼	Natural regenera	tion /	Unvasives removal
□ no	Other:					
RESTORABLE AREA		Impacted area on po where the riparian a		Impacted area on eit public or private land		Impacted area on private land where road; building
LT BANK RT	REFORESTATION POTENTIAL:	not appear to be use	ed for any	presently used for a	specific	encroachment or other
Length (ft):	(Circle #)	specific purpose; ple area available for pl		purpose; available at planting adequate	rea tor	feature significantly limits available area for planting
Width (ft):	,	5	4	7) 3		2 1
POTENTIAL CONFLICTS WITH REFOR  Poor/unsafe access to site Existing	ESTATION Wi	idespread invasive	e plants	Potential conta	minatio	on Lack of sun
6		•				
NOTES: 1 Pip-RAP A	riony US	•				
1 leap dur	IPINA ON UR	Adj Acent	t to 1	River +	2055	ible
@ leaf dur snow pilit	na Gardaina	Once	. هاما	مد خلامی	aneidi	ia 17
21800 Pm	J (Miller 119)	wt ), Pos	31010	sair ay	01101	1000
· ·						

WATERSHED/SUBSHED:	1BP			DATE:	11/24/09	Ass	ESSED BY: CW1/C	
URVEY REACH:		TIME:	_:AM/PM	Рното	<b>ID:</b> (Camera-Pi	c #)	/#	
SITE ID: (Condition-#) STAR	RT LAT 4 9 4	6' 1 " 1	Long <u>72°42</u>	· <u>)4                                    </u>	LMK		GPS: (Unit ID)	
IB- END	Lat <u>41 ° 44</u>	<u>, '12_" i</u>	LONG 72-0 40	· 14.8"	LMK			
LAND USE: Priv (Facing downstream) LT Bank RT Bank	son Inadequate:  rate Institutional  Description	Golf Cou	y planted	her: Lither Publi	p-RAP (po : :		lants	
LAND COVER: LT Bank						<u> </u>		
RT Bank						:		
	None Rare		artial coverage			unk		
STREAM SHADE PROVIDED?	☐ None ☐ Par	tial [	Full WETL	ANDS PR	ESENT? No	□ Y	es Unknown	
POTENTIAL RESTORATION CA	ANDIDATE Acti		ion Greenway	design 💋	Natural regenerat	ion 🔼	Invasives removal	
RESTORABLE AREA	POTENTIA (Circle #)		Impacted area on pu where the riparian ar not appear to be use specific purpose; ple area available for pla	rea does ed for any enty of	Impacted area on eith public or private land to presently used for a spurpose; available are planting adequate	hat is pecific	Impacted area on private land where road; building encroachment or other feature significantly limits available area for planting	
widili (it).	<del></del>		5	4	<u></u>	2	1	
POTENTIAL CONFLICTS WITH		cover D Se	idespread invasive	plants	Potential contar	nination	Lack of sun	
Poor/unsafe access to site   Existing impervious cover   Severe animal impacts (deer, beaver)   Other:  NOTES:   Rip - RAP on both banks    Other:								

Impacted Buffer

IB |

LWATERSHED/SUBSHED: NBP			DATE: 1 / 24 /09	ASSESSED BY:CM/86
111	Typen			
URVEY REACH: \( \( \text{\text{Condition-#}} \) \( START \) \( \text{L}. \( \text{\text{Condition-#}} \) \( START \) \( \text{L}. \( \text{\text{Condition-#}} \) \( \text{START } \) \( \text{L}. \( \text{\text{Condition-#}} \) \( \text{START } \) \( \text{L}. \( \text{Condition-#} \) \( \text{START } \) \( \text{L}. \( \text{Condition-#} \) \( \text{START } \) \( \text{L}. \( \text{Condition-#} \) \( \text{START } \) \( \text{L}. \( \text{Condition-#} \) \( \text{START } \) \( \text{L}. \( \text{Condition-#} \) \( \text{START } \) \( \text{L}. \( \text{Condition-#} \) \( \text{START } \) \( \text{L}. \( \text{Condition-#} \) \( \text{START } \) \( \text{L}. \( \text{Condition-#} \) \( \text{START } \) \( \text{L}. \( \text{Condition-#} \) \( \text{START } \) \( \text{L}. \( \text{Condition-#} \) \( Condi	11ME: AT <u>41 ° 46 ° 14 "</u> 1	:AM/PM	PHOTO ID: (Camera-Pic	C#) PB2400 /# 47 (WALL) GPS: (Unit ID)
			• .	= (Jib. (Jim. 1D)
B END LA	<u> </u>	LONG 1  1  1  1  1  1  1  1  1  1  1  1  1	1963" LMK	
IMPACTED BANK: REASON IN	ADEQUATE: 🗹 Lack of	f vegetation To	o narrow Widespread inv	vasive plants
LT RT Both	Recentl	y planted 🔽 Oth	ier: erosion, parking	lors, TRACL, Retaining us
LAND USE: Private  (Facing downstream) LT Bank		urse Park O □ □	ther Public	~
RT Bank			□:	
DOMINANT Paved	Bare ground Turf/la		Shrub/scrub Trees	Other
LAND COVER: LT Bank				<u></u> :
RT Bank				□:
INVASIVE PLANTS: None	Rare 🔼	Partial coverage	Extensive coverage	unknown
STREAM SHADE PROVIDED? Non	e 🗓 Partial 📗	Full WETL	ANDS PRESENT? No	☐ Yes ☐ Unknown
POTENTIAL RESTORATION CANDIDA	TE Active reforestat	ion 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 difference presently used for a sponty of purpose; available are	hat is land where road; building pecific encroachment or other
Width (ft):		5	4 (3)	2 1
POTENTIAL CONFLICTS WITH REFOR		idespread invasive vere animal impac		nination
NOTES: O PARKING LOT  O RIP-RAP ON  O MINOR ELE  O MOUNT LAN	1 banks (poor	e wildlife banks)		ps mark
G MOWN (NV		-008c &P 16	wec	
		·	:	

WATERSHED/SUBSHED: NO	DATE: 11 124 109   ASSESSED BY: CM 1869							
SURVEY REACH ID: 6	TIME::AM/PM	<b>РНОТО ID:</b> (Camera-Pio	:#) None /#					
SITE ID (Condition-#): OTA	LAT 41 . 46 1037 "LO	ong 72 · 42 · 18 "	LMK	GPS: (Unit ID)				
BANK: TYPE:  LT RT Head  FLOW: Trickle	MATERIAL:	SHAPE: Single Circular Double Elliptical Triple Other:	DIMENSIONS: Diameter: 29	SUBMERGED:  No in) Partially Fully				
☐ Moderate       ☐ Substantial     ☐ Open       ☐ Other:     channel	☐ Concrete ☐ Earthen☐ Other:	☐ Parabolic W	epth: (in idth (Top): (in (Bottom): (in	NOT APPASCABLE				
CONDITION:  None  Chip/Cracked  Sewage	☐ None ☐ Oily	VEGGIE DENSITY:  None Normal Inhibited	Brown Or					
☐ Peeling Paint ☐ Rancid/S ☐ Corrosion ☐ Sulfide ☐ Other: ☐ Other:	Paint Other:	Excessive Other:	POOL QUALITY: Good Godors Suds Algae Other:	s □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 Excess Trash (paper/plastic bags) Dumping (bulk) Excessive Sedimentation  OTHER ONCERNS: Needs Regular Maintenance Bank Erosion Other:								
POTENTIAL RESTORATION CANDI	POTENTIAL RESTORATION CANDIDATE ☐ Discharge investigation ☐ Stream daylighting ☐ Local stream repair/outfall stabilization ☐ no ☐ Storm water retrofit ☐ Other:							
If yes for daylighting:								
If yes for stormwater:  Is stormwater currently controlled?  ☐ Yes ☐ No ☐ Not investigated	Is stormwater currently controlled?  Land Use description:							
SEVERITY: strong smeil. The amount of discharge is significant compared to the amount of normal flow in receiving discharge or the property to be beginned as the property of		charge has a color and/or odor, the amount of charge is very small compared to the stream's base wand any impact appears to be minor / localized.  Outfall does not have of discharge; staining; or of causing any erosion						
	5 4	3	2	1				
sketch/Notes: Rip-Rap (+ possible snow)	SKETCH/NOTES: Rip-RAP SURfainding Pipe, Also leab dumping here (+ possible snowing + salt inputs).							
		· 	REPORTED TO AUTHO	ORITIES: YES NO				



WATERSHED/SUBSHED: NBP		DATE: 11 / 24 / 09 ASSESSED BY: CM/BG				
SURVEY REACH ID: 6	TIME::AM/PM	PHOTO ID: (Camera-Pic #)	PB0400 # 43			
SITE ID (Condition-#): OT- 8		ong <u>612° 42' 138"</u>	LMK GPS: (Unit ID)			
BANK: TYPE:  LT RT Head  FLOW: Closed pipe	MATERIAL:  Concrete Metal  PVC/Plastic Brick  Other:	Circular Double	DIMENSIONS:  SUBMERGED:  No VOTE  Diameter: (in) Partially  Fully			
Moderate Substantial Open channel	Concrete Earthen Other:					
CONDITION:  ☐ None ☐ Chip/Cracked ☐ Peeling Paint ☐ Corrosion ☐ Other: ☐ Other: ☐ ODOR: ☑ None ☐ Gas ☐ Rancid/So ☐ Rancid/So ☐ Other: ☐ Other:	⊠ None □Oily	None Normal Inhibited Excessive Other:	Pre Benthic Growth: None   Brown			
FOR COLOR: Clear Brown Grey Yellow Green Orange Red Other:  FLOWING TURBIDITY: None Slight Cloudiness Cloudy Opaque  FLOATABLES: None Sewage (toilet paper, etc.) Petroleum (oil sheen)  OTHER CONCERNS: Needs Regular Maintenance Bank Erosion Other:						
POTENTIAL RESTORATION CANDID	ATE Discharge investigation		ocal stream repair/outfall stabilization			
no	Storm water retrofit	Other:	·			
If yes for daylighting: Length of vegetative cover from outfall	ft Type of exis	sting vegetation:	Slope:°			
If yes for stormwater:  Is stormwater currently controlled?  ☐ Yes ☐ No ☐ Not investigated	Land Use de Area availab		· 			
SEVERITY: strong smell. The amo	unt of discharge is significant at the formal flow in receiving ears to be having a	discharge; flow mostly clear and odorle rge has a color and/or odor, the amount rge is very small compared to the strear and any impact appears to be minor / loca	of discharge; staining; or appearance of causing any erosion problems			
	5 4	<u> </u>	2 1			
SKETCH/NOTES: The Pip	e is Juthing out	from bank	NIO', possible			
evidence of by	tule erosion a	renaunal wic	dening?			
evidence of by another pipe included to	a us with,	s Arme Chara o admicy.	faistics is			
			ORTED TO AUTHORITIES: YES NO			

$\Lambda$ T	
$\mathbf{O}\mathbf{I}$	

WATERSHED/SUBSHED: NBP		DATE: 11 / 24 / 09 ASSESSED BY: BG/CM			
SURVEY REACH ID: \	TIME: :AM/PM	PHOTO ID: (Camera-Pi	c#) have /#		
SITE ID (Condition-#): OT-	LAT 41 0 461 12.9" LO	on <del>c/2                                    </del>		GPS: (Unit ID)	
BANK: TYPE:  LT RT Head  FLOW: pipe  None Trickle	MATERIAL: Concrete Metal PVC/Plastic Brick Other:	SHAPE: Single Circular Double Elliptical Triple Other:	DIMENSIONS:  Diameter: (in)	SUBMERGED: No Partially Fully	
	Concrete Earthen Other:	Parabolic W	epth: (in) //idth (Top): (in) / (Bottom): (in)	NOT APPENCABLE	
CONDITION:  Chip/Cracked  Peeling Paint  Corrosion  Other:  ODOR:  Gas  Sewage  Rancide  Sulfide  Other:	None Oily Sour Flow Line	VEGGIE DENSITY:  None Normal Inhibited Excessive Other:	PIPE BENTHIC GRO Brown Orang Other:  POOL QUALITY: Some Orang Odors Suds Algae Other:	e ☐ 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:					
POTENTIAL RESTORATION CAND	<u></u>		Local stream repair/o	outfall stabilization	
If yes for daylighting:	Storm water retrofit	Other:			
Length of vegetative cover from outf	all:ft Type of exis	ting vegetation:	Slope: _	<u> </u>	
If yes for stormwater:  Is stormwater currently controlled?  ☐ Yes ☐ No ☐ Not investigated	Land Use de Area availab	-			
SEVERITY: strong smell. The a compared to the an	discharge is significant of normal flow in receiving a pipears to be having a pownstream.	discharge; flow mostly clear and or rge has a color and/or odor, the an rge is very small compared to the s id any impact appears to be minor	nount of stream's base / localized.	not have dry weather taining; or appearance ny erosion problems.	
SKETCH/NOTES: A. A. C.O.A.	5 4	3	. 2	1	
1tan 4 an	At to parking	LOT,			
		F	REPORTED TO AUTHORIT	TES: YES NO	

$\Lambda$	Г
$\mathbf{U}_{\mathbf{I}}$	L

WATERSHED/SUBSHED: NBP			DATE: 11 / 24 / CM ASSESSED BY: BG / CM			
SURVEY REACH ID:	6 Tu	ME:;AM/PM	РНОТО ID: (Camera-Pic#) РВ24 00 /# 446			
SITE ID (Condition=#): O	LA	т <u>41°46 · 17                                   </u>	LONG 10 . 42 . 10 " LMK GPS: (Unit ID)			
BANK:  LT RT Head  FLOW:  None Trickle	TYPE: Closed pipe	MATERIAL:  ☐ Concrete Met ☐ PVC/Plastic ☐ Brid ☐ Other:	~ ~ ~ ~ ~ ~ ~ ~ ~			
Moderate Substantial Other:	Open channel	Concrete Earth	Trapezoid   Depth:(in)   NOT APPECABLE     Other:   (Bottom):(in)			
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:   PIPE BENTHIC GROWTH:			
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:						
DOTENTIAL DECTROPATE	ION CANDIDATI	7 Disabanca investiga	tion Comment destriction			
no	ION CANDIDATE	Storm water retrofit	ation Stream daylighting Local stream repair/outfall stabilization  Other:			
If yes for daylighting:		Brown water reactive				
Length of vegetative cover	from outfall:	ft Type of e	xisting vegetation:o			
If yes for stormwater:  Is stormwater currently controlled?  Land Use description:  Yes \[ \] No \[ \] Not investigated  Area available:						
SEVERITY: strong comp stream		f discharge is significant normal flow in receiving to be having a	all discharge; flow mostly clear and odorless. If the charge has a color and/or odor, the amount of charge is very small compared to the stream's base v and any impact appears to be minor / localized.  Outfall does not have dry weather discharge; staining; or appearance of causing any erosion problems.			
	5	4	3 (2) 1			
SKETCH/NOTES: Se	wer?					
			Reported to authorities: \( \square\) yes \( \square\) no			



WATERSHED/SUBSHE	D: NEP		DATE: 194/9 ASSESSED BY: CM/86			
SURVEY REACH ID:	\6 Tı	ME::AM/PM	Рното ID: (Camera-Pi	ic#) Nave /#		
SITE ID (Condition-#): C	M-E LA	1741 <u>· 46 · 8.9</u> "I	ONG 10 0 40 11.3	' LMK	GPS: (Unit ID)	
BANK: SLT RT Head FLOW: None Trickle	TYPE: Closed pipe	MATERIAL:  ☐ Concrete		DIMENSIONS: Diameter: 36 "	SUBMERGED: No in) Partially Fully	
Moderate Substantial Other:	Open channel	Concrete Earthen Other:	Parabolic W	cepth:         (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 G  Brown Or Other:  POOL QUALITY: Good Odors Suds Algae Other:	☐ No pool ☐ Colors ☐ Oils	
FOR COLOR: Clear Brown Grey Yellow Green Orange Red Other:  FLOWING TURBIDITY: None Slight Cloudiness Gloudy Opaque  FLOWING FLOATABLES: None Sewage (toilet paper, etc.) Petroleum (oil sheen)  OTHER Excess Trash (paper/plastic bags) Dumping (bulk) Excessive Sedimentation  CONCERNS: Needs Regular Maintenance Bank Erosion Other:  POTENTIAL RESTORATION CANDIDATE Discharge investigation Stream daylighting Local stream repair/outfall stabilization						
□no		Storm water retrofit	Other:			
If yes for daylighting:						
	er from outfall:	ft Type of exi	sting vegetation:	Slope	e:°	
If yes for stormwater:  Is stormwater currently controlled?  Land Use description:  Yes No No tinvestigated  Area available:						
SEVERITY: strc cor stre	npared to the amount of eam, discharge appears	of discharge is significant discharge in ormal flow in receiving to be having a	discharge; flow mostly clear and o arge has a color and/or odor, the ar arge is very small compared to the and any impact appears to be minor	nount of discharg of causii	loes not have dry weather le; staining; or appearance ng any erosion problems.	
G	5	4	3	2	1	
SKETCH/NOTES: N A CONCLER Server?	letal pipe box cul	vent. Coming	n end that i	s AyAR + by lot AR	ea, Assible	
			ı	REPORTED TO AUTHO	RITIES: YES NO	

Stream Crossing

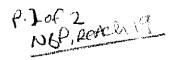
SC

WATERSHED	/SUBSHED: NEP				124109		SSED BY: CM /B6	
SURVEY REA					: (Camera-Pic			
SITE ID: (Con		41 0 46 04,	<u>7" Long<i>0</i>73</u>	<u>42 -</u>	13.6" LI	мк	GPS (Unit ID)	
	- Svert				C 1 ' 15		Other	
TYPE: X Roa	ad Crossing Railroad Crossi			I	MENT:		ONS: (if variable, sketch)	
	SHAPE:  Bottomless	#BARRELS: ☐ Single	MATERIAL:  Concrete		w-aligned	Barrel dia	.,	
'	Box Elliptical	Double	Metal		flow-aligned		Height:(ft)	
FOR ROAD/	Circular Other:	Triple Other: 5	Other:	□ Do	not know			
RAILROAD CROSSINGS		none	<u> </u>	CULV	ERT SLOPE:	Culvert le	ngth:(ft)	
ONLY	CONDITION: (Evidence of)  Cracking/chipping/corrosio	·	n scour hole	☐ Fla	t		Width:(ft)	
	Sediment deposition	· Failing emb			ght (2° – 5°)			
	Other (describe):			U 06	vious (>5°)	Roadway	elevation:(ft)	
	Daniel Carlon Carlon		emoval Culver	t rongir/ro	alacement 🔲	Instream st	orage retrofit	
1	RESTORATION CANDIDATE	<del></del>	repair Other:		nacement [	opsu cum se	Orago ronom	
Ø no	C. L. Co. LDT CO. WIDO!	·						
IS SC ACTIN	G AS GRADE CONTROL		es 🔲 Clikilo		CKAGE SEVE	RITY: (circ	le #)	
1	EXTENT OF PHYSICAL BLO						A temporary barrier such as a	
	Temporary Unkno	wn	A structure such as road culvert on a 3rd		A total fish block tributary that wo	uld isolate a	beaver dam or a blockage at	
If yes for	CAUSE:		greater stream block upstream movemen	~	significant reach or partial blockag		the very head of a stream with very little viable fish habitat	
fish barrier	Drop too high Water D	Orop:(in)	anadromous fish; no	fish	interfere with the	fere with the migration of above it; natural barriers such as waterfalls.		
14.	☐ Flow too shallow Water I☐ Other:	Depth: (in)	passage device pre			•		
N /G	U Other:		5		4 3	<u> </u>	2 1	
NOTES/SKE	TCH: this mar! ) + the south	es the a	downstre	AM	(Stand	1 36	reach	
(1100)	I also a construction	30 1 2 2 A 350	. سده ه	~ ~	lale Ac	Sessme	<del>al</del>	
(NGP	1 & Ash Property	COFF COFF	י רמיסק י		Andrian array	et amo		
İ								
ri.								
							WHO DIFFER TO VES TO NO.	
					REPO	RTED TO AU	JTHORITIES 🗌 YES 📗 NO	

NBP REACH T



SURVEY REACH ID: 19 WTRSHI	D/SUBSHD: NBF	)	DATE: 1/23	ASSE	SSED BY: 169
START TIME: 8:21 (AN)/PM	LMK:	_	1:25 (PM)PM	LMK:	GPS ID:
LAT4] . 48 . 18 " LONG 172.	42 . 24 "	LAT41° 48'	24 " Long 9	J. 42. 2	生" (2017)
DESCRIPTION: Culvert 2 ROAd		DESCRIPTION: Ex	manua del	postulation	
Colinor of the	Crossing		MIN TO BASE OF IN	DRIVEN	JAY /GERM/CUI
RAIN IN LAST 24 HOURS  Heavy rain	Steady rain	PRESENT CONDITIONS	B ☐ Heavy rain	☐ Steady rain	<b>⊡</b> Intermittent
None 🗆 Intermittent	Trace [	☐ Clear	Trace	☐ Overcast	☐ Partly cloudy
SURROUNDING LAND USE:		♣Urban/Residential  □ Crop	☐ Suburban/Res ☐ Pasture	☐ Forested ☐ Other:	
AVERAGE CONDITIONS (check ap	pplicable)	REACH	SKETCH AND SIT	ГЕ ІМРАСТ ТЕ	RACKING
BASE FLOW AS % 0-25%	□ 50%-75%	Simple planar sketch	of survey reach. Tra	ck locations and	IDs for all site impacts
CHANNEL WIDTH □25-50 %	<b>≰</b> 3.75-100%	within the survey r feature	each (OT, ER, IB,SC, s deemed appropriate.	UI, IR, MI) as w Indicate direction	
DOMINANT SUBSTRATE		•			on of flow
Silt/clay (fine or slick)	e (2.5 –10")	Environn			
☐ Sand (gritty) ☐ Bould ☐ Gravel (0.1-2.5") ☐ Bed ro		Restora	10°7 \		
☐ Gravel (0.1-2.5") ☐ Bed re		DIM Par	127		
WATER CLARITY  Celear  Turbid (su		Γ	1 /xV		
☐ Stained (clear, naturally colored) ☐ Opt	aque (milky)		Olivers	,	
Other (chemicals, dyes)					(2E)7M
AQUATIC PLANTS Attached:  none				$-\int \mathcal{N}_{\alpha}$	WEG LEN IN
IN STREAM Floating: A none	some 🗆 lots		Oure	- / / ->1	TEEL COLVERT
WILDLIFE IN OR (Evidence of)	Прож		ENDOED	211	
AROUND STREAM ☐ Fish ☐ Beaver ☐ Snails	Deer	i	culvent	7 \	
⊠ Mostly shaded (≥75			SIMM	1 1	
STREAM SHADING Halfway (≥50%)	o vo co verage)		water		
(water surface) ☐ Partially shaded (≥			,	$\neg$ $\square$	
☐ Unshaded (< 25%)	·		्र १	111 =	(vol:
CHANNEL Downcutting	Bed scour	/ . /	thing		1
DYNAMICS Widening Headcutting	Bank failure Bank scour	///	tolesto	1 83	- thin
Aggrading	Slope failure		cher	1/75	forested
Unknown Sed. deposition	Channelized		4	11	terffér
Height: LT bank	30 // (ft)	]		11	*
CHANNEL	(ft)	\ \		11	
DIMENSIONS RT bank	(ft)(ft)	~ 1//		11	
DOWNSTREAM)	()	') /'/			
Top _	(ft)	(N)	CONCRETE E	Re	cent excavation,
REACH ACCESSIBILITY Fair: Forested or Diff	fficult. Must cross	income /	Black	K \	imparated bank
Good: Open area in developed area we	etland, steep slope, or	1 (500)	1	1 58	open (no camp
sufficient room to adjacent to stream.	nsitive areas to get to eam. Few areas to	* /		04	culvot
stockpile materials, removal or impact to sto	ockpile available	1	-		
access for heavy landscaped areas. an	id/or located a great stance from stream.		\ \		
equipment using small or distant from Sp	ecialized heavy			, ,OA-A1-	
Sueam. eq	uipment required.	-	' <b>}                                   </b>	C PARK-	<b>&gt;</b>
NOTES: (biggest problem you see in survey rea	<u>rch)</u> ,	<u> </u>		<u> </u>	1,
Impacted bank of s	sixthen e	war upstream	m of, conjudi	r we	Mackakomina
turner that carrier	- water	damstre	AM MUST	be ve	my Img - 1
NOTES: (biggest problem you see in survey real MPAZED LOANK DS turned that CARRIED it is not located a street on it is	on the oth	ur side of	the Repo	RTED TO AUTHO	ORITIES YES NO
5 troot - or it	s closed		,		
ا المراجعة المراجعة المراجعة المراجعة المراجعة المراجعة المراجعة المراجعة المراجعة المراجعة المراجعة المراجعة					



		OVERALL STREAM CONDI	TION	
	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 (1)	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	<b>(3)</b> 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	8 7 6	<b>3</b> 4 3	2 1 0
	Right Bank 10 9	8 🔿 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 🗘	10 9 8 7 6	5 4 3 2 1 0
	OVER	ALL BUFFER AND FLOODPLAI	IN CONDITION	
	Optimal	Suboptimal	Marginal	Poor
VEGETATED BUFFER WIDTH Width of buffer zone >50 feet; human activities (l.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	<b>5</b> 4 3	2 1 0
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	2 I 0  Predominant floodplain vegetation type is turf or crop land
	20 19 18 17 16	15 14 🕦 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	Ever 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
Et coppy And	No evidence of floodplain encroachment in the form of fill	Minor floodplain encroachment in the form of fill material, land	Moderate floodplain encroachment in the form of filling, land development, or	Significant floodplain encroachment (i.e. fill material, land development, or man-made
FLOODPLAIN ENCROACH- MENT	material, land development, or manmade structures  20 19 18 17 16	development, or manmade structures, but not effecting floodplain function  14 13 12 11	manmade structures, some effect on floodplain function	structures). Significant effect on floodplain function  5 4 3 2 1 0

WATERSHEI	SUBSHED: N						17310		ESSED BY: CM/86
SURVEY REA	· · · · · · · · · · · · · · · · · · ·	TIM	Œ: <u>∦:∂</u> ≤	_ <b>40</b> 2/PM	Рнс	то ІД	: (Camera-P	ic #) PBI3	00 # 01 +02
SITE ID: (Con	ndition#) SC- <u>[}</u>	LAT 41 °	48 . 18	_" Long <u>7</u>	<u>)</u>	42	<i>3</i> 4 " I	LMK	GPS (Unit ID)
TYPE: K Ro	TYPE: Road Crossing Railroad Crossing Manmade Dam Beaver Dam Geological Formation Other:								
FOR ROAD/ RAILROAD	SHAPE:  Arch Botto Box Ellipt Circular Other:	mless # BA	ARRELS: Single Double Triple Other:	MATERIAL: Concrete Metal Other:		ALIGN Flo	NMENT: ow-aligned t flow-aligned not know	DIMENS Barrel dia	SIONS: (if variable, sketch) ameter:(ft) Height:(ft)
CROSSINGS ONLY	CONDITION: (Evidence of)  Cracking/chipping/corrosion  Sediment deposition  Other (describe): Rip-Rap, fill, Recent exception			n scour hole ankment assi U.C. Flood	Flat			Culvert length:(ft)  Width:(ft)  Roadway elevation:(ft)	
по	RESTORATION CANDI	<b>⊠</b> L		emoval 🔀 Culv repair 🔼 Othe				- I -	torage retrofit -CAN it be Sho
Is SC ACTIN	G AS GRADE CONTRO			es 🛭 Unk	nown				
If yes for fish barrier	fish barrier  CAUSE:  Drop too high Water Drop:(in)  Flow too shallow Water Depth:(in)  Other:  OCHORN  CAUSE:  Upstream movement of anadromous fish; no fish passage device present.  Upstream movement of anadromous fish, no fish passage device present.  Or partial blockage that may interfere with the migration of anadromous fish.  Very little viable fish habitat above it; natural barriers such as waterfalls.								
NOTES/SKET	сн:						,		
NOTES/SKETCH:  REACH 19 (NBP) flows 1 nto this box culvert but "  it is unclear how far the stream must travel  underground - no autlet was observed and there is  an athletic field at the other side of the street.  At the box culvert inlet there appears to be  evidence as recent excavation - possibly from an  emergency from event (?) there is RII, Rip-RAP, t  evidence of a recent unshout under the rand  (see photo#01+00).									
									·
	· ·						REPO	RTED TO AU	THORITIES  YES NO

C	
3	

WATERSHEI	D/SUBSHED: NB/				DATE: ]	103107		SED BY: CM	1/66
SURVEY REA	ACH ID:	Tim		(A)M/PM		): (Camera-Pi	: #) PB23		
SITE ID: (Co	ndition#) SCB	LAT 41°	48 - 24	<u>  " Long 7</u>	1 · 42 ·	<u> ЭЧ "</u> L	MK	GPS (Unit I	(D)
	FARM _								
TYPE: Re			Manmade Dam Beaver Dam Geological Formati			1	IMENSIONS: (if variable, sketch)		
	SHAPE:	l	ARRELS: Single	MATERIAL:		NMENT: ow-aligned	Barrel dian		(ft)
i	Box Elliptical		Double	Metal		ot flow-aligned		Height:	(ft)
FOR ROAD/	Circular		Triple	Otherape	ארן <u> </u> דען   דען	not know	•		(/
RAILROAD	Other:		Other:	botte		/EDT CLOBE:	Culvert ler	ngth:	(ft)
ONLY	CONDITION: (Evide		Doumetroor	m scour hole		/ERT SLOPE: at	,	Width:	(ft)
	Cracking/chipping Sediment deposit		Failing emb		1	ight $(2^{\circ} - 5^{\circ})$			
	Other (describe):					ovious (>5°)	Roadway 6	elevation:	(ft)
				. = .		. —			
<u> </u>	RESTORATION CANI	OIDATE ∐ F	ish barrier r	emoval 🛭 Culv repair 📮 Oth	ert repair/re	placement $\square$	Upstream sto	rage retront  / better S	bemun
no	· · · · · · · · · · · · · · · · · · ·					ment ke	2MIDNAY	1 MAN	mzem
IS SC ACTIN	G AS GRADE CONTR	OL N	lo 🗆 Y	es 🖾 Unk		COLL OF CHIEF	marra ( ) I	- 41	
	EXTENT OF PHYSI	CAL BLOCKA Partial	GE:		BLO	OCKAGE SEVE	KITY: (circi	е # <u>)</u> ·	
1		Unknown		A structure such road culvert on a		A total fish block tributary that wo		A temporary barrie beaver dam or a bi	
If yes for	C. won-		greater s		ocking the	significant reach	ant reach of stream, the very he		stream with
fish barrier	CAUSE:  Drop too high	(in)	anadromous fish; no fish interfere w			ge that may   migration of	very little viable fish above it; natural ba		
	Flow too shallow					us fish. as waterfalls.			
7	Other:					4 3		2 1	
NOTES/SKE	TCH: the st	REAM (	ASSES	thou	yen 4	uis a	ulvert	under	.
	,,,,		1 4	Dagara	المده	11 : 6	20	and	
A \	perm- pos	sibly A	N DIO	THOM	KONTO		1 6 1	7000	
cen	perm- pos dition of n starm	her H	JAN	high s	edime	int lop	els – (	likely	
1,00	n storm	unter	inpu	ts.					
G.G.	3,0,2,0,								l
		4							
								ł	
								•	
					_	REPO	RTED TO AU	THORITIES Y	'es 🔲 No

#### Channel Modification



WAIEKSHED/SU	JBSHED:	NBP			DATE: 11 / 2	3/07	ASSESSED BY: CM/B6
SURVEY REACH	ı ID:	19	TIME: 8	32_AMPM	Рното II	D: (Camera-Pic #)	100 # 002
SITE ID: (Conditi	lon-#)	START LAT	<u>• 48 · 18 "</u>	LONG	<u> </u>	LMK Sta	GPS: (Unit ID)
CM		END LATE		Long	0 1 11	LMK	- '
80.503/h07/04-1-1-76:1986-9C							
TYPE: Chanr	nelization	Bank annoring	concrete c	hannel 🔼 F	loodplain encroach	ment Other:	
MATERIAL:		Does channel ha	ve perennial f	low?	Yes 🗌 No	DIMENSIONS:	
☐ Concrete ☐		Is there evidence	of sediment	deposition?	XYes ☐ No	Height Bottom Width	
<del>-</del> –	Earthen	Is vegetation gro	wing in chan	nel?	Yes No	Top Width:	(ft)
☐ Metal ☐ Other:		Is channel conne	<u>-</u>		Yes No	Length:	(fi)
BASE FLOW CH		,			ADJACENT ST	REAM CORRIDO	R
Depth of flow _	• •	(in)			Available widt	h LT	(ft) RT(ft)
Defined low flo	w channel	l? 🗌 Yes 🔲 No			Utilities Presen	nt? MY.	Fill in floodplain?
% of channel bo	ottom	%			Yes ☐ No		<b>K</b> Yes □ No
POTENTIAL RE	STORATIO	ON CANDIDATE	Structural re	ераіг ПВа	se flow channel cre	eation 🐼 Natural	channel design
no	DI OICITI			•	sh barrier removal	Bioengi	
	A long section	of concrete stream (>50	)0')		but channel stabilized a		nannel less than 100 ft with good water
CHANNEL	channel when	e water is very shallow (< natural sediments prese	to beginning t	to function as a na	atural stream channel.	uepui, a natui	ral sediment bottom, and size and to the unchannelized stream reaches
SEVERITY:	deep) with no the channel.	natural sediments prese	"" Vegetated	bars may have for	rmed in channel.		low impacted area.
(Circle #)		5	4	3		2	(1)

### Storm Water Outfalls

**OT** 

WATERSHED/SUBSHED: N	&₽ 	DATE: 11/23/09   ASSESSED BY: CM/BG				
SURVEY REACH ID:	TIME: 1 : 05 @/PM	<b>РНОТО ID:</b> (Сатега-Ріс #) /#				
SITE ID (Condition #): OT-	LAT41 . 48 . 24 "Le	DNG #20 4 2-125 " I	MK GPS: (Unit ID)			
BANK: TYPE:  LT RT Head  Close	MATERIAL:  Concrete Metal	☐ Circular ☐ Double	MENSIONS: SUBMERGED:  No uneter: (in) Partially			
FLOW: pipe None Trickle	d	☑ Elliptical ☐ Triple Dia ☐ Other:	Fully			
Moderate   □ Open   Chann	Concrete Earthen	☐ Trapezoid Depth: ☐ Parabolic Width (* ☐ Other: " (Bott	3, 2 1 NOT APPECABLE om): (in)			
CONDITION: Solve   Gas   Sewa   Sewa   Sewa   Chip/Cracked   Sewa   Sanci   Corrosion   Sulfic   Other:	y None ge Qily 56 Yr.  If I Flow Line Paint	None         □ Excessive           □ Other:         □ Other	BENTHIC GROWTH: None Brown    Orange    Green Other:  DL QUALITY:  No pool Good    Odors    Colors    Oils Buds    Algae    Floatables Other:			
	None Sewage (tollet paper, paper/plastic bags)	☐ Cloudy ☐ Opaque  etc.) ☐ Petroleum (oil sh g (bulk) ☐ Excessive Sedir	ge Red Other:  seen) Rother: SCUM  nentation  AP~ 10' diam Rock			
POTENTIAL RESTORATION CAN	DIDATE Discharge investigation  Storm water retrofit	on  Stream daylighting Lo Other:	cal stream repair/outfall stabilization			
If yes for daylighting: Length of vegetative cover from ou			Slope:°			
If yes for stormwater:  Is stormwater currently controlled?  ☐ Yes ☐ No ☐ Not investigate	Land Use de d Area availab		. <u></u>			
SEVERITY: strong smell. The compared to the	discharge is significant and discharge appears to be having a downstream.	discharge; flow mostly clear and odorless rge has a color and/or odor, the amount o rge is very small compared to the stream's nd any impact appears to be minor / localiz	discharge; staining; or appearance of causing any erosion problems.			
SKETCH/NOTES:	5 4		2 1			
SKEICH/INGLES:						
		REPOR	RTED TO AUTHORITIES: 🗌 YES 🗎 NO			

P.1002 Fyb, feach 1

### Reach Level Assessment



<b>)</b>	SURVEY REACH I	DD:	WTRSHD/SUBSHD: Fy	S	DATE: 1 / 30	<u> /0</u> 91   45°	SESSED BY:	
	START TIM	E: 7 : 55 0	D/PM LMK;	END TIME: 10	30 DI/PM	LMK:		PS ID:
	LAT 41 . 49 .		vc 72 ° 43 ' 41 "	LAT41 0 49 1	12 " LONG 7	2.43.5	70 "	au l
	DESCRIPTION: R		icks/culvet	DESCRIPTION: Le				·
		hiras Ace	ICAZICNIA DAI	Ne.	M PASS			
	RAIN IN LAST 24 HO	OURS  Heavy	rain   Steady rain	PRESENT CONDITIONS	☐ Heavy rain	☐ Steady ra	in 🕰 Intermit	tent
	None	☐ Intermi	•	☐ Clear	☐ Trace	☐ Overcast		1
	SURROUNDING LAN	D USE: 🗆 Indu	strial   Commercial	☐ Urban/Residential	☐ Suburban/Res	☐ Forested	<b>S</b> Institution	onal
		☐ Golf	f course Park	☐ Crop	☐ Pasture	⊠Other: P	WEIL TO	rechast R+V
	AVERAGE	CONDITIONS	(check applicable)	REACH	SKETCH AND SI	ге Імраст Т	RACKING	<u> </u>
	BASE FLOW AS %	□ 0-25%	□ 50%-75%	Simple planar sketch o	of survey reach. Tra	ck locations and	l IDs for all site	impacts
	CHANNEL WIDTH	□25-50 %	<b>₺</b> 75-100%	within the survey red features	icn (O1, EK, 1B,SC, deemed appropriate.			inonai
	DOMINANT SUBSTR  ✓ Silt/clay (fine or  ☐ Sand (gritty)  ☐ Gravel (0.1-2.5)	slick) [	□ Cobble (2.5 –10") □ Boulder (>10") □ Bed rock	1	MEU PAD			
		aturally colored) dyes)	urbid (suspended matter)  Opaque (milky)	DT TO	MER	umak		
	AQUATIC PLANTS IN STREAM	Floating: 🗖	none △ some □ lots none □ some □ lots		1	Hie	CHOOL	
	Wildlife in or Around Stream	☐ Snails ☐X	J VZ+ W	2	EMEADEN			
	STREAM SHADING (water surface)	☐ Mostly sha  ☐ Halfway (≥ ☐ Partially sh ☐ Unshaded (	aded (≥25%)		***		- CLEAN	ΞΛ,
	CHANNEL	☐ Downcutt☐ Widening	· ' -		*		MULCH	ES
	DYNAMICS	Headcuttii	ng 🔲 Bank scour		ta	NHT TO	NER	
	Unknown	☐ Aggrading ☐ Sed. depo			7	<b>)</b>	1410.	
	BANA	Height: LT b	ank 32 <sup>11</sup> (ft)	1	,	<b>136</b>	Noust	nac
	CHANNEL YVV	RTb				198,0,00	180	
	(FACING	Width: Botto	- 111 l.			EXP TO		
	DOWNSTREAM)	Top-	(ft)			K		\
	F	REACH ACCESSI		1		$\lambda$		
	Good: Open area in	Fair: Forested or	Difficult. Must cross	1		X	/1	7
	public ownership,	developed area adjacent to strear	wetland, steep slope, or sensitive areas to get to			$\chi$		İ
	sufficient room to stockpile materials,	Access requires t	ree stream. Few areas to			1	<b>(</b>	
	easy stream channel	removal or impaction				•	<b>)</b>	
	access for heavy equipment using	Stockpile areas	distance from stream.				1	
	existing roads or trails.	small or distant from stream.	om Specialized heavy equipment required.				<b>?</b> -	•
	5	4) 3	2 1	1			<u>^</u> ~	14
	NOTES: (biggest prof Vento ACCOVS Resol Rend	WHY SI	ome service	tours + v	has Arens	es t wi	re onte	y Mothy
		•			Repor	TED TO AUTHO	ORITIES   YE	s 🗆 No
							_	<del></del>

P.2-62 FYB, REARN!

	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.					
	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 is very high; vegetation is very high; vegetation one-half of the potential plant stubble height.						
	Left Bank 10 9	8 7 6	5 🐠 3	2 1 0					
	Right Bank 10 9	8 7 6	<b>3</b> 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	<b>8</b> 7 6	5 4 3	2 1 0					
	Right Bank 10 9	<b>8</b> 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  Width of buffer zone <10 feet: little or no riparian vegetation due to human activities.					
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.						
	Left Bank 10 9	8 7 6	5 4 3	2 1 0					
	Right Bank 10 9	8 7 6	5 🐴 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 🚳	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:       57 /80 + Buffer/Floodplain:       27 /80 = Total Survey Reach       80 /160									

#### Impacted Buffer

IB

		т		
WATERSHED/SUBSHED: FYB			DATE: <u>   /30 /09</u>	
URVEY REACH:		_: <u>58_</u> am/pm	Рното ID: (Camera-Pic	
	<u>чт 41°49'-28" і</u>	LONG 72 ° 43	<u>' 4</u> " LMK	GPS: (Unit ID)
B A END LA	<u>т°'" І</u>	LONG°	'" LMK	
1			_	
LT RT LBoth			o narrow ☐ Widespread inve er: P(p-PAp	asive plants
			her Public  B: RR TRACKS	L. Combleton
(Facing downstream) LT Bank			B: RR TRACK	
DOMINANT Paved	Bare ground Turf/lav	vn Tall grass		Other
LAND COVER: LT Bank		. <u> </u>		
RT Bank	<b>5</b> 4.			E: RA TRAX
Invasive Plants: None	Rare 🔀 🛭	artial coverage	☐ Extensive coverage [	unknown
STREAM SHADE PROVIDED? Non	e ≰Partial [	Full WETL	ANDS PRESENT? No	Yes Unknown
POTENTIAL RESTORATION CANDIDA	TE Active reforestat	ion <b>G</b> Greenway d	esign 🔀 Natural regeneration	on 🔀 Invasives removal
RESTORABLE AREA		Impacted area on put		
LT BANK RT	REFORESTATION	where the riparian are not appear to be used	1 ' '	1
Length (ft): 200' 200'	POTENTIAL: (Circle #)	specific purpose; pler area available for plai		for feature significantly limits available area for planting
Width (ft):	(	5	4) 3	2 1
BOTTONELLI COMPLICES WITH DEPON	ECTATION CIW	I <del></del>	<del></del>	
POTENTIAL CONFLICTS WITH REFOR ☐ Poor/unsafe access to site ☐ Existing			plants	mation Lack of sun
NOTES: RAIRANCE TO	eneks / Rip	-PAP C	tlang both b	Hella
for ~200'				
, ,				
				÷
				*
-				•
			•	
7				

WATERSHED/SUBSHED: FYG	· · · · · · · · · · · · · · · · · · ·		DATE	:11 130 100	Ass	SESSED BY	· CMA I	12
URVEY REACH:	TIME:	: AM/PM		o ID: (Camera-P				0
na wanana kata kata kata kata kata kata kata	··	Long 12 °4			,,,,	GPS: ((		-
		LONG 72 ° 4	<del></del>			1	ŕ	ŀ
Report 24 To 19 Control of the Contr	<u> </u>	DO:10 10.	<u> </u>					
IMPACTED BANK: REASON IN	NADEQUATE: Lack	of vegetation 🗆	Γοο narrow	✓   Widespread in	vasive	plants		
LT RT Both	Recent			munder input	<u>15 wi</u>	that c	AMORY C	<u> </u>
LAND USE: ? Private  (Facing downstream) LT Bank	Institutional Golf Co	ourse Park	Other Pub			•	(A to	and
RT Bank				_				
DOMINANT Paved	Bare ground Turf/la		s Shrub/s	scrub Trees	Other			$\neg$
LAND COVER: LT Bank	•			≅	□:			ŀ
RT Bank	· · · · · · · · · · · · · · · · · · ·		<u>_</u>	<u>⊠</u>	:	····		_
INVASIVE PLANTS: None	Rare 🔀	Partial coverage	☐ E>	tensive coverage	unl	known		
STREAM SHADE PROVIDED? No	one 🛭 Partial	☐ Full WE	TLANDS P	RESENT? 🗌 No	<i>'</i>	∕es ☐ Uni	known	
						<u> </u>		
POTENTIAL RESTORATION CANDID	<del>_</del>	ation UGreenwa	y design	Natural regenera	tion [_	] Invasives	removal	
Decrease Anna	Other:	T		Ι				$\dashv$
RESTORABLE AREA	REFORESTATION	Impacted area on where the ripariar		Impacted area on eith public or private land			rea on private road; building	
LT BANK RT Length (ft):	POTENTIAL:		not appear to be used for any specific purpose; plenty of purpose; available area for feature significantly					
A PARTICIPATION OF THE PARTICI	(Circle #)	area available for		planting adequate	54 101		ea for planting	. [
Width (ft):		5	C	3	. ,	2	1	$\Box$
POTENTIAL CONFLICTS WITH REFO				Potential contain Deaver) Deaver		n 🔲 Lacl	k of sun	
NOTES:								$\Box$
-> Recent cleans	n of res t	110295T	. 50	ears ws	be	iam 1	wid	,
down to kee	op seedlsoi	1. (vest	- BA	10				
+ No butter her				•				
to Many lann w	without vegety	atian in	RIPA	risin 2	we_	. + 10	w	
% Cares a CA	MAGEL (30%)	- lent B	Aul					
+ bield (both	banks wit	h stown	when	they is	ter	myli	_	
+ bield (both openssy smale	a - could in	onexse T	theu	use log	-\re			
<b>.</b>								ı

# Storm Water Outfalls



	WATERSHED/SUBSHEE	FYB		DATE: 1 /30 /09   ASSESSED BY: CM /66				
	SURVEY REACH ID:		IME: 9:55 AD/PM	PHOTO ID: (Camera-Pi	РНОТО ID: (Camera-Pic #) 149300 /# 03			
	SITE ID (Condition-#): O	r <u> </u>	AT 41 0 49 1 28 "1			GPS: (Unit ID)		
	BANK: TYPE:  LT RT Head  FLow: Closed pipe		MATERIAL:  ☐ Concrete  Meta ☐ PVC/Plastic ☐ Brick ☐ Other:		DIMENSIONS: Diameter: 5 (in)	SUBMERGED:  No Partially Fully		
	None Trickle Moderate Substantial Other:	Open channel	Concrete Earther	Trapezoid D	Depth:         (in)           Vidth (Top):         (in)           " (Bottom):         (in)	NOT APPECABLE		
	CONDITION: None Gas Chip/Cracked Peeling Paint Corrosion Other: Other: Odor:		DEPOSITS/STAINS:  None Oily Flow Line Paint Other:	VEGGIE DENSITY:  None Normal Inhibited Excessive Other:	PIPE BENTHIC GROWTH: None  ☐ Brown ☐ Orange ☐ Green ☐ Other:  POOL QUALITY: ☐ No pool ☐ Good ☐ Odors ☐ Colors ☐ Oils ☐ Suds ☐ Algae ☐ Floatables ☐ Other:			
Seed Street, And America, and Seed Street, S	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 Excess Trash (paper/plastic bags) Dumping (bulk) Excessive Sedimentation  CONCERNS: Needs Regular Maintenance Bank Erosion Other:							
ſ	POTENTIAL RESTORAT	TION CANDIDAT	TE ☐ Discharge investigat	ion Stream daylighting	Local stream repair/	outfall stabilization		
	If yes for daylighting: Length of vegetative cove	r from outfall:		isting vegetation:	Slope:	o		
	If yes for stormwater: Is stormwater currently co ☐ Yes ☐ No ☐ Not i		Land Use o Area availa	lescription:ble:				
	SEVERITY: stror com stres		of discharge is significant discharge in receiving s to be having a	Il discharge; flow mostly clear and on narge has a color and/or odor, the an narge is very small compared to the sand any impact appears to be minor	mount of discharge; stream's base	not have dry weather staining; or appearance any erosion problems.		
ŀ		5	. 4	3	2	1		
	SKETCH/NOTES: NE	ext to c	acker.	uch carrie	s street			
	)			. 1	Reported to authori	fies: □ yes □ no		

## Storm Water Outfalls



WATERSHED/SUBSHED:	FYB	DATE: 11 / 30 / 09   ASSESSED BY: CM 186				
SURVEY REACH ID:	TIME::AM/PM	PHOTO ID: (Camera-Pic #) Nove /#				
SITE ID (Condition-#): OT-	LAT <u>41 ° 49 ' 30 "</u>					
L L'I CAILLA	PE: MATERIAL:  Concrete Metric PVC/Plastic Bric Other:					
	Open Concrete Earthe	Trapezoid   Depth:(in)   NOT AP DESCABLE   Other:   (Bottom):(in)   NOT AP DESCABLE   Other:   (Bottom):(in)				
□ None         □ Chip/Cracked           □ Peeling Paint         □ R           □ Corrosion         □ S	OR: NO Gas Sewage Rancid/Sour Sulfide Other:  DEPOSITS/STAINS: OBPOSITS/STAINS: Plow Line Paint Other:	VEGGIE DENSITY:       PIPE BENTHIC GROWTH: ☐ None         ☐ None       ☐ Brown ☐ Orange ☐ Green         ☐ Other:       POOL QUALITY: ☐ No pool         ☐ Excessive       ☐ Good ☐ Odors ☐ Colors ☐ Oi         ☐ Other:       ☐ Suds ☐ Algae ☐ Floatables				
		Other:				
	None Slight Cloudiness Sewage (toilet pape	Cloudy Opaque				
l	gular Maintenance Bank I	Erosion Other:				
POTENTIAL RESTORATION		tion  Stream daylighting  Local stream repair/outfall stabilization  Other:				
If yes for daylighting: Length of vegetative cover from	m outfall:ft Type of ex	sisting vegetation:°				
If yes for stormwater:  Is stormwater currently controll  Yes No Not invest		description:able:				
SEVERITY: strong smel compared to stream; disc	to the amount of normal flow in receiving disc	Ill 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 dry weather discharge; staining; or appearance of causing any erosion problems.				
Commence	5 4	3 2 1				
SKETCH/NOTES: INSU	factent notes.					
	?					
	•					
		REPORTED TO AUTHORITIES: YES N				

WATERSHED/SUBSHED:	: FYB		DATE: 11 / 30 /	DATE: 11/30/09   ASSESSED BY: CM/B6				
SURVEY REACH ID: TIME:AM/PM				PHOTO ID: (Camera-Pic#) 149300 /# 07 +09				
SITE ID (Condition-#): OT	LA1	+ see welon	LONGº'	" LMK	GPS: (Unit ID)			
BANK: * See below	Түре:	MATERIAL:	SHAPE: Single		Submerged:			
LT RT Head  FLOW:	Closed pipe	Concrete M PVC/Plastic B Other:			rantany			
None Trickle Moderate Substantial	<b>Ø</b> Open	Concrete Example	Trapezoid	Depth: (in) Width (Top): (in)				
Other:	channel	□ Other: <b>GRASS</b> SWAK	Other:	" (Bottom): (in)				
CONDITION: None Chip/Cracked	ODOR: No Gas Sewage	DEPOSITS/STAINS:  ✓ None  Oily  Flow Line	☐ None ☐ Normal	PIPE BENTHIC GR Brown Ora Other:				
Peeling Paint Corrosion Other:	☐Rancid/Sour ☐ Sulfide ☐ Other:	Paint Other:	☐ Inhibited ☐ Excessive ☐ Other:	POOL QUALITY: Good Odors Suds Algae Other:	□Colors □Oils			
ELECTRIC PROPERTY OF THE PROPE			инирия разоранория а <u>сто</u> мирия астор		inaa.ngab.sananapaa.saanananan			
FLOWING TURBIDIT	22 24 25 25 25 25 25 25 25 25 25 25 25 25 25							
	s Trash (paper/plas		—	ive Sedimentation				
CONCERNS:     Needs	Regular Maintena	ince 🔲 Ban	nk Erosion					
POTENTIAL RESTORAT	ION CANDIDATE	☐ Discharge invest	igation Stream daylighting	g  Local stream repair	r/outfall stabilization			
no		Storm water retro	fit Other:					
If yes for daylighting: Length of vegetative cover	from outfall:	ft Type of	f existing vegetation:	Slope	:°			
If yes for stormwater:			•					
Is stormwater currently cor			se description:		_			
Yes No Not in		Area av	/ailable:					
SEVERITY: strong comp stream	y discharge with a distir g smell. The amount of ared to the amount of n m; discharge appears to icant impact downstreal	discharge is significant ormal flow in receiving be having a	Small discharge; flow mostly clear al discharge has a color and/or odor, the discharge is very small compared to flow and any impact appears to be m	e amount of discharge the stream's base of causing	es not have dry weather ; staining; or appearance g any erosion problems.			
	5	4	<u>(3)</u>	2	1			
SKETCH/NOTES: UNKNOWN   And USC? Several inputs through grassy swales could increase steems temperatures "40"/70"43'50"  41° 49' 42"/70'43'50", swale   Swale 41'49'39"/72" 43'47"  41° 49' 38'/70'43'46" swale   Pan  41° 49'37"/70'43'46" swale   41°49'39"/72" 43'47"								
	~~~~	5~ 5~	He/input 241°	19 '35 "/72°43' Reported to Author	44" rities: 🗆 yes 🔲 no			

WATERSHED	SUBSHED: FYB	- III		DATE: 11	<u>/ 30 /09</u>			CMIK	<u>55</u>
SURVEY REA			<b>Ø</b> I/PM	Рното II	: (Camera-Pi	c#) <b>/47 3</b>	<i>D</i> /#	<u>ශ</u>	
SITE ID: (Con	dition#) SC-A LAT	41 0 49 . 2	<u>8_" Long_</u>	<u>ع و لاع ا</u>	<u>4)</u> " L	MK	GPS	(Unit ID)	
					•				
TYPE: Ros	ad Crossing	ing Manmade	Dam Beav	er Dam 🔲	Geological Fon				
	SHAPE:	# BARRELS:	MATERIAL:	ALIG	NMENT:			riable, sketch	
	☐ Arch ☐ Bottomless ☐ Elliptical	Single Double	Concrete	we ☐ Fic	ow-aligned	Barrel diar	_		(ft)
FOR ROAD/	☐ Circular	Triple	☐ Metal 346	Deg 140	t flow-aligned not know	]	Height: _	(	(ft)
RAILROAD	Other: Cerrent botto	Other:	Oulci.		TIOL KIIOW	G 1 41		,	(0)
CROSSINGS ONLY	CONDITION: (Evidence of)				ERT SLOPE:	Culvert ler	ngth: Width:		(ft)
ONLI	Cracking/chipping/corrosio			Fla	ght (2° – 5°)	,	width: _	(	(ft)
	Sediment deposition	☐ Failing emb	ankment		vious (>5°)	Roadway e	elevation:		(ft)
	Other (describe):					Roadway			-(11)
POTENTIAL I	RESTORATION CANDIDATE	Fish barrier re	moval 🔲 Culv	ert repair/re	olacement 🔲 🛚	Upstream sto	orage retro	fit	
<b>™</b> no		Local stream		-		-	•		
IS SC ACTING	G AS GRADE CONTROL	□No □Y	es 🔲 Unk	nown					
	EXTENT OF PHYSICAL BLO	OCKAGE:		BLO	CKAGE SEVEI	RITY: (circle	e #)		
	☐ Total ☐ Partial		A structure such a	es a dam or	A total fish blocka	ene on a	A temporary	/ barrier such a	as a
If yes for	☐ Temporary ☐ Unkno	wn	road culvert on a	Brd order or tributary that would		ould isolate a beaver dam or a bloc		or a blockage	at
fish barrier	CAUSE:		greater stream ble upstream movem		significant reach of stream, or partial blockage that may		the very head of a stream with very little viable fish habitat		
,		rop:(in)	anadromous fish; passage device p	no fish	interfere with the anadromous fish.	migration of		tural barriers si	
	☐ Flow too shallow Water D☐ Other:	epth:(in)	passage device p	resent.	anauromous iisii.			s. 	
NOTES/SKET			5	•	1 3		2	1	
NOTES/SKET	Сн:								
			•						
								•	
	•								
1					Dance				Nic
	-				KEPOR	TED TO AUT	HORITIES	L YES L	INO

SC

WATERSHED	/SUBSHED:	FYB			DATE:	11/30/0	7 Asse	SSED BY:	cm/84
SURVEY REA		graduuri ja kara	TIME::	_AM/PM		ID: (Camera-P	ic#) <b>1493</b>	<i>୭</i> ୦ /#	06
SITE ID: (Con	dition=#) SC-	LAT	<u>41 · 49 · 3</u>	3" Long 1	<u>12° 43</u>	<u>142" I</u>	.MK	GPS	(Unit ID)
Type, [7] D.,		7 p.::	🗆 \( \tau_{\text{1}}	D [] D	D	Code de la Code		l 041	
TYPE: (X) KOZ	SHAPE:	_ Railroad Crossi	mg Manmade #BARRELS:	MATERIAL:		☐ Geological Fo			riable, sketch) 🚜
	Arch	□Bottomless	₩ BARRELS.	☐ Concrete	t	Flow-aligned	Barrel dia		(ft)
FOR ROAD/ Box Scircular		☐ Elliptical	☐ Double	Metal		Not flow-aligned		Height: _	(ft)
RAILROAD	Other:		☐ Triple ☑ Other:	Other:		Do not know			
CROSSINGS	CONDITION	: (Evidence of)			Cu	LVERT SLOPE:	Culvert le	-	(ft)
ONLY		chipping/corrosion				Flat Slight $(2^{\circ} - 5^{\circ})$		Width: _	(ft)
	☐ Sediment☐ Other (de.	•	☐ Failing emb	ankment		Obvious ( $>5^\circ$ )	Roadway	elevation:_	(ft)
	U Other (ae.	scribe).					1.0000		(.0)
POTENTIAL I	RESTORATIO	N CANDIDATE	Fish barrier re	moval 🔲 Culv	ert repair	r/replacement	Upstream s	torage retro	fit
no			Local stream	repair	er:				
Is SC ACTING	G AS GRADE (	CONTROL	□No □Y	es 🔲 Unk					
	EXTENT OF	PHYSICAL BLO	CKAGE:		В	BLOCKAGE SEVI	RITY: (circ	:le #)	
	Temporar	☐ Partial y ☐ Unknov	vn	A structure such road culvert on a					barrier such as a
If yes for	CAUSE:			greater stream b	ocking the	significant reacl	the very head of a str age that may very little viable fish h above it; natural barri		d of a stream with
fish barrier	Drop too	high Water Di	rop:(in)	upstream moverr anadromous fish		or partial blocks interfere with th			
		shallow Water De	epth: (in)	passage device	oresent.	anadromous fis	h.	as waterfalls	•
77 (7	Other:			5		4 3		2	1
NOTES/SKET	CH:				T -	- PARK-H	ve		
11 monok			Y41 X4	x6')	\				
WHA	—> (	18") (4							
chipagn		<b>-</b>						•	
Shear					<b>a</b>				
(18" ONE	·				4 <u>5.</u>				
stormur	Her)				4				
		١.		arb.	9				
			nsteem		2				
	3		side		17				
	8				`				
	eft Bank								
	9				1				
	J								
\_				1	,	a = A A	e do	- te	ا ، ہ
	there p	re 3 k	ARLES.	an the	wost	WERM !	3,000	. ط بد نا≑	# 12 m 1
	MYVOR	· ME NE	BULL OF	hereb.	·len 1	terr -	the 15	5 . W	Art Ciery
	is ston	than M	بسيارا						
						Repo	RTED TO AU	THORITIES	☐ YES ☐ No

Trash and Debris

TR

WATERSHED/SUE	SHED: FYB		DATE: 1/3	0109	ASSESSED BY: 36+ CM
SURVEY REACH I		TIME::AM/PM	Рното ID: (Са		
SITE ID: (Condition	r#) TR- <u>ovy</u> Lat	throughout "LON	G°'_	" LMK	GPS: (Unit ID)
TYPE:   Industrial   Commercial   Residential	☑ Tires ☐ C	Paper Metal Construction Medical Yard Waste Other: Shapping chal-	SOURCE: Unknown Flooding Illegal dump	LOCATION:  Stream Riparian Ar	A 2 5 5 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7
POTENTIAL REST		Stream cleanup Stre	am adoption segmen	t Removal/pr	
If yes for trash or debris removal	EQUIPMENT NEEDED: WHO CAN DO IT:	☐ 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) k inside a park with easy access	ocated with easy access. Trash	may have been dumped on it could be cleaned up i	over A large amoul	nt of trash or debris scattered over a large ccess is very difficult. Or presence of drums of hazardous materials
Notes	5	4	3	2	1 4 4
NOTES: Oi	bottles, plastic	c bottles she	pping car	uts, than	s, parts of a
Nissan	which app	arently cras	ited t was	POORly	s, parts of a cleaned up,
etc. Th	e Nissam u	ms next to	PARK Ave	ا ، ا	
				Reporte	D TO AUTHORITIES YES NO



					·····		
SURVEY REACH 1	ID: 🔼   W1	RSHD/SUBSHD: F	YB	DATE: 1 /24	<u>/08</u> A	ASSESSED BY:	26
START TIM	1E:3 25 AME	) LMK:	END TIME:	_: <u>22_</u> AM/€M	LMK:		GPS 1D:
	55_" LONG	2.43 39 "	LAT41 0 49 .	20 " LONG TO	3 . 43	40 "	MAN
DESCRIPTION: JU	inchon with	WBS	DESCRIPTION: Co	HARE LODING Q	w Hund	en paces / }	2,00
.,		<u> </u>		HITE CORON == 1-		Culver	<del></del>
RAIN IN LAST 24 HO	OURS   Heavy rain	Steady rain	PRESENT CONDITIONS	☐ Heavy rain	☐ Steady	rain 🗆 Intermi	ittent
□ None	☐ Intermittent	☐ Trace	☐ Clear	☐ Trace	<b>▼</b> Overca	ist 🗆 Partly	cloudy
SURROUNDING LAN		l ☐ Commercial rse ☐ Park		☐ Suburban/Res ☐ Pasture	☐ Forester	d □Institut Retikermen	+ Commu
AVERAGE	E CONDITIONS (che	ck applicable)	REACH S	SKETCH AND SIT	TE IMPACT	TRACKING	F
BASE FLOW AS % CHANNEL WIDTH	□ 0-25% □25-50 %	□ 50%-75% <b>△</b> 75-100%	Simple planar sketch o within the survey red features		UT, TR, MI) (	as well as any ad	
DOMINANT SUBSTR DASilt/clay (fine or □ Sand (gritty) □ Gravel (0.1-2	slick)   C  B	obble (2.5 –10") oulder (>10") ed rock		,			
l		Opaque (milky)					
AQUATIC PLANTS IN STREAM		ne □ some □ lots e □ some □ lots					
WILDLIFE IN OR AROUND STREAM	(Evidence of) □ Fish □ Beav □ Snails □ Othe						
STREAM SHADING (water surface)	☐ Mostly shaded  【Halfway (≥50% ☐ Partially shade ☐ Unshaded (< 2	%) d (≥25%)					
CHANNEL DYNAMICS	Downcutting Widening Headcutting	Bed scour Bank failure Bank scour					
Unknown	Aggrading Sed. deposition	Slope failure Channelized	_	COTTAGE	carve	ROM	<b>-</b> ,
CHANNEL DIMENSIONS (FACING DOWNSTREAM)	Height: LT bank RT bank Width: Bottom Top	·	1	ony culvert of more sec. in the sec. in the sec.	7/2	TAM washoute	ano
	REACH ACCESSIBIL	•		\	7	- reignitary	Mau
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	1	APAVITMENT COMPLEX	4	- Tenbut	vary input
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.	cuand come feate	1		og+ desu	SDAM
5 (	4 3	2 1			_/	·	
NOTES: (biggest pro	oblem you see in surve	v reach) StorkMwa	Her Runoff	not well	MANASI	al.	
				Dana		~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	Vena 🗖 Na 📗

	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; la 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	
<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 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.	
<del></del>	20 19 18 17 16	15 14 (3) 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 ① 6	5 4 3	2 1 0	
<del></del>	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	

Severo Bank Erosion

ER

WATERSHED/SUBS	SHED: FYB			DATE: 1/6	<u> 14/09</u>	ASSESSED B	v: CM +	BG
SURVEY REACH:	2	TIME: 3 :	<u>∂5</u> amæ	PHOTO ID (CA	MERA-PIC#	):PB240/#	075+0	76+
SITE ID: (Condition-	#) START LAT_	11048.55	" LONG <u>チ</u> よ。 <sup>ん</sup>	13 139"	LMK	GPS	: (Unit ID)	
ER- one shee	END LAT_	<u> </u>	" LONG°_	1 17	LMK			
Bnoones.		D. W. On Co	worms: Dim		,, ,, ,			
	Currently unknown	LOCATION:	INCERN: ☐ LI  Meander bend	RT Both Straight section	(looking dowi	<i>nstream)</i> lopc/vallev wai	II  Other	
Downcutting  Widening	Bed scour  Bank failure	DIMENSIONS			. 🗀 эксери.	ope rane, wa	ir 🗀 oliici.	
Headcutting	Bank scour		-	ft and/or RT	ft	Bottom wid	th f	t
Aggrading	Slope failure			ft and/or RT				ft
Sed. deposition	Channelized	Bank Angle	LT	° and/or RT	•	Wetted Wid	lth	ft
	P: Private Publi							
POTENTIAL REST	ORATION CANDIDAT	E: Grade	control	Bank stabilizati	on ,	_		
□ No				the control	8 /Minin	41.50 AA	skivess	<u> </u>
THREAT TO PROP	ERTY/INFRASTRUCT	URE: 🔼 No	Yes (Descr	ibe):				
EXISTING RIPARIA	AN WIDTH:	<b>⊠</b> ≤25 ft	25 - 50 ft	□ 50-75ft □ 7	75-100 <del>fl</del> [	]>100 <del>f</del>		
Erosion	Active downcutting; tall bar		Pat downcutting evi	dent, active stream		114		
SEVERITY(circle#)	of the stream eroding at a contributing significant amo	ount of sediment to	widening, banks act	tively eroding at a		width stable; isola ion; likely caused		
Channelized= 1	stream; obvious threat to p infrastructure.	roperty or	infrastructure	near to property or		aired riparian vege		
	5		4 3		2	O		
ACCESS:	Good access: Open area ownership, sufficient room			ted or developed area		cess. Must cross tive areas to acces		
	materials, easy stream cha heavy equipment using ex-		removal or impact to	Access requires tree landscaped areas.	stockpile ar	reas available and om stream section	or located a gre	eat
	trails.		Stockpile areas sma	all or distant from stream	equipment		. oposialized tit	~1 J
NOTES/CROSS SEC	CTION SKETCH:	10000 0	or Onillas	o A-+ 100	wation	<u> </u>	₹172 ±	
WBS	Adjakent Pairly easy. one of	- to Se	miar h	rm facil	ity +	Accen	could	<b></b> -
1	The sales	<u></u>		را المحالية	$\Omega$ $\mathbf{v}_{\mathbf{v}}$ :	pince 1	Slava	
voe f	MRY EASY.	There	IS A	wand -	d Ather L.	wwww	7	
PORT	are ob 1	d who	Aules, 4	haigh.				
,	_			-				
1								
					REPORTE	D TO AUTHORI	TIES 🗌 YES	□No

	(FRI) JAN 22 2010 9:44	
DΕ	COUNT NAME: STINATION: Scan PDF ST. NUMBER: 1  DOCUMENT#: 6800000-400 TIME STORED: JAN 22 9:43 TIME SENT: DURATION: MODE:	
	GES : O sheets SULT : NG	
	P. 1 76 2  Fyb, leach    Reach Level Assessment RCH	
_	SURVEY REACH ID: WTRSHD/SUBSHD: FYS  DATE: 1/30/09 ASSESSED BY:  START TIME: 1:55 DD/PM LMK: END TIME: 0:30 DD/PM LMK: GPS ID:  LAT 41 0 49 0 48 " LONG 72 0 43 0 41 " LAT 41 0 49 0 42 " LONG 72 0 45 0 50 " OM  DESCRIPTION: RA RACKS/CUIVET DESCRIPTION: LONG 72 0 45 0 50 "	
	RAIN IN LAST 24 HOURS   Heavy rain   Steady rain   PRESENT CONDITIONS   Heavy rain   Steady rain   Intermittent   Face   Clear   Trace   Overcast   Partly cloudy    SURROUNDING LAND USE:   Industrial   Commercial   Urban/Residential   Suburban/Res   Forested   Institutional   Commercial   Crop   Pasture   ROther: Proceedings   Rother: Process   Rother   Rother   Rother   Rother   Rother   Rother   Rother   Rother   Rother   Rother   Rother   Rother   Rother   Rother   Rother   Rother   Rother   Rother   Rother   Rother   Rother   Rother   Rother   Rother   Rother   Rother   Rother   Rother   Rother   Rother   Rother   Rother   Rother   Rother   Rother   Rother   Rother   Rother   Rother   Rother   Rother   Rother   Rother   Rother   Rother   Rother   Rother   Rother   Rother   Rother   Rother   Rother   Rother   Rother   Rother   Rother   Rother   Rother   Rother   Rother   Rother   Rother   Rother   Rother   Rother   Rother   Rother   Rother   Rother   Rother   Rother   Rother   Rother   Rother   Rother   Rother   Rother   Rother   Rother   Rother   Rother   Rother   Rother   Rother   Rother   Rother   Rother   Rother   Rother   Rother   Rother   Rother   Rother   Rother   Rother   Rother   Rother   Rother   Rother   Rother   Rother   Rother   Rother   Rother   Rother   Rother   Rother   Rother   Rother   Rother   Rother   Rother   Rother   Rother   Rother   Rother   Rother   Rother   Rother   Rother   Rother   Rother   Rother   Rother   Rother   Rother   Rother   Rother   Rother   Rother   Rother   Rother   Rother   Rother   Rother   Rother   Rother   Rother   Rother   Rother   Rother   Rother   Rother   Rother   Rother   Rother   Rother   Rother   Rother   Rother   Rother   Rother   Rother   Rother   Rother   Rother   Rother   Rother   Rother   Rother   Rother   Rother   Rother   Rother   Rother   Rother   Rother   Rother   Rother   Rother   Rother   Rother   Rother   Rother   Rother   Rother   Rother   Rother   Rother   Rother   Rother   Rother   Rother   Rother   Rother   Rother   Rother   Rother   Rother	<b>ሳ</b> ኦ
	AVERAGE CONDITIONS (check applicable)  REACH SKETCH AND SITE IMPACT TRACKING	
	BASE FLOW AS %	
	WATER CLARITY Clear ATurbid (suspended matter)  Stained (clear, naturally colored) Opaque (milky)  Other (chemicals, dyes)	
	AQUATIC PLANTS Attached:   IN STREAM Floating:   In one Some lots  WILDLIFE IN OR AROUND STREAM   Snails   Souther: SAALE   Michael  Snails   Stream   Snails   Stother: SAALE   Michael  Snails   Stother: SAALE   Michael  Snails   Stother: SAALE   Michael  Snails   Stother: SAALE   Michael  Snails   Stother: SAALE   Michael  Snails   Stother: SAALE   Michael  Snails   Stother: SAALE   Michael  Snails   Stother: SAALE   Michael  Snails   Stother: SAALE   Michael  Snails   Stother: SAALE   Michael  Snails   Stother: SAALE   Michael  Snails   Stother: SAALE   Michael  Snails   Stother: SAALE   Michael  Snails   Stother: SAALE   Michael  Snails   Stother: SAALE   Michael  Snails   Stother: SAALE   Michael  Snails   Stother: SAALE   Michael  Snails   Stother: SAALE   Michael  Stother: Stother: Stother: Stother: Stother: Stother: Stother: Stother: Stother: Stother: Stother: Stother: Stother: Stother: Stother: Stother: Stother: Stother: Stother: Stother: Stother: Stother: Stother: Stother: Stother: Stother: Stother: Stother: Stother: Stother: Stother: Stother: Stother: Stother: Stother: Stother: Stother: Stother: Stother: Stother: Stother: Stother: Stother: Stother: Stother: Stother: Stother: Stother: Stother: Stother: Stother: Stother: Stother: Stother: Stother: Stother: Stother: Stother: Stother: Stother: Stother: Stother: Stother: Stother: Stother: Stother: Stother: Stother: Stother: Stother: Stother: Stother: Stother: Stother: Stother: Stother: Stother: Stother: Stother: Stother: Stother: Stother: Stother: Stother: Stother: Stother: Stother: Stother: Stother: Stother: Stother: Stother: Stother: Stother: Stother: Stother: Stother: Stother: Stother: Stother: Stother: Stother: Stother: Stother: Stother: Stother: Stother: Stother: Stother: Stother: Stother: Stother: Stother: Stother: Stother: Stother: Stother: Stother: Stother: Stother: Stother: Stother: Stother: Stother: Stother: Stother: Stother: Stother: Stother: Stother: Stother: Stother: Stother: Stother: Stother: Stother: Stother: Stother: Stother: Stother: Stoth	
_	☐ Mostly shaded (≥75% coverage)  STREAM SHADING (⇒Halfway (≥50%)  (water surface) ☐ Partially shaded (≥25%)  ☐ Unshaded (<25%)	

Bed scour

☐ Bank failure

Bank scour
Slope failure

Downcutting

Widening

Headcutting
Aggrading

CHANNEL

**D**YNAMICS

Trash and Debris

TR

WATERSHED/SUB	SHED: FYB			DATE: <u>  / 2</u>	ASSESSED BY: CM+84			
SURVEY REACH I	D: 2	Тіме::_	AM/PM	<b>РНОТО ID:</b> (Сал	mera-Pic#)PBDY	10 /# 080 + 082		
SITE ID: (Condition	#) TR-XX LAT	11 <u>• 48 • 59</u>	LONG	12.43.38	_" LMK	GPS: (Unit ID)		
TYPE: Industrial Commercial Residential	<b>=</b>	onstruction  ard Waste	Metal [ Medical [	GOURCE:  Unknown  Flooding  Illegal dump  Local outfall	LOCATION: Stream Riparian Are Lt bank Rt bank	A TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTAL TOTA		
POTENTIAL REST	ORATION CANDIDATE	Stream cleanu	р 🗌 Stream	adoption segment	☑ Removal/pre	evention of dumping		
If yes for trash or debris removal	EQUIPMENT NEEDED: WHO CAN DO IT:			sh bags Unkno v Hazmat Te		DUMPSTER WITHIN 100 FT:  ☐ Yes ☐ No ☐ Unknown		
CLEAN-UP POTENTIAL: (Circle #)	A small amount of trash (i.e., than two pickup truck loads) lo- inside a park with easy access	cated a long period of time but it could be cleaned up in a			t of trash or debris scattered over a large cess is very difficult. Or presence of drums f hazardous materials			
	(3)	4 3			2	2 1		
NOTES: local antiall - Adjacent to dumpster and parking lot in favely unborn area. Stream reach is in between a serior living center + apartment building (?)								
					Reported	TO AUTHORITIES YES NO		

# Storm Water Outfalls



WATERSHED/SUBSHED:	В	DATE: V/24/09 ASSESSED BY: CM/B6				
SURVEY REACH ID: $\partial$	TIME::AM/PM	PHOTO ID: (Camera-Pic#) /#				
SITE ID (Condition-#): OT- A	LAT 41 0 48 1 55 "LI	ong <u>72 ° 43 '38 " LMK GPS: (Unit ID)</u>				
BANK:    XLT	I , C/I lustic []Brick	SHAPE: Single DIMENSIONS: SUBMERGED: Circular Double No Elliptical Triple Diameter: (in) Partially Other: Fully				
☐ Moderate ☐ Substantial ☐ Other: ☐ Char		☐ Trapezoid         Depth:				
CONDITION:  None  □ Chip/Cracked □ Peeling Paint □ Corrosion □ Other:  □ Other:  □ ODOR: □ Gas □ Sew □ Ranc □ Ranc □ Corrosion □ Other	age	VEGGIE DENSITY:				
FOR COLOR: FLOWING TURBIDITY: ONLY FLOATABLES: OTHER CONCERNS:  Needs Regular	None Sewage (toilet paper, paper/plastic bags)	☐ Cloudy ☐ Opaque etc.) ☐ Petroleum (oil sheen) ☐ Other; g (bulk) ☐ Excessive Sedimentation				
POTENTIAL RESTORATION CA	NDIDATE Discharge investigation  Storm water retrofit	on Stream daylighting  Local stream repair/outfall stabilization  Other:				
If yes for daylighting: Length of vegetative cover from or	<del></del>	sting vegetation: Slope:°				
If yes for stormwater:  Is stormwater currently controlled?  ☐ Yes ☐ No ☐ Not investigat	Land Use de ed Area availab	scription: Parthing / building (Apt?)				
SEVERITY: strong smell. The compared to the	e amount of discharge is significant discharge amount of normal flow in receiving discharge appears to be having a	discharge; flow mostly clear and odorless. If the trige has a color and/or odor, the amount of trige is very small compared to the stream's base and any impact appears to be minor / localized.  Outfall does not have dry weather discharge; staining; or appearance of causing any erosion problems.				
	5 4	3 2 1				
SKETCH/NOTES: POORLY	designed steem	under from parking for.				
		REPORTED TO AUTHORITIES: YES NO				

V	VATERSHED/SUBSHED	: FYB			DATE: 1 / 24 / 0	ASSES	SED BY: C	m+B6	
S	URVEY REACH ID: 🭃	<b>L</b> TIM	<b>ИЕ:</b> :AM/PM	1	<b>РНОТО ID:</b> (Camera-Pic	:#)	/#		
S	ITE ID (Condition#): O	Г <u>. В.</u>   Lл	To_See_loel	_"Lo	NG''	LMK_	G	PS: (Unit ID)	
E	BANK: See Gelow  LT RT Head  LOW:  None Trickle	TYPE: Closed pipe	Material:	Metal	SHAPE: Single Circular Double Elliptical Triple Other:	DIMENSI Diameter:	ons: 7ð <sup>(in)</sup>	SUBMERGED:  No Partially Fully	
	Moderate Substantial Other:	Open channel	Concrete E E	arthen	Parabolic W	epth: idth (Top): (Bottom):		NOT APPACABLE	
12	CONDITION:  None Chip/Cracked Peeling Paint	ODOR: No Gas Sewage Rancid/Sour	DEPOSITS/STAINS None Oily Flow Line	S:	VEGGIE DENSITY:  ☑ None ☐ Normal ☐ Inhibited	Brown Other:	PE BENTHIC GROWTH: None Brown Orange Green Other:		
	Corrosion Other:	Sulfide Other:	r		Excessive Other:	Good [	POOL QUALITY:  ☐ No pool ☐ Good ☐ Odors ☐ Colors ☐ C ☐ Suds ☐ Algac ☐ Floatables ☐ Other:		
O C	FOR   COLOR:   Brown   Grey   Yellow   Green   Orange   Red   Other:								
L	yes for daylighting: ength of vegetative cover yes for stormwater:	r from outfall:			ing vegetation:				
Is	stormwater currently co		Land Area	Use des	cription: PARKING /	Build	iving lp	partments	
O Si	DUTFALL Heavestron stron computer (ircle #)	y discharge with a disting smell. The amount of	inct color and/or a discharge is significant normal flow in receiving to be having a	Small di discharg discharg	scharge; flow mostly clear and oc ge has a color and/or odor, the am ge is very small compared to the si I any impact appears to be minor /	ount of tream's base	discharge; sta	ot have dry weather ining; or appearance y erosion problems.	
Si	KETCH/NOTES:			4	<u>3</u>	2		1	
51	SOWI	oe iter		4	parland to Apts.			648'59"/72°4	
<b>//</b>		her to	hart Flan	<b>←</b>	- stormwater/wash 	unt 20 41	148 '57	es; U yes \( \text{NO} \) "/72"43'38" "72"43'35"	

WATERSHEI				DATE:				cunt (	<u>36</u>
SURVEY REA	.CH ID: 😞		_AM/ <b>®</b> D	Рното Ц	<b>):</b> (Camera-Pio	: #) PB240	/#	<i>0</i> 83	
SITE ID: (Cor	dition#) SC-	41.49.0	O" LONG	<u> </u>	<u>40 "</u> LI	МК	GPS	(Unit ID)	
						<del></del>			
TYPE: K Ro	ad Crossing    Railroad Cross	i -	Dam Beav	er Dam 🔲	Geological Form	nation 🔲 C	Other:		
	SHAPE:	#BARRELS:	MATERIAL:		NMENT:			ıriable, sketci	h)
	☐ Arch ☐ Bottomless ☐ Elliptical	Single	Concrete		ow-aligned	Barrel dian	_		(ft)
FOR ROAD/	Circular	Double Triple	☐ Metal ☐ Other:		ot flow-aligned o not know	H	leight:		(ft)
RAILROAD	Other:	Other:	U Otner.		not know				
CROSSINGS	CONDITION: (Evidence of)				CULVERT SLOPE:		gth:		(ft)
ONLY	Cracking/chipping/corrosio	g/corrosion Downstream scour hole			at	V	/idth:	(	(ft)
	Sediment deposition	☐ Failing emb	pankment		ght (2° – 5°) ovious (>5°)				(0)
	Other (describe):				ovious (/3 )	Roadway e	levation:		(ft)
POTENTIAL I	RESTORATION CANDIDATE	Fish barrier re	emoval D Culs	ert ranair/ra	nlacement D I	Instrum sto	raiga ratro	.fit	
no	ALGIORATION CAMPIDATE	Local stream		-	•	-	-	/11 <b>t</b>	
	G AS GRADE CONTROL	• -			love sed	unneut			
18 SC ACTING			es 🔲 Unk		OCKAGE SEVER	DITV: (ainele	#)		
}	EXTENT OF PHYSICAL BLO  Total  Partial	CKAGE:		DLC	CRAUE SEVER	urri (circle	#/		
	Temporary Unkno	wn	A structure such road culvert on a		A total fish blocka tributary that wou			y barrier such a i or a blockage	
If yes for	Canon		greater stream bl		significant reach	of stream,	he very hea	ad of a stream	with
fish barrier	CAUSE:  Drop too high Water D	rop:(in)	upstream moven anadromous fish		or partial blockage interfere with the		•	able fish habita tural barriers s	
l	Flow too shallow Water D	•	passage device p		anadromous fish.		as waterfall		4011
	Other:		5		4 3		<u> </u>	1	
NOTES/SKET	CH:								
	"excess selv	ment.							
]									
					-		•		
			-						
						•			
	4			٠.					
)									
					Repor	TED TO AUTH	IORITIES	YES 🔲	No

P.1062 Pybrenes



SURVEY REACH II	D: <u>3</u> WTF	SHD/SUBSHD: F Y	 8	DATE: 11 / 39	<u>/07</u> A	ASSESSED BY:	No.
LAT41 049 1		LMK: -43 40_"	LAT41 0 49 13	1 2		· <u>41</u> "	GPS ID:
DESCRIPTION: RE	1. 218/culvet	CVORIND	DESCRIPTION: RR	- tracks/c	ulver e	closs	
RAIN IN LAST 24 HO	URS  Heavy rain	☐ Steady rain☐ Trace	PRESENT CONDITIONS  Clear	☐ Heavy rain ☐ Trace	☐ Steady ☐ Overca	rain 🔼 Internast 🗆 Partly	nittent v cloudy
SURROUNDING LAND		☐ Commercial	☐ Urban/Residential ☐ Crop	☑ Suburban/Res □ Pasture	Foreste	ed 🗆 Institu	ıtional
AVERAGE	CONDITIONS (chec	k applicable)	REACH S	SKETCH AND SI	TE IMPAC	I TRACKING	
BASE FLOW AS % CHANNEL WIDTH	□ 0-25% □25-50 %	□ 50%-75% ♥【 75-100%	Simple planar sketch of within the survey rea features o	of survey reach. Tra och (OT, ER, IB,SC, deemed appropriate	UT, TR, MI)	as well as any a	ite impacts additional
<b>I</b>	Slick		CLIPNAP AP	+ -	WARE	EMENT	
AQUATIC PLANTS IN STREAM		some 🗆 lots	NOW		PAV	EMENT	
WILDLIFE IN OR AROUND STREAM	(Evidence of) □ Fish □ Beave □ Snails 🔂 Other	ERACON		RIPLAP			
STREAM SHADING (water surface)	Mostly shaded (☐ Halfway (≥50%☐ Partially shaded☐ Unshaded (< 25	) ( <u>≥</u> 25% )	PIPE	war	1		
CHANNEL DYNAMICS Unknown	Downcutting Widening Headcutting Aggrading Sed. deposition	Bed scour Bank failure Bank scour Slope failure Channelized	AEIZT A	# 36" POPE	7	A	
CHANNEL DIMENSIONS (FACING DOWNSTREAM) BANVEAN	Height: LT bank RT bank Width: Bottom Top	(ft) (ft) (ft) (ft)		VOORD K	TRIBUTHA DITAG		
]	REACH ACCESSIBILI			/	1	1 4	
Good: Open area in public ownership, sufficient room to stockpile materials, easy stream channel access for heavy equipment using existing roads or trails.	Fair: Forested or developed area adjacent to stream. Access requires tree removal or impact to landscaped areas. Stockpile areas small or distant from stream.	Difficult. Must cross wetland, steep slope, or sensitive areas to get to stream. Few areas to stockpile available and/or located a great distance from stream. Specialized heavy equipment required.	I	Contra	BU  + P	FICE COUNTS	CMANA
NOTES: (biggest pro	blem you see in survey	reach) impactions	The buffer of A rputs Jutshow nood,	reas of costs, areas	of exp	WYPESIN WAR (Rig	sly bank
weemna	March March 1 Ma	* - 2.00/0000		REPO	RTED TO A	UTHORITIES [	YES No

P.2% I FYB, REACTIZ

		OVERALL STREAM CONDI	······································	
	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.
3	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)	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 stubble height remaining.			
1	Left Bank 10 9	<b>№</b> 7 6	5 4 3	2 1 0
	Right Bank 10 9	<b>®</b> 7 6	5 4 3	2 1 0
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 9	8 7 6	<b>3</b> 4 3	2 1 0
	Right Bank 10 9	8 7 6	<u>G</u> 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
	OVE	RALL 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: 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 6	5 4 3 Predominant floodplain	
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	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  10 9 8 7 6	floodplain function  5 4 3 2 1 0

SC

WATERSHED	SUBSHED: FY S		D	AТЕ: <u>↓</u>	<u> /30 /09</u> 1	ASSE	SSED BY: CM/ + K
SURVEY REA		TIME: 8:15	AM/PM P	ното II	<b>):</b> (Camera-Pio	:#) dym	pus/# 00>
SITE ID: (Con	dition-#) SC LA1	41.49 0		<u>•43                                    </u>	<u>40 " L</u>	мк	GPS (Unit ID)
	Rt.218 _						
TYPE: AROS		sing Manmade		1			
	SHAPE:	#BARRELS:	MATERIAL:	4 .	NMENT: ow-aligned	DIMENS Barrel dia	IONS: (if variable, sketch)
	Box Elliptical	Double	☐ Metal		ot flow-aligned	Barrel dia	ameter:(ft Height:(ft
FOR ROAD/	Circular Other:	Triple	Other:		not know		rieight(n
RAILROAD CROSSINGS		Other:		C	EDE OLOBE	Culvert le	ength:(ft
ONLY	CONDITION: (Evidence of)  Cracking/chipping/corrosi	on Downstrear	m eggur hala	Fi	ERT SLOPE:		Width:(ft
	Sediment deposition				ght $(2^{\circ} - 5^{\circ})$		
6	Other (describe):			Of	ovious (>5°)	Roadway	elevation:(f
<b>D</b>			. 🖼		. –		
	RESTORATION CANDIDATE		emoval 🔣 Culvert	-	-	_	-
□ no		_	repair Other:		vient Re	4V0VV	Κ
IS SC ACTING	G AS GRADE CONTROL	□ No □ Y	es Unkno				¥ ///
	EXTENT OF PHYSICAL BL	OCKAGE:   left loay		BLC	CKAGE SEVEI	RITY: (circ	:le #) 
	Temporary Unkne		A structure such as a		A total fish blocka	~	A temporary barrier such as beaver darn or a blockage at
If yes for	Cause:		road culvert on a 3rd greater stream block	ing the	the significant reach of stream,		the very head of a stream wit
fish barrier		Orop:(in)	upstream movement anadromous fish; no		or partial blockag interfere with the	•	very little viable fish habitat above it; natural barriers suc
1	☐ Flow too shallow Water I		passage device pres		anadromous fish.	•	as waterfalls.
	Other:		5		4 3		2
NOTES/SKET	CH: CIAM NOT SEE ildlife including	- light -	truaige +	Myne	11:w) Q	Not	be used
by w	ildlife including	traffes-c	HON SHIT	be .	used by	HEN)	<b>.</b>
lebt	bay of 2-bay cu	lvert is d	essed with	n sec	Riment.	t tlan	3 15
pesta	icted to reight	only only					
Carlo	ent goes under	Rt. 218/1	4-lane 1	inghi	M.		
				_	•		
,							
1					Repor	TED TO AU	THORITIES TYES N

WATERSHED/SUBSHED:	B	DATE: 1 /30 /69\ ASSESSED BY: CM /BG				
SURVEY REACH ID: 3	TIME: 8:15 -9:45	PHOTO ID: (Camera-Pic #)	/#			
SITE ID (Condition-#): OT-	LAT_ of See, Reve	Long"	LMK GPS: (Unit ID)			
BANK: Type:	M	Suppose IV Co. 1. D	IMENSIONS: SUBMERGED:			
LT RT Head	MATERIAL: ☑ Concrete ☑Med		IMENSIONS: SUBMERGED:			
FLOW: Clos		ck 🔲 Elliptical 🔲 Triple D	iameter: Sec (in) Partially			
None Trickle	Other:	Other:	Fully			
Substantial S-Oper		en Trapezoid Depth:  Parabolic Width				
Other: chan	nel Other:		(Top): (in) NOT APDECABLE ttom): (in)			
CONDITION: ODOR:	<del>_</del>		PE BENTHIC GROWTH: None			
☑ None	⊠ None nge □Oily	□ None □ □ Normal □	Brown			
Peeling Paint Ranci	d/Sour Flow Line		OL QUALITY: No pool			
Corrosion Sulfi		☐ Excessive	Good Odors Colors Oils			
Other:	.: Domer.	l	Suds Algae Floatables Other:			
Eskodovenski garannos konnosioses (nonasnina ak	goliosiggssia makatalikahanni jeranganga					
	☑ Clear ☐ Brown ☐ Grey ☑ None ☐ Slight Cloudiness		nge Red Other:			
14 (1 Hall 1997)	None Sewage (totlet pape		heen) Other:			
OTHER		oing (bulk) ☐ Excessive Sedin Erosion ☐ Other:	mentation			
CONCERNS: Needs Regular	Maintenance Bank	Erosion Other:				
POTENTIAL RESTORATION CAN	DIDATE Discharge investiga	ation Stream daylighting Lo	ocal stream repair/outfall stabilization			
Ø no	Storm water retrofit	Other:				
If yes for daylighting: Length of vegetative cover from ou	tfall ft Type of a	xisting vegetation:	Slope:			
Bengin of vegetative cover from ou	italiti Type of c	xisting vegetation.	stope			
If yes for stormwater: Is stormwater currently controlled?	T 11	1 DAOVICE I				
Yes No Not investigate	d Area avail	description: PARKING FOT lable:	*****			
	with a distinct color and/or a Sm	all discharge; flow mostly clear and odorless	s.lf the			
(circle #) compared to the	amount of normal now in receiving   died	charge has a color and/or odor, the amount of charge is very small compared to the stream?	s hase   discharge; staining; or appearance			
significant impact	e appears to be having a flow downstream.	and any impact appears to be minor / locali	zed. of causing any erosion problems.			
Sweepen/Norma	5 4	3	2 1			
SKEICH/NOTES: There Ay	le several open	My san course	o this REACH side for locations t			
Additional detail	pipes ("-) in total	MI). SEE REPERSE	side tour locations it			
, 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						
- No unusual dos	servations)-					
		•				
		Repoi	RTED TO AUTHORITIES: YES NO			

```
1.) -reibutary entering LB as 41°49'03"/72"43'41" - possibly starmanter from parking lot.
 2) without from stremmeter from ar trebutarry on LB 2 41° 49'03" / 72° 43'41"
 3) Telbutary input on LB 20 41°49'05"/72'43'41"
 4) tributary input on RB D 41°49'05"/72°43'41"
5) "" " 241°49'06"/72'43'41"
 6.)
              " 2 41*49'06"/72*43"43"
               " L6 ~ 30 'Routher North
                     " 241°49'08"/72°43.41"
                     " 2 41°49′ 10"/12°43′ 40"
     " D 41'49' 12"/-90'43'42" - there is some Running water here, unlike
11.) WAShout/terlashay input to RB 241.47'13"/72" 43'42"
                                   believed residential AREA 2 41°49 13"/72°43'42"
 13.) Stochwater input on R6 2 41°49'15"/72"43" - there's a 30" Round concrete pipe 

N2' high off ground + Rip-PAP under to buffer outface before it perchen lovade.

See photo olympus 1 - ook.
14.) terbutary at statementary flaw (x2) on RB 20 41°49'16"/72°43'42°
15.) Tenentary input on LB ~ 41049 16 "/72"43"40"
16) Input on LB ~ 41° 49' 17"/72° 43'41"
17) Stremmater pipe on RB believed residential ARRA N12" diam; Rip-RAP under pipe
     + ~ 4' back from Top ob bank a 41°49'21"/12°43'43"
18.) Tribularry /input with running water to LB 2 41949 22"/72"43"42"
19.) Input To LB 2 41°49'25"/72°43'42"
20.) Starmmater injust (no pipe) to RE 20 41049 26 1/72043 45"
and of reach (upstream end) a culvert there is A 5' round metae pipe
```

#### Severe Bank Erosion

ER

_[	WATERSHED/SUBS	HED: FYB			DATE: 1 / 30	/OT Ass	ESSED BY: CM +66
1	SURVEY REACH:	3		AM/PM	PHOTO ID (CAMI		- 1
distribution in		START LAT 4	1 049 20	' Long <u>72 ° 4</u>	<u>3'42"</u> 1	LMK	GPS: (Unit ID)
	DR=	END LAT_	0 1 1	LONG°		LMK	
$\mid$	Process:	Currently unknown	BANK OF CO	NCERN: ALT	RT Both (lo	akino davinstrei	
	Downcutting	Bed scour					valley wall  Other:
	☐ Widening	☐ Bank failure	DIMENSIONS	:			
	Headcutting	Bank scour	Length (if no C	•	and/or RT		ottom widthft
	Aggrading	Slope failure	Bank Ht	LTft	and/or RT	ft To	p widthft
-	Sed. deposition	Channelized		1			etted Widthft
	LAND OWNERSHIP	: Private Publi	Unknown	LAND COVER	Forest  Fi	eld/Ag De	eveloped:
	Poperatus Decre	DATE OF CANDADAM	, D.C., de		□ Dault stabilination		
	No No	DRATION CANDIDATI	E: Grade  Other:	-	Bank stabilization		
	THREAT TO PROP	ERTY/INFRASTRUCT	URE: No	Yes (Describ	pe):		
	EXISTING RIPARIA	N WIDTH:	□ ≤25 ft	□ 25 - 50 ft [	□ 50-75ft □ 75-	100ft □>1	00ft
ı	EROSION .	Active downcutting; tall bar of the stream eroding at a f		Pat downcutting evide	ent, active stream	Grado and width	stable; isolated areas of bank
.	SEVERITY(circle#)	contributing significant amo	unt of sediment to	widening, banks activ moderate rate; no thr		failure/erosion; lik	ely caused by a pipe outfall, local
	Channelized= 1	stream; obvious threat to prinfrastructure.	operty or	infrastructure		scour, impaired n	parian vegetation or adjacent use.
	ACCESS:	Good access: Open area		4 (3)	d or developed area	2 Difficult access.	1 Must cross wetland, steep slope or
	ACCESS:	ownership, sufficient room materials, easy stream cha	to stockpile	Fair access: Foreste adjacent to stream. A	ccess requires tree	1	eas to access stream. Minimal vailable and/or located a great
	İ	heavy equipment using exi- trails.		removal or impact to Stockpile areas small	landscaped areas. For distant from stream.		eam section. Specialized heavy
		5		3	)	2	1
		CTION SKETCH:					
	viviais s	pors turang	hart pe	mer-thic	example	is typic	AP
		nother slape:					l l
	т н	VID (100) Supe	1. 111.440	in cept	W4701C = 4	11 71 65	1010 43 42
i							
			-		•		
		•					
	•			·		REPORTED TO	AUTHORITIES   YES   No

								1	
WATERSHED/SUBSHED:	FYB	г		1	DATE:			SESSED BY:	
BURVEY REACH: 3				_: <u>45_</u> <b>Ф</b> и/рм		DID: (Camera	-Pic #) {		
SITE ID: (Condition=#)	START LA	T41 049	<u>'26"</u> I	ong <u>72°4</u>	3142"	LMK_		GPS: (Uni	it ID)
<b>B</b>	END LA	т <u>41°49</u>	' <u>28</u> " 1	ONG <u>72°4</u>	<u>3 ' 41 ''</u>	LMK_			
IMPACTED BANK:  ☐ LT	REASON INA					□ Widespread			(e)
LAND USE:	Private 1	nstitutional	Golf Cou	rse Park	Other Publ				•
(Facing downstream) LT Ban	_								
RT Ban			T. C1	<del></del>			Od		
DOMINANT LAND COVER: LT Bar	Paved nk ☐	Bare ground	i uri/lav	vn 1all gras: } □	s Shrub/s □	crub Trees ☑	Other □:	•	
RT Bar						<b>₽</b>			
Invasive Plants:	None	Rare		artial coverage	Ex	tensive coverage		known	
STREAM SHADE PROVID	DED? Non	e 💆 Parti	al	Full WET	LANDS PF	RESENT? 🗌 No	□ \	Yes Unkno	own
POTENTIAL RESTORATION	ON CANDIDA	TE Activ		on Greenway	/ design [	Natural regen	eration [	] Invasives ren	noval
	K RT /± ~ 80/±	REFORESTA POTENTIAL (Circle #)		Impacted area on where the riparian not appear to be u specific purpose; area available for	area does sed for any elenty of	Impacted area on public or private la presently used for purpose; available planting adequate	nd that is a specific area for	Impacted area of land where road encroachment of feature significa available area for	t; building or other intly limits
Vidth (ft):				5	4	3		2	1
POTENTIAL CONFLICTS  ☐ Poor/unsafe access to sit						Potential corpeaver) Deaver		on Lacko	fsun
Notes: there are to stabilize to stabilize	these	AREMS	were	docen	ven t	col 14-	s la	elan 5	
- b Rip-Rap no - prip-Rap no - Another	40' lmg,	x 15' Wigh	n stre	n appliex. Len of Rip-	ikap, k	light BA	who,	then	
=> these they b it is propose	AREAS I	day non Ready to to v	technic technic tote reach!	particular other	Rest eun " rly i ( doeung		- Res	idiates however toration nigues ap can	is could

SURVEY REACH I	D: W1	RSHD/SUBSHD: BB	E	DATE: [2 / 3 /0]	Assessed by:	<del>.</del>
START TIME	E: 9 : 20 00/PM		END TIME:	: 45@1/PM LM		GPS ID:
LAT 41 0 50 1		2042149"	LAT 41 . 50 . 2	13" LONG 72° 43	1 45 "	OW
	<del></del>			luckt a dike		_
DESCRIPTION: JW	uction wi	th lock > 2	- January CM	INCRE TO GUER		
RAIN IN LAST 24 HO	URS 64 Heavy rain	☐ Steady rain	PRESENT CONDITIONS	☐ Heavy rain ☐ Stea	dy rain   Intern	nittent
□ None	☐ Intermittent	·	□ Clear	☐ Trace ☐ Ove	· ·	
SURROUNDING LANI				☐ Suburban/Res ☐ Fore	sted <b>Fil</b> nstitu	itional (Service)
DORROUNDING EARN		rse 🗆 Park			or Ole, Do	werehouse And
Average	CONDITIONS (che	-k applicable)	REACH S	KETCH AND SITE IMPA	[223 Ca3 a 46] E v e 3 e 62 a 52 a 53 a 53 a 63 a 63 a 63 a 63 a 63 a 63	
BASE FLOW AS %	□ 0-25%	□ 50%-75%		f survey reach. Track locatio		
CHANNEL WIDTH	□25-50 %	<b>□</b> (75-100%	1	ch (OT, ER, IB,SC, UT, TR, M leemed a <u>ppr</u> opriate.  Indicate		dditional
DOMINANT SUBSTR	ATE		, jeanares u		anection by flow	
Silt/clay (fine or		obble (2.5 –10")		$\mathcal{A}_{\mathcal{E}_{\mathcal{I}}}$		>e/k
☐ Sand (gritty)		oulder (>10")		ponded /		Jenk Cenk
☐ Gravel (0.1-2.5	") 🗆 Be	ed rock		Clooche	ત્ર	Δ
WATER CLARITY	☐ Clear ♣ZTurbia	(suspended matter)		floode	k T	$\Gamma f$
☐ Stained (clear, no				N.Va		
Other (chemicals,	•	-1 1 1 1 1 1 1 1		< Dike ->		
A accompany to the same of	Z Attached: ☐ non	e □ some □ lots	1			
AQUATIC PLANTS ?		e □ some □ lots				
	(Evidence of)	C L SOINC L NOTS		101	culvert	
WILDLIFE IN OR	☐ Fish ☐ Beav	er 🗆 Deer	Right	· >07.1	AB CHIVELIE	RAP
AROUND STREAM	☐ Snails 🛱 Other	: RT WANK	/ ***	Dow Do	1 7	, , ,
	☐ Mostly shaded		\ \	1 4000 400	· /	
STREAM SHADING	☐ Halfway (≥50%		\ \	<b>\</b>	- 1	
(water surface)	☐ Unshaded (< 25		1 7 1		St PO	اه/
**	<u> </u>		┤ <b>\</b>		<i>(</i> '	
CHANNEL	Downcutting	Bed scour	\ & \		1	
DYNAMICS	☐ Widening ☐ Headcutting	Bank failure Bank scour	\ ', \		[	
in flood	Aggrading	Slope failure	\ \\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	1	1	
Z Unknown	Sed. deposition	1 <b>=</b> '	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	1 1.	1	
BANISTULL	-	2/	TAKE OF STREET	1 1	1 .	
CHANNEL	Height: LT bank	<u>(ft)</u>	1339		e chan	ANEK
DIMENSIONS	R <del>T ban</del> k	(ft)	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	\ \ \ \	[	3BE-1)
( <del>FACING &gt; DOWNSTREAM</del> )	Width: Bettern	13' (ft)	/%;	V \ '	•	
Estimate &	Top	(ft)		\	•	
R	EACH ACCESSIBILI	PΥ	\	1		
Good: Open area in	Fair: Forested or	Difficult. Must cross		<b>\</b>		
public ownership,	developed area adjacent to stream.	wetland, steep slope, or sensitive areas to get to		1		
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	Stockpile areas	distance from stream.				
equipment using existing roads or trails.	small or distant from	Specialized heavy				
<b>5</b>	stream.	equipment required. 2 1	1			
		reach) - the	a so thock	ow through	n the c	went
WAS SO WI	ger it can	used the w	ater to pool	ow through the ban py cover —	ks to b	lowant
( henre tho	LID-RAD	), The	L NO CAMA	SU COVER	1 Hamps	nciente
U	· • • • • • • • • • • • • • • • • • • •	مع آهسيماه تفتد ا سا	المنافعة المنافعة المنافعة المنافعة المنافعة المنافعة المنافعة المنافعة المنافعة المنافعة المنافعة المنافعة ال	Denonwer wo	. OTHER D	'

	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	(19 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	<b>5</b> 4 3	2 1 0		
	Right Bank 10 9	8 7 6	<b>3</b>	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.		
under	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 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 — R		
	20 19 18 17 16	15 14 13 12 11	10 9 8 7 6	<b>3</b> 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 🔞 17 16	15 14 13 12 11	10 9 8 7 6	5 4 3 2 1 0		
FLOODPLAIN ENCROACH- MENT JAKE, CALLVEST, R.O. W.	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: 51 /80

Buffer/Floodplain:

<u>33</u>/80

Total Survey Reach 84 /160

SC

WATERSHED	SUBSHED: BBE	<u> </u>		DATE:	<u>12/03/09</u>	ASSE		S6+cm
SURVEY REA	CH ID: ७\	Тіме: <u>9</u> :45	<del></del>		ID: (Camera-Pi	c#)PC03	14 <u>00</u>	10
SITE ID: (Con	dition#) SC-Let LAT	<u>41 ° 50 ° 2</u>	<u>_" Long                                   </u>	1 <u>2 ° 42</u>	<u>' 45"</u> L	MK	GPS (	Unit ID)
	<u> </u>							1
TYPE: Roa	<u>-</u>		T		Geological For	1		•
	SHAPE:	#BARRELS:	MATERIAL:	t t	IGNMENT:	1		iable, sketch)
	☐ Arch ☐ Bottomless ☐ Box ☐ Elliptical	Single ☐ Double	Concrete  Metal		Flow-aligned	Barrel dia	_	24" (ft)
FOR ROAD/		Triple	Other:		Not flow-aligned Do not know		Height: _	(ft)
RAILROAD	Other: pipe	Other:	Other.		Do not know		41	(0)
CROSSINGS ONLY	CONDITION: (Evidence of)				LVERT SLOPE:	Culvert le	engtn: Width:	(ft)
ONLI	Cracking/chipping/corrosion				Flat Slight (2° – 5°)		width:	(ft)
	Sediment deposition	☐ Failing emb	Failing embankment		Obvious (>5°)	Roadway	elevation:	(ft)
	Other (describe):					Roadway		(11)
POTENTIAL I	POTENTIAL RESTORATION CANDIDATE  Fish barrier removal  Culvert repair/replacement  Upstream storage retrofit							
□ по		Local stream		-	<del>-</del>	=	- 1	, I
Is SC ACTING	G AS GRADE CONTROL	□No □Yo	es Unk	nown	·			
	EXTENT OF PHYSICAL BLO			В	LOCKAGE SEVE	RITY: (circ	le #)	
	☐ Total ☐ Partial		A structure such	es a dem or	A total fish block	age on a	A temporary l	barrier such as a
If yes for	☐ Temporary ☐ Unknow	wn.	road culvert on a	3rd order or	r tributary that wou	ıld isolate a	beaver dam o	or a blockage at
ij yes jor fish barrier	CAUSE:		greater stream blupstream movem		significant reach or partial blockag		the very head of a stream with very little viable fish habitat	
) ion con the		rop: (in)	anadromous fish;	no fish	interfere with the	migration of	above it; natu	ıral barriers such
1	☐ Flow too shallow Water Do	epth: (in)	passage device p	resent.	anadromous fish	•	as waterfalls.	
N(G			5		4 3		2	1
NOTES/SKET	CH: See RCh de	stasheet	for	skete	li.			
	•							
								÷
•								
		,			·			
		•		•				
		•						
•								
1					REPOR	TED TO AUT	THORITIES [	∃Yes ⊟No

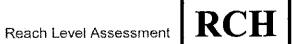
SURVEY REACH ID: 2 WTRSHD/SUBSHD: 486	DATE: 2/3/09 ASSESSED BY: 66
START TIME: 2:00 WPM LMK:	END TIME: 7:20 (O)PM LMK: GPS ID:
LAT ? LONG ?	LAT 4/ 0 50 1 21 " LONG 72 0 42 149 " (W)
1 · ·	DESCRIPTION: Junction water BBE-01
DESCRIPTION: JUNEAU MAY BE 4/BBC3	DESCRIPTION DANGER DISK - 01
D	RESENT CONDITIONS
	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 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 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 (≥50%)	3
(water surface) ☐ Partially shaded (≥25%)	[6]
☐ Unshaded (< 25%)	
CHANNEL Downcutting Bed scour	3
CHANNEL DWidgeing Donk feiture	
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)	(土)
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
sunkto	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	<b>8</b> 7 6	5 4 3	2 1 0
<del>-</del>	Right Bank 10 9	8 7 6	5 4 3	<del></del>
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	<b>8</b> 7 6 <b>8</b> 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
	20 19 18 17 16	15 14 12 12 631		floodplain 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+B6					
SURVEY REACH	D: 07	mera-Pic#) <b>PCG50</b>	-Pic #) <b>PCB00</b> /# <b>08</b>							
SITE ID: (Condition-#) TR- Steet LAT 41 ° 50 ' 8 "LONG 77 ° 42 ' 52 " LMK GPS: (Unit 1D)										
TYPE:  Industrial Commercial Residential	= =	onstruction	SOURCE:  Unknown Flooding Illegal dump Local outfall	LOCATION:  Stream Riparian Are Lt bank Ribank	a  LAND OWNERSHIP:  Public Munknown  Private  AMOUNT (# Pickup truck loads):					
POTENTIAL RESTORATION CANDIDATE  ☐ Stream cleanup ☐ Stream adoption segment ☐ Removal/prevention of dumping ☐ no ☐ Other:										
If yes for trash or debris removal	EQUIPMENT NEEDED: Heavy equipment Trash bags Unknown DUMPSTER WITHIN 100 FT:									
	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 ess is very difficult. Or presence of drums hazardous materials					
	5	<u>(4)</u>	3	2	1					
Notes: very	old CAR - Rela	tvely what, wa	y Reavire	welviery	be fernand					
<u> </u>				REPORTED	TO AUTHORITIES TYES NO					



SURVEY REACH!	D:BBE-OY W	TRSHD/SUBSHD:	BEAMAN	Brook E.	DATE: 12/3	109	ASSESSED BY:	-M
START TIM	e: <u>&amp; 30 am/f</u> % " Long		ENE	TIME?	AM/PM " LONG	ې LM	K:	GPS ID:
DESCRIPTION: COL		<del></del>			FWENCE W/	BBE	03 CNSEEN	(
RAIN IN LAST 24 HO  ☐ None	OURS Heavy rain		Prese	NT CONDITIONS	☐ Heavy rain ☐ Trace	☐ Stead	dy rain □ Inter reast □ Part	mittent ly cloudy
SURROUNDING LAN	D USE:	ial ☐ Commer ourse ☑ Park ?	cial □ Urb □ Cro		☑ Suburban/Res ☐ Pasture	☑ Fores ☐ Othe		tutional
AVERAGE	CONDITIONS (e)	seck applicable)		REACH S	SKETCH AND SI	TE ÎMPA	CT TRACKING	
BASE FLOW AS % CHANNEL WIDTH	□ 0-25% □25-50 %	□ 50%-75% <b>12</b> 75-100%	, ,	thin the survey red	of survey reach. Tro ach (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: In no	one  some  l some  los ne  some  lo	E		\ P\			
Wildlife in or Around Stream	(Evidence of) ☐ Fish ☐ Bea ☐ Snails ☑ Oth	aver Deer her: RED-THIED	I AWK.		DIFE			
STREAM SHADING (water surface)	Partially shad				$\setminus V$		a.s.	
CHANNEL DYNAMICS	Downcutting Widening Headcutting Aggrading	Bed scou Bank fail Bank sco	ure ur		JE S	•	57	(NOT SEE
Unknown	Sed. deposit	· · = · ·	zed E	ASSEMBLET IN	CLEANED)	1	<i>3</i> )	
CHANNEL DIMENSIONS	Height: La ban	k		MARCH		7	FLOO	Ders
(FACING DOWNSTREAM)	Width: Bottom	1&	(ft) (ft)	TRISTING FA	PIPE OF THE			
	REACH ACCESSIBIT	LITY Difficult. Must cros	22		1	1	<u>,                                      </u>	
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 slop sensitive areas to g stream. Few areas	e, or et to		7	\ ~ 6	'APE	•
easy stream channel access for heavy equipment using existing roads or trails.	landscaped areas. Stockpile areas small or distant from	and/or located a gre distance from strea	m.		OPE	N FEE	cia, Mos	N
	4) 3 FRAM	2 PINEAL I LA	NE					
NOTES: (biggest pro	blem you see in surv M ) <b>U</b>	ey reach) IN CAGNO UTON BUN EAUT SED TISIVE PLAN	+ PIPE	ed thus	THLY B	BANK	NOF	
	W # 1	JUM SOIL	i Malh	- ISAN	10 12/3	በጥሮቡ ጥሶ ፡	HTHODITIES F	IVes □No
W		ACIVE DIAM	S (PA	Chy SAvole	A, OLRAS	300 10 A	A KOSA	WALES
	(114	etc),	· •	- 1	<i>/</i> '	r.	,	

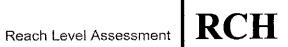
	Optimal	Suboptimal	Marginal	Poor
IN-STREAM HABITAT  (May modify criteria based on appropriate habitat regime)	Greater than 70% of substrate favorable for epifaunal colonization and fish cover; mix of snags, submerged logs, undercut banks, cobble or other stable habitat and at stage to allow full colonization 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	<b>(8)</b> 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 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: BBE			DAT	LE: <u>Ј</u>	<u> 103 /09</u>	Asse	SSED BY:	cm+86
SURVEY REA	SURVEY REACH ID: 04 TIME: 8: 45 AD/PM PHOTO ID: (Camera-Pic #) PC0300 /# 93						<b></b>		
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		_	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	<b>CONDITION:</b> (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		VII.	road culvert on a greater stream bl			tributary that would significant reach of	ld isolate a		or a blockage at ad of a stream with
fish barrier	CAUSE:	<i>(</i> : \	upstream movem	ent 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 Water Drop too high Water Drop too high Water Drop too high Water Drop too high Water Drop too high Water Drop too high Water Drop too high Water Drop too high Water Drop too high Water Drop too high Water Drop too high Water Drop too high Water Drop too high Water Drop too high Water Drop too high Water Drop too high Water Drop too high Water Drop too high Water Drop too high Water Drop too high Water Drop too high Water Drop too high Water Drop too high Water Drop too high Water Drop too high Water Drop too high Water Drop too high Water Drop too high Water Drop too high Water Drop too high Water Drop too high Water Drop too high Water Drop too high Water Drop too high Water Drop too high Water Drop too high Water Drop too high Water Drop too high Water Drop too high Water Drop too high Water Drop too high Water Drop too high Water Drop too high Water Drop too high Water Drop too high Water Drop too high Water Drop too high Water Drop too high Water Drop too high Water Drop too high Water Drop too high Water Drop too high Water Drop too high Water Drop too high Water Drop too high Water Drop too high Water Drop too high Water Drop too high Water Drop too high Water Drop too high Water Drop too high Water Drop too high Water Drop too high Water Drop too high Water Drop too high Water Drop too high Water Drop too high Water Drop too high Water Drop too high Water Drop too high Water Drop too high Water Drop too high Water Drop too high Water Drop too high Water Drop too high Water Drop too high Water Drop too high Water Drop too high Water Drop too high Water Drop too high Water Drop too high Water Drop too high Water Drop too high Water Drop too high Water Drop too high Water Drop too high Water Drop too high Water Drop too high Water Drop too high Water Drop too high Water Drop too high Water Drop too high Water Drop too high Water Drop too high Water Drop too high Water Drop too high 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:					<del>†</del>	· · · · · · · · · · · · · · · · · · ·	<u> </u>	•
			÷						
									-
	•								
									[
					,				
						•			
	•								
					÷				
7						Repor	FED TO AUT	THORITIES	☐ Yes ☐ No

### Storm Water Outfalls

$\mathbf{O}$	٦
UI	_

WATERSHED/SUBSHED: BOE			DATE: 10/03/09 ASSESSED BY: CM +B6			
SURVEY REACH ID: 54 TIME: 8:55 (D)/PM			PHOTO ID: (Camera-Pic#) PC 0700 /# 04			
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 CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE 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	
FOR   COLOR:     Clear   Brown   Grey   Yellow   Green   Orange   Red   Other:						
POTENTIAL RESTORA	rion Candidati	E Discharge investigati	on Stream daylighting	Local stream repair/	outfall stabilization	
<b>⊠</b> 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.	discharge; flow mostly clear and or arge has a color and/or odor, the an arge is very small compared to the s and any impact appears to be minor	nount of discharge; of causing	s not have dry weather staining; or appearance any erosion problems.	
	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	
<del></del>			<del></del>			



SURVEY REACH I	<b>D: <u>88</u>W-са W</b> т	RSHD/SUBSHD: <b>B</b> らべ	AN BROOK WES	T DATE: <u>12</u> /_		SED BY:
START TIM	E:	LMK:	END TIME:	10: 15 40 PM	LMK:	GPS ID:
LATH . 50 'E	98 " Long 7	2043 11 "	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	<b>4</b> (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 <b>\</b>		
TO THE REPORT OF THE	REACH ACCESSIBILE	THE RESERVE AND DESCRIPTION OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON OF THE PERSON 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	<b>(3)</b> 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		
	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>				<del>M+1</del>	50		
TYPE:   Road Crossing   Manmaude Dam   Beaver Dam   Geological Formation   Other:									<del></del>	6	
Type:   Road Crossing   Railroad Crossing   Manmade Dam   Beaver Dam   Geological Formation   Other:     March   Material:   Railroad		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	1	T						_
FOR ROAD   CROSSINGS   Conditions of the continue   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color				•		- ·					
FOR ROAD   Circular   City   Cother:   Do not know   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   City   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)   Clivert slope: (fi)   Clivert slope: (fi)   Clivert slope: (fi)   Clivert slope: (fi)   Clivert slope: (fi)   Clivert slope: (fi)   Clivert slope: (fi)   Clivert slope: (fi)   Clivert slope: (fi)   Clivert slope: (fi)   Clivert slope: (fi)   Clivert slope: (fi)   Clivert slope: (fi)   Clivert slope: (fi)   Clivert slope: (fi)   Clivert slope: (fi)   Clivert slope: (fi)   Clivert slope: (fi)   Clivert slope: (fi)   Clivert slope: (fi)   Clivert slope: (fi)   Clivert slope: (fi)   Clivert slope: (fi)   Clivert slope: (fi)   Clivert slope: (fi)   Clivert slope: (fi)   Clivert slope: (fi)   Clivert slope: (fi)   Clivert slope: (fi)   Clivert slope: (fi)   Clivert slope: (fi)   Clivert slope: (fi)   Clivert slope: (fi)   Clivert slope: (fi)   Clivert slope: (fi)   Clivert slope: (fi)   Clivert slope: (fi)   Clivert slope: (fi)   Clivert slope: (fi)   Clivert slope: (fi)   Clivert slope: (fi)   Clivert slope: (fi)   Clivert slope: (fi)   Clivert slope: (fi)   Clivert slope: (fi)   Clivert slope: (fi)   Clivert slope: (fi)   Clivert slope: (fi)   Clivert slope: (fi)   Clivert slope: (fi)   Clivert slope: (fi)   Clivert slope: (fi)   Clivert slope: (fi)   Clivert slope: (fi)   Clivert slope: (fi)   Clivert slope: (fi)   Clivert slope: (fi)   Clivert slope: (fi)   Clivert slope: (fi)   Clivert slope: (fi)   Clivert slope: (fi)   Clivert slope: (fi)   Clivert slope: (fi)   Clivert slope: (fi)   Clivert slope: (fi)   Clivert slope: (fi)   Clivert slope: (fi)   Clivert slope: (fi)   Clivert slope: (fi)   Clivert slope: (fi)   Clivert slope: (fi)   Clivert slope: (fi)   Clivert slope: (fi)   Clivert slope: (fi)   Clivert slope: (fi)   Clivert slope: (fi)   Clivert slope: (fi)   Clivert slope: (fi)   Clivert slope: (fi)   Clivert slope: (fi)   Clivert slope: (fi)   Clivert slope: (fi)   Cliver		FOR ROAD/	☑ Circular	Triple	<del></del>		- 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)									· <del>=</del>	(	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 goal culvert on a 3d order or goal culvert on a 3d order 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   Lysheem   Lysheem   Lysheem   Lysheem   Lysheem   Lysheem   Lysheem   Lysheem   Lysheem   Lysheem   Lysheem   Lysheem   Lysheem   Lysheem   Lysheem   Lysheem   Lysheem   Lysheem   Lysheem   Lysheem   Lysheem   Lysheem   Lysheem   Lysheem   Lysheem   Lysheem   Lysheem   Lysheem   Lysheem   Lysheem   Lysheem   Lysheem   Lysheem   Lysheem   Lysheem   Lysheem   Lysheem   Lysheem   Lysheem   Lysheem   Lysheem   Lysheem   Lysheem   Lysheem   Lysheem   Lysheem   Lysheem   Lysheem   Lysheem   Lysheem   Lysheem   Lysheem   Lysheem   Lysheem   Lysheem   Lysheem   Lysheem   Lysheem   Lysheem   Lysheem   Lysheem   Lysheem   Lysheem   Lysheem   Lysheem   Lysheem   Lysheem   Lysheem   Lysheem   Lysheem   Lysheem   Lysheem   Lysheem   Lysheem   Lysheem   Lysheem   Lysheem   Lysheem   Lysheem   Lysheem   Lysheem   Lysheem   Lysheem   Lysheem   Lysheem   Lysheem   Lysheem   Lysheem   Lysheem   Lysheem   Lysheem   Lysheem   Lysheem   Lysheem   Lysheem   Lysheem   Lysheem   Lysheem   Lysheem   Lysheem   Lysheem   Lysheem   Lysheem   Lysheem   Lysheem   Lysheem   Lysheem   Lysheem   Lysheem   Lysheem   Lysheem   Lysheem   Lysheem   Lysheem   Lysheem   Lysheem   Lysheem   Lysheem   Lysheem   Lysheem   Lysheem   Lysheem   Lysheem   Lysheem   Lysheem   Lysheem   Lysheem   Lysheem   Lysheem   Lysheem   Lysheem   Lysheem   Lysheem   Lysheem   Lysheem   Lysheem   Lysheem   Lysheem   Lysheem   Lysheem   Lysheem   Lysheem   Lysheem   Lysheem   Lysheem   Lysheem   Lysheem   Lysheem   Lysheem   Lysheem   Lysheem   Lysheem   Lysheem   Lysheem   Lysheem   Lysheem   Lysheem   Lysheem   Lysheem   Lysheem   Lysheem   Lysheem   Lysheem   Lysheem   Lysheem   Lysheem   Lysheem   Lysheem   Lysheem   Lysheem   Lysheem   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   Stream Notes/Sketch:   Prop -Rap on   Westleton   Stream Notes/Sketch:   Prop -Rap on   Westleton   Stream Notes/Sketch:   Prop -Rap on   Westleton   Stream Notes/Sketch:   Prop -Rap on   Westleton   Stream Notes/Sketch:   Prop -Rap on   Westleton   Stream Notes/Sketch:   Prop -Rap on   Westleton   Stream Notes/Sketch:   Prop -Rap on   Westleton   Stream Notes/Sketch:   Prop -Rap on   Westleton   Stream Notes/Sketch:   Prop -Rap on   Westleton   Stream Notes/Sketch:   Prop -Rap on   Westleton   Stream Notes/Sketch:   Prop -Rap on   Westleton   Stream Notes/Sketch:   Prop -Rap on   Westleton   Stream Notes/Sketch:   Prop -Rap on   Westleton   Stream Notes/Sketch:   Prop -Rap on   Westleton   Stream Notes/Sketch:   Prop -Rap on   Westleton   Stream Notes/Sketch:   Prop -Rap on   Prop -Rap on   Prop -Rap on   Prop -Rap on   Prop -Rap on   Prop -Rap on   Prop -Rap on   Prop -Rap on   Prop -Rap on   Prop -Rap on   Prop -Rap on   Prop -Rap on   Prop -Rap on   Prop -Rap on   Prop -Rap on   Prop -Rap on   Prop -Rap on   Prop -Rap on   Prop -Rap on   Prop -Rap on   Prop -Rap on   Prop -Rap on   Prop -Rap on   Prop -Rap on   Prop -Rap on   Prop -Rap on   Prop -Rap on   Prop -Rap on   Prop -Rap on   Prop -Rap on   Prop -Rap on   Prop -Rap on   Prop -Rap on   Prop -Rap on   Prop -Rap on   Prop -Rap on   Prop -Rap on   Prop -Rap on   Prop -Rap on   Prop -Rap on   Prop -Rap on   Prop -Rap on   Prop -Rap on   Prop -Rap on   Prop -Rap on   Prop -Rap on   Prop -Rap on   Prop -Rap on   Prop -Rap on   Prop -Rap on   Prop -Rap on   Prop -R				CKAGE:		BLO	CKAGE SEVEI	RITY: (circl	e #)		$\dashv$
If yes for fish barrier CAUSE:   Drop too high   Water Drop:			_ =	wn							
Jish barrier		If yes for				locking the significant reach of si		f stream, the very head of a stream wit		with	
Flow too shallow Water Depth: (in)   passage device present.   anadromous fish.   as waterfalls.				ron: (in)							
Notes/Sketch: Rip-Rap on tupsthethm sides of culvert atomy both banks bor ~30' Head walls causists 16 Rip-Ray.				-	1		·	-	-		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	<b>9</b> 2 <b>(</b> 12 .	S v		ļ
			100 - 30, f	rena worms s	-engists of	G P	walk t				
										٠	
					•						
			•								
			•								1
REPORTED TO AUTHORITIES TYPES IN NO	I	1	•				Repor	RTED TO AU	THORITIES	☐ Yes ☐	No

Impacted Buffer

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 °			<b>5</b> •	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	<del></del>			] [	<b>∄</b> 2	□:			
RT Bar					<u> </u>				
DOMINANT LAND COVERS LEEP.	Paved	Bare ground		•	_	rub/scrut	_	Other	
LAND COVER: LT Ba RT Ba			<b></b>					□: □:	
Invasive Plants:	<del></del>		•				<u> </u>		
	None	Rare		artial covera		<del></del>	· · · · · · · · · · · · · · · · · · ·	Z unk	•
STREAM SHADE PROVID	DED? No	ne 🗖 Pari	ial <b>(50%)</b> □	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): $\frac{\sqrt{50'}}{10'}$	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	- ``					
					` .				
	•								
•									

# Impacted Buffer

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		<del></del>		□: □:
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	WALLEY .			
	•			•
			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:	SURVEY REACH ID: TIME: 10 : 00 M/PM			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
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:				
POTENTIAL RESTORATION CANDID  no  If yes for daylighting:  Length of vegetative cover from outfall	Storm water retrofit	Other:		r/outfall stabilization
If yes for stormwater:  Is stormwater currently controlled?  ☐ Yes ☐ No ☐ Not investigated	Land Use de Area availab	•		_
OUTFALL SEVERITY: (circle #)  Heavy discharge with strong smell. The amo compared to the amo stream; discharge approximation in the significant impact down	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  Suburban/Res
_	H SKETCH AND SITE IMPACT TRACKING
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 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%)	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.	<b>E</b>
5 4 3 2 1	<b>k</b>
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)	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	<b>③</b> 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	<b>(3)</b> 7 6	5 4 3	2 1 0
	Right Bank 10 9	<b>®</b> 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	<b>3</b> 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

SC

WATERSHED	DISUBSHED: WYSS			DATE: 12	<u> / 0                                  </u>	ASSES	SED BY: UV	<u> 705 (</u>
SURVEY REA	ACH ID: O	TIME::_	АМ/РМ	Рното II	<b>):</b> (Camera-Pi	c#) PCOIC	0 # 35	
SITE ID: (Cor	ndition-#) SCLAT	0 1	" Long_	0 !	" L	MK	GPS (Unit IE	))
3,3,3,3,3,3,3,3,3,3,3,3,3,3,3,3,3,3,3,3,	porothy DR.							
TYPE: Ros	· · · · · · · · · · · · · · · · · · ·	ing	Dam Beav	er Dam	Geological For	mation 🔲 C	ther:	
SHAPE: #1 Arch Bottomless		#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 ☐ Temporary ☐ Unknown  If yes for		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: ONL I los	, (RR)	's labor	/a_0	ے ملاتد	and carro	ـد ـــــــــــــــــــــــــــــــــــ	
·	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

Impacted Buffer

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 A 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	<del></del> _	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  Existing		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	000.00	soot tour	J.	,
J. 200/2 2 2(1	20 2 1 / (*	17 <b>3</b> 1 H	ppiese.	no remo	<b>r</b>	
	•			•		
		•				
		•				
	·					
				•		
						· · · · · · · · · · · · · · · · · · ·
						·

	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 '		(M)
			•				, ,	
	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	
	AVERAGE		v. v. 484 - 52 - 41 - 42 - 42 - 42 - 42 - 42 - 42 - 4		an National Committee of the Committee of the Committee of the Committee of the Committee of the Committee of the Committee of the Committee of the Committee of the Committee of the Committee of the Committee of the Committee of the Committee of the Committee of the Committee of the Committee of the Committee of the Committee of the Committee of the Committee of the Committee of the Committee of the Committee of the Committee of the Committee of the Committee of the Committee of the Committee of the Committee of the Committee of the Committee of the Committee of the Committee of the Committee of the Committee of the Committee of the Committee of the Committee of the Committee of the Committee of the Committee of the Committee of the Committee of the Committee of the Committee of the Committee of the Committee of the Committee of the Committee of the Committee of the Committee of the Committee of the Committee of the Committee of the Committee of the Committee of the Committee of the Committee of the Committee of the Committee of the Committee of the Committee of the Committee of the Committee of the Committee of the Committee of the Committee of the Committee of the Committee of the Committee of the Committee of the Committee of the Committee of the Committee of the Committee of the Committee of the Committee of the Committee of the Committee of the Committee of the Committee of the Committee of the Committee of the Committee of the Committee of the Committee of the Committee of the Committee of the Committee of the Committee of the Committee of the Committee of the Committee of the Committee of the Committee of the Committee of the Committee of the Committee of the Committee of the Committee of the Committee of the Committee of the Committee of the Committee of the Committee of the Committee of the Committee of the Committee of the Committee of the Committee of the Committee of the Committee of the Committee of the Committee of the Committee of the Committee of the Committee of the 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	\( \frac{1}{2} \)	. <b>(5</b> )
	☐ Silt/clay (fine or		obble (2.5 –10")		P.	Ţ	ar j	37
	<b>Æ</b> Sand (gritty)		oulder (>10")		: چ	Ŧ	2.	V. DW
	☐ Gravel (0.1-2.5	3") ⊔ Be	ed rock		<b>*</b>	‡	FIN	3/4
	WATER CLARITY	M Clear □Turbi	A (evenanded matter)		٢-	<b>t</b>	•	Le dulo
	Stained (clear, no				-	ł , ,	اه جمع	
	☐ Other (chemicals,	•	Opaquo (mms)				ER E	
				-	4			The Early
	AQUATIC PLANTS		ne □ some □ lots			<u>.</u>	-	$\mathcal{L}$
	IN STREAM		e □ some □ lots	_	- 1	-	1 1	reighter
	WILDLIFE IN OR	(Evidence of)	<del></del>			<u>.</u> ,	71 - A	TYAPAL 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	<del>RT ba</del> nk	<del>(#)</del> )		. 1	MARSH		
	(FACING	Width: Bottom	/O (ft)		17	4	<b></b>	1
	DOWNSTREAM)	<del>Tóp</del>	(ft)		MARSh +	MARSH	<b>€</b> ~	
		-			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	N 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	0	
	easy stream channel	landscaped areas.	and/or located a great		~ // <del>!</del>	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	reachis-		\z			
					1,50			
					Depo	<b>ወጥሮስ ፕ</b> ፖስ አመጥ	HORITIES 🔲	YES IT NO
	•				REPU.	KLEV IVAUL	THE PROPERTY 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 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	<b>(8)</b> 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 Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share Share	SURVEY REA	SURVEY REACH ID: 6 TIME: 3:30 AM/60						c#) Pco	10 /# O4S
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):   Chief (describe):   Chief (describe):   Chief (describe):   Chief (describe):   Chief (describe):   Chief (describe):   Chief (describe):   Chief (describe):   Chief (describe):   Chief (describe):   Chief (describe):   Chief (describe):   Chief (describe):   Chief (describe):   Chief (describe):   Chief (describe):   Chief (describe):   Chief (describe):   Chief (describe):   Chief (describe):   Chief (describe):   Chief (describe):   Chief (describe):   Chief (describe):   Chief (describe):   Chief (describe):   Chief (describe):   Chief (describe):   Chief (describe):   Chief (describe):   Chief (describe):   Chief (describe):   Chief (describe):   Chief (describe):   Chief (describe):   Chief (describe):   Chief (describe):   Chief (describe):   Chief (describe):   Chief (describe):   Chief (describe):   Chief (describe):   Chief (describe):   Chief (describe):   Chief (describe):   Chief (describe):   Chief (describe):   Chief (describe):   Chief (describe):   Chief (describe):   Chief (describe):   Chief (describe):   Chief (describe):   Chief (describe):   Chief (describe):   Chief (describe):   Chief (describe):   Chief (describe):   Chief (describe):   Chief (describe):   Chief (describe):   Chief (describe):   Chief (describe):   Chief (describe):   Chief (describe):   Chief (describe):   Chief (describe):   Chief (describe):   Chief (describe):   Chief (describe):   Chief (describe):   Chief (describe):   Chief (describe):   Chief (describe):   Chief (describe):   Chief (describe):   Chief (describe):   Chief (describe):   Chief (describe):   Chief (describe):   Chief (describe):   Chief (describe):   Chief (describe):   Chief (describe):   Chief (describe):   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   Partial   Propose   Propose   Propose   Propose   Propose   Propose   Propose   Propose   Propose   Propose   Propose   Propose   Propose   Propose   Propose   Propose   Propose   Propose   Propose   Propose   Propose   Propose   Propose   Propose   Propose   Propose   Propose   Propose   Propose   Propose   Propose   Propose   Propose   Propose   Propose   Propose   Propose   Propose   Propose   Propose   Propose   Propose   Propose   Propose   Propose   Propose   Propose   Propose   Propose   Propose   Propose   Propose   Propose   Propose   Propose   Propose   Propose   Propose   Propose   Propose   Propose   Propose   Propose   Propose   Propose   Propose   Propose   Propose   Propose   Propose   Propose   Propose   Propose   Propose   Propose   Propose   Propose   Propose   Propose   Propose   Propose   Propose   Propose   Propose   Propose   Propose   Propose   Propose   Propose   Propose   Propose   Propose   Propose   Propose   Propose   Propose   Propose   Propose   Propose   Propose   Propose   Propose   Propose   Propose   Propose   Propose   Propose   Propose   Propose   Propose   Propose   Propose   Propose   Propose   Propose   Propose   Propose   Propose   Propose   Propose   Propose   Propose   Propose   Propose   Propose   Propose   Propose   Propose   Propose   Propose   Propose   Propose   Propose   Propose   Propose   Propose   Propose   Propose   Propose   Propose   Propose   Propose   Propose   Propose   Propose   Propose   Propose   Propose   Propose   Propose   Propose   Propose   Propose   Propose   Propose   Propose   Propose   Propose   Propose   Propose   Propose   Propose   Propose   Propose   Propose		☐ Cracking/chipping/corrosio☐ Sediment deposition				☐ Flat ☐ Slight (2° – 5°)			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 cull wufs   Different conditions   Single of Property   Coulse of the conditions   Single of Property   Single of Steam with the digration of anadromous fish.   Single of Steam with the digration of anadromous fish.   Single of Steam with the digration of anadromous fish.   Single of Steam with the migration of anadromous fish.   Single of Steam with the migration of anadromous fish.   Single of Steam with the migration of anadromous fish.   Single of Steam with the migration of anadromous fish.   Single of Steam with the migration of anadromous fish.   Single of Steam with the migration of anadromous fish.   Single of Steam with the migration of anadromous fish.   Single of Steam with the migration of anadromous fish.   Single of Steam with the migration of anadromous fish.   Single of Steam with the migration of anadromous fish.   Single of Steam with the migration of anadromous fish.   Single of Steam with the migration of anadromous fish.   Single of Steam with the migration of anadromous fish.   Single of Steam with the migration of anadromous fish.   Single of Steam with the migration of anadromous fish.   Single of Steam with the migration of anadromous fish.   Single of Steam with the migration of anadromous fish.   Single of Steam with the migration of anadromous fish.   Single of Steam with the migration of anadromous fish.   Single of Steam with the migration of anadromous fish.   Single of Steam with the migration of anadromous fish.   Single of Steam with the migration of anadromous fish.   Single of Steam with the migration of anadromous fish.   Single of Steam with the migration of anadromous fish.   Single of Steam with the migration of anadromous fish.   Single of Steam with the migration of anadromous fish.   Single of Steam wi		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 of the Down of the Down of the Down of the Down of the Down of the Down of the Down of the Down of the Down of the Down of the Down of the Down of the Down of the Down of the Down of the Down of the Down of the Down of the Down of the Down of the Down of the Down of the Down of the Down of the Down of the Down of the Down of the Down of the Down of the Down of the Down of the Down of the Down of the Down of the Down of the Down of the Down of the Down of the Down of the Down of the Down of the Down of the Down of the Down of the Down of the Down of the Down of the Down of the Down of the Down of the Down of the Down of the Down of the Down of the Down of the Down of the Down of the Down of the Down of the Down of the Down of the Down of the Down of the Down of the Down of the Down of the Down of the Down of the Down of the Down of the Down of the Down of the Down of the Down of the Down of the Down of the Down of the Down of the Down of the Down of the Down of the Down of the Down of the Down of the Down of the Down of the Down of the Down of the Down of the Down of the Down of the Down of the Down of the Down of the Down of the Down of the Down of the Down of the Down of the Down of the Down of the Down of the Down of the Down of the Down of the Down of the Down of the Down of the Down of the Down of the Down of the Down of the Down of the Down of the Down of the Down of the Down of the Down of the Down of the Down of the Down of the Down of the Down of the Down of the Down of the Down of the Down of the Down of the Down of the Down of the Down of the Down of the Down of the Down of the Down of the Down of the Down of the Down of the Down of the Down of the Down of the Down of the Down of the Down of the Down of the Down of the Down of the Down of the Down of the Down of the Down of the Down of the Down of the Down of the Down of the Down of the Down of the Down of the Down of the Down of the Down of the 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 blocks 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		

SC

WATERSHED	/SUBSHED: WKN			Da'	<u>те: Љ</u>	101 109	ASSE	SSED BY: (	Junt Bo
SURVEY REA		<u>  Тіме: Ч : К</u>				: (Camera-Pio	c#) Pholo	00 /# 5 <sup>L</sup>	1,55 +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		ERT SLOPE:	Culvert le	•	(ft)
ONLY	☐ Cracking/chipping/corros ☐ Sediment deposition ☐ Other (describe):	on Downstrear Failing emb			☐ Flat ☐ Slight (2° – 5°) ☐ Obvious (>5°)			Width:	(ft)
Downwar I	DECEMBER OF CAMPUS AND		1 🗆 🔾 1		• (	1	T4		<del> </del>
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 Particular Particular Particular Particular Particular Particular Particular Particular Particular Particular Particular Particular Particular Particular Particular Particular Particular Particular Particular Particular Particular Particular Particular Particular Particular Particular Particular Particular Particular Particular Particular Particular Particular Particular Particular Particular Particular Particular Particular Particular Particular Particular Particular Particular Particular Particular Particular Particular Particular Particular Particular Particular Particular Particular Particular Particular Particular Particular Particular Particular Particular Particular Particular Particular Particular Particular Particular Particular Particular Particular Particular Particular Particular Particular Particular Particular Particular Particular Particular Particular Particular Particular Particular Particular Particular Particular Particular Particular Particular Particular Particular Particular Particular Particular Particular Particular Particular Particular Particular Particular Particular Particular Particular Particular Particular Particular Particular Particular Particular Particular Particular Particular Particular Particular Particular Particular Particular Particular Particular Particular Particular Particular Particular Particular Particular Particular Particular Particular Particular Particular Particular Particular Particular Particular Particular Particular Particular Particular Particular Particular Particular Particular Particular Particular Particular Particular Particular Particular Particular Particular Particular Particular Particular Particular Particular Particular Particular Particular Particular Particular Particular Particular Particular Particular Particular Particular Particular Particular Particular Particular Particular Particular Particular Particular Particular Particular Particular Particular Particular Particular Particular Particular Particular 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	· Para 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	-0// 2 M	) A	<del>-</del> ∢
	flow (	these Mi	sol tex	Ĭ,	nsut	Rivent	877	e), v.	7
	معلیمیں	pools.	cae idho	toʻ	٤			•	
ļ	. WA4+∞ (	poors.	200 km		-				
			•						
									•
		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
				<del></del> _	
POTENTIAL RESTORATION CANDIDATE	<del></del>		-	<del>-</del>	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
	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 Lett	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	\_ a. Day	tion potent
		IDITIO! (ICI	(0)	DO 1684 050	1,001 30 1001
B18 1	al wind de	aid outis	8 \	1.000	A walant
	VALUE OF NO.	nobation	· vove	1000 IS	1'20"/72'
No D	NOTO.	Je 1 4-1100	, 600(()	- 1 - 11 5	1'20"/72'44'09
	(	,	ماليم		within the so photo by information
(9) YARD U	nazze griwb	alour Alour	), raye	6 LB+	within the
Chanr	iel itself.	J 41"5T	22"/7	7 44' B" A	so photo
Poten	tial restorat	tidh cand	id Ate	by plandi	information
OR &	macemen	<del>d</del> ,		$I_{ij}^{-1}$	
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 NATE 187
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 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
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 second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second 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
	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 the letter of the letter of the letter of the letter of the letter of the letter of the letter of the letter of the letter of the letter of the letter of the letter of the letter of the letter of the letter of the letter of the letter of the letter of the letter of the letter of the letter of the letter of the letter of the letter of the letter of the letter of the letter of the letter of the letter of the letter of the letter of the letter of the letter of the letter of the letter of the letter of the letter of the letter of the letter of the letter of the letter of the letter of the letter of the letter of the letter of the letter of the letter of the letter of the letter of the letter of the letter of the letter of the letter of the letter of the letter of the letter of the letter of the letter of the letter of the letter of the letter of the letter of the letter of the letter of the letter of the letter of the letter of the letter of the letter of the letter of the letter of the letter of the letter of the letter of the letter of the letter of the letter of the letter of the letter of the letter of the letter of the letter of the letter of the letter of the letter of the letter of the letter of the letter of the letter of the letter of the letter of the letter of the letter of the letter of the letter of the letter of the letter of the letter of the letter of the letter of the letter of the letter of the letter of the letter of the letter of the letter of the letter of the letter of the letter of the letter of the letter of the letter of the letter of the letter of the letter of the letter of the letter of the letter of the letter of the letter of the letter of the letter of the letter of the letter of the letter of the letter of the letter of the letter of the letter of the letter of the letter of the letter of the letter of the letter of the letter of the letter of the letter of the letter of the letter of the letter of the letter of the letter of the letter of the letter of 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	<b>(8)</b> 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/SUB	SHED: BHR	•		DATE: 12 /0	<u>8/09</u>	ASSESSED BY: CM +BG			
SURVEY REACH I	SURVEY REACH ID: O   TIME: 1 : 40 M/PM PHOTO ID: (Camera-Pic #) PCORO /# 086								
SITE ID: (Condition	-#) <b>TR-</b> _Å	LAT410SI	<b>2</b> ⁄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	<b>                                   </b>			
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:	A small amount of tra than two pickup truck I inside a park with easy	oads) located a long	sy access. Trash r	or bulk items, in a small a may have been dumped o it could be cleaned up it small backhoe.	ver area, where a	nt of trash or debris scattered over a large coess is very difficult. Or presence of drums of hazardous materials			
(Circle #)	5		4	(3)	2	1			
NOTES: Very good candidate for Restocation/deanup. Prevention shallow be emphasized. Trash included (Among other Huring): Washing Machine, ac units, chunks of concrete t 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 + B6			
SURVEY REACH I	D: 0\	TIME::AM/PM	Рното ID: (Сан	mera-Pic #) PC080	/# 090 ·	
SITE ID: (Condition	#) TR-8 LAT <u>41</u>	051 132 "LONG	:72·47·51	<u> </u>	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	ORATION CANDIDATE	1 Stream cleanup 🛛 Strea	m adoption segment	Removal/preven	ntion of dumping	
If yes for trash or debris removal		Heavy equipment Tr			UMPSTER WITHIN 100 FT:  Yes Ø'No □ Unknown	
CLEAN-UP POTENTIAL:	A small amount of trash (i.e., le than two pickup truck loads) locat inside a park with easy access		nay have been dumped or it could be cleaned up in	ver area where access	trash or debris scattered over a large s is very difficult. Or presence of drums zardous materials	
(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: $\mathcal{C} \not\vdash \mathcal{C}$			DATE: 10	8109 A	Assessed by: OM + BG
SURVEY REACH I	D: 0 /	TIME::AM/PM	<b>РНОТО ID:</b> (Са	mera-Pic #) PC 08 (	0 /# 091,092
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 Dunknown Private  AMOUNT (# Pickup truck loads): Needs welland
POTENTIAL REST		Stream cleanup Stream Stream Cleanup			
If yes for trash or debris removal	EQUIPMENT NEEDED: WHO CAN DO IT:	☐ Heavy equipment ☐ To	<u>_</u> _		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	I WITH PASY ACCESS I FASH II	nay have been dumped or it could be cleaned up in	ver area, where acce	of trash or debris scattered over a large ess is very difficult. Or presence of drums 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/SUB	SHED: BHR		DATE: 12/08/09 ASSESSED BY: CM+B			
SURVEY REACH I	D: Ol	TIME::AM/PM	Рното Ю: (Са	mera-Pic #)	1# None	
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	ORATION CANDIDATE	Stream cleanup Stre		t ☑ Removal/pre	vention of dumping	
If yes for trash or debris removal	EQUIPMENT NEEDED: WHO CAN DO IT:	Heavy equipment \( \square\) Volunteers \( \square\) 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		may have been dumped o it could be cleaned up i	area, where acc	of trash or debris scattered over a large ess is very difficult. Or presence of drums hazardous materials	
(Circle #)	5	(4)	3	2	1	
NOTES: Most	ly yard waste, I stone	but also met	al scraps	PRIVATE 1	seaperty - some	
				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		
FLOWING TURBIDITY:	None Slight Cloudiness None Sewage (toilet paper, r/plastic bags) Dumping	etc.) Petroleum (oil sheen g (bulk) Excessive Sediment	) Other:		
POTENTIAL RESTORATION CANDID  no  If yes for daylighting: Length of vegetative cover from outfall:	ATE Discharge investigation Storm water retrofit	on Stream daylighting Local			
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

WATERSHED	D/SUBSHED: BHK		,	Date: 🗦	<u> 108 109</u>	ASSE	SSED BY:	<u>contbo</u>
SURVEY REA		TIME::_						089,090
SITE ID: (Con	ndition-#) SC- A LAT	41.51.3	2 " Long <u>7</u> )	042	<u> 50 "</u> ΓΙ	MK	GPS	(Unit ID)
	old FARM ROAD V	Yno nAMe						
TYPE: Ros	ad Crossing Railroad Crossi	ng Manmade	Dam Beave	Dam 🔲	Geological Fon	mation 🔲	Other:	
	SHAPE:	#BARRELS:	MATERIAL:		NMENT:	I		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:	ەم ت	not know			
CROSSINGS ONLY	CONDITION: (Evidence of)				ERT SLOPE:	Culvert le	~	(ft)
ONLI	Cracking/chipping/corrosion			☐ Fla	t ght (2° – 5°)		Width:	(ft)
	Sediment deposition	☐ Failing emb	ankment		yious (>5°)	Daadway	elevation:	(ft)
	Other (describe):				710 <b>4</b> 5 (* 5 )	Koadway	elevation.	(11)
POTENTIAL I	RESTORATION CANDIDATE	Fish barrier re	emoval 🔲 Culve	rt repair/re	olacement   U	Jostream st	orage retro	ofit
√⊠ no		Local stream						
IS SC ACTING	G AS GRADE CONTROL	□No □Y	es Unkn	own		•		
	EXTENT OF PHYSICAL BLO				CKAGE SEVER	RITY: (circ	!e #)	
	☐ Total ☐ Partial		A structure such se				•	. harder auch as a
	☐ Temporary ☐ Unknow	A structure such as road culvert on a 3	d order or	A total fish blocka tributary that wou	ld isolate a	beaver dam	y barrier such as a or a blockage at	
If yes for fish barrier	CAUSE:	greater stream bloc upstream movemen		significant reach of stream, or partial blockage that may		the very head of a stream with very little viable fish habitat		
Jish varreer	Drop too high Water Dr		anadromous fish; n	o fish	interfere with the	migration of	above it; na	tural barriers such
	Flow too shallow Water Do	epth: (in)	passage device pre	esent.	anadromous fish.		as waterfail	S.
	Other:		5		3		2	1 .
NOTES/SKET	CH:							
				•				
·								
·	,							
<b>'</b>						•		
		•						
		· ·						
		•						
		·			Dans-			☐ YES ☐ No

SC

Other:	WATERSHED	-			DATE: 12		1 1100100			TBG
STRAND Crossing   Railroad Crossing   Mammade Dam   Geological Formation   Other:							c#) PC080	) /#	093,	094,0
SHAPE:	SITE ID: (Con	dition# Se LAT	41 051 4	" Long <u>7</u>	<u>2 ° 42 '</u>	<u> 50</u> " L	MK	GPS	(Unit ID	)
Arch   Bottomiess   Single   Concret   Not filow-aligned   Not filow-aligned   Not filow-aligned   Not filow-aligned   Not filow-aligned   Not filow-aligned   Not filow-aligned   Not filow-aligned   Not filow-aligned   Not filow-aligned   Not filow-aligned   Not filow-aligned   Not filow-aligned   Not filow-aligned   Not filow-aligned   Not filow-aligned   Not filow-aligned   Not filow-aligned   Not filow-aligned   Not filow-aligned   Not filow-aligned   Not filow-aligned   Not filow-aligned   Not filow-aligned   Not filow-aligned   Not filow-aligned   Not filow-aligned   Not filow-aligned   Not filow-aligned   Not filow-aligned   Not filow-aligned   Not filow-aligned   Not filow-aligned   Not filow-aligned   Not filow-aligned   Not filow-aligned   Not filow-aligned   Not filow-aligned   Not filow-aligned   Not filow-aligned   Not filow-aligned   Not filow-aligned   Not filow-aligned   Not filow-aligned   Not filow-aligned   Not filow-aligned   Not filow-aligned   Not filow-aligned   Not filow-aligned   Not filow-aligned   Not filow-aligned   Not filow-aligned   Not filow-aligned   Not filow-aligned   Not filow-aligned   Not filow-aligned   Not filow-aligned   Not filow-aligned   Not filow-aligned   Not filow-aligned   Not filow-aligned   Not filow-aligned   Not filow-aligned   Not filow-aligned   Not filow-aligned   Not filow-aligned   Not filow-aligned   Not filow-aligned   Not filow-aligned   Not filow-aligned   Not filow-aligned   Not filow-aligned   Not filow-aligned   Not filow-aligned   Not filow-aligned   Not filow-aligned   Not filow-aligned   Not filow-aligned   Not filow-aligned   Not filow-aligned   Not filow-aligned   Not filow-aligned   Not filow-aligned   Not filow-aligned   Not filow-aligned   Not filow-aligned   Not filow-aligned   Not filow-aligned   Not filow-aligned   Not filow-aligned   Not filow-aligned   Not filow-aligned   Not filow-aligned   Not filow-aligned   Not filow-aligned   Not filow-aligned   Not filow-aligned   Not filow-aligned   Not filow-aligned   Not filow-aligned   Not f	TYPE: X Roa	ad Crossing   Railroad Cross	ing Manmade	Dam Beav	er Dam	Geological For	mation 🔲 O	ther:		
Cracking/chiping/corrosion   Downstream scour hole   Sediment deposition   Failing embankment   Sight (2° – 5°)   Roadway elevation: (fit)   Sight (2° – 5°)   Roadway elevation: (fit)   Sight (2° – 5°)   Roadway elevation: (fit)   Sight (2° – 5°)   Roadway elevation: (fit)   Sight (2° – 5°)   Roadway elevation: (fit)   Sight (2° – 5°)   Roadway elevation: (fit)   Sight (2° – 5°)   Roadway elevation: (fit)   Sight (2° – 5°)   Roadway elevation: (fit)   Sight (2° – 5°)   Roadway elevation: (fit)   Roadway elevation: (fit)   Sight (2° – 5°)   Roadway elevation: (fit)   Sight (2° – 5°)   Roadway elevation: (fit)   Sight (2° – 5°)   Roadway elevation: (fit)   Sight (2° – 5°)   Roadway elevation: (fit)   Sight (2° – 5°)   Roadway elevation: (fit)   Sight (2° – 5°)   Roadway elevation: (fit)   Sight (2° – 5°)   Roadway elevation: (fit)   Sight (2° – 5°)   Roadway elevation: (fit)   Sight (2° – 5°)   Roadway elevation: (fit)   Sight (2° – 5°)   Roadway elevation: (fit)   Sight (2° – 5°)   Roadway elevation: (fit)   Sight (2° – 5°)   Roadway elevation: (fit)   Sight (2° – 5°)   Roadway elevation: (fit)   Sight (2° – 5°)   Roadway elevation: (fit)   Sight (2° – 5°)   Roadway elevation: (fit)   Sight (2° – 5°)   Roadway elevation: (fit)   Sight (2° – 5°)   Roadway elevation: (fit)   Sight (2° – 5°)   Roadway elevation: (fit)   Sight (2° – 5°)   Roadway elevation: (fit)   Sight (2° – 5°)   Roadway elevation: (fit)   Sight (2° – 5°)   Roadway elevation: (fit)   Sight (2° – 5°)   Roadway elevation: (fit)   Sight (2° – 5°)   Roadway elevation: (fit)   Sight (2° – 5°)   Roadway elevation: (fit)   Sight (2° – 5°)   Roadway elevation: (fit)   Sight (2° – 5°)   Roadway elevation: (fit)   Sight (2° – 5°)   Roadway elevation: (fit)   Sight (2° – 5°)   Roadway elevation: (fit)   Sight (2° – 5°)   Roadway elevation: (fit)   Sight (2° – 5°)   Roadway elevation: (fit)   Sight (2° – 5°)   Roadway elevation: (fit)   Sight (2° – 5°)   Roadway elevation: (fit)   Sight (2° – 5°)   Roadway elevation: (fit)   Sight (2° – 5°)   Roadway eleva	FOR ROAD/ RAILROAD	☐ Arch ☐ Bottomless ☐ Box ☐ Elliptical ☐ Circular	Single , Double Triple	Concrete Metal	<b>⊠</b> Flo	ow-aligned ot flow-aligned	Barrel diam H	eter: eight:	ariable, sk	(ft)
No	CROSSINGS ONLY	☐ Cracking/chipping/corrosio☐ Sediment deposition			☐ Fla	nt ght (2° – 5°)	W	idth:		(ft)
EXTENT OF PHYSICAL BLOCKAGE:    Total	POTENTIAL I	RESTORATION CANDIDATE	<del></del>			placement	Upstream stor	age retr	ofit	
Total   Minown   A structure such as a dam or road culvert on a 3rd order or greater stream blocking the upstream movement of anadromous fish.   A structure such as a dam or road culvert on a 3rd order or greater stream blocking the upstream movement of anadromous fish.   A structure such as a dam or road culvert on a 3rd order or greater stream blocking the upstream movement or partial blockage of the two yelled of a stream with very little viable fish habitat above; in altural barriers such as a dam or road culvert on a 3rd order or greater stream blocking the upstream workend of anadromous fish.   A temporary barrier such as a dam or road culvert on a 3rd order or greater stream blocking the upstream workend of anadromous fish.	Is SC ACTING	G AS GRADE CONTROL	□ No □ Ye	es 🔲 Unk						
Temporary   Unknown   A structure such as a darder or greater stream blocking the upstream movement of paradicornous fish. no fish   Drop too high   Water Drop:(in)   Flow too shallow   Water Depth:(in)   Other: 56:\ Wovement / clored   So.\ Removed   Removed   So.\ Removed   Removed   So.\ Removed   Removed   So.\ Removed   Removed   So.\ Removed   Removed   So.\ Removed   Removed   So.\ Removed   Removed   So.\ Removed   Removed   So.\ Removed   Removed   So.\ Removed   Removed   So.\ Removed   Removed   So.\ Removed   Removed   So.\ Removed   Removed   So.\ Removed   Removed   So.\ Removed   Removed   So.\ Removed   Removed   Removed   So.\ Removed   Removed   Removed   Removed   Removed   Removed   Removed   Removed   Removed   Removed   Removed   Removed   Removed   Removed   Removed   Removed   Removed   Removed   Removed   Removed   Removed   Removed   Removed   Removed   Removed   Removed   Removed   Removed   Removed   Removed   Removed   Removed   Removed   Removed   Removed   Removed   Removed   Removed   Removed   Removed   Removed   Removed   Removed   Removed   Removed   Removed   Removed   Removed   Removed   Removed   Removed   Removed   Removed   Removed   Removed   Removed   Removed   Removed   Removed   Removed   Removed   Removed   Removed   Removed   Removed   Removed   Removed   Removed   Removed   Removed   Removed   Removed   Removed   Removed   Removed   Removed   Removed   Removed   Removed   Removed   Removed   Removed   Removed   Removed   Removed   Removed   Removed   Removed   Removed   Removed   Removed   Removed   Removed   Removed   Removed   Removed   Removed   Removed   Removed   Removed   Removed   Removed   Removed   Removed   Removed   Removed   Removed   Removed   Removed   Removed   Removed   Removed   Removed   Removed   Removed   Removed   Removed   Removed   Removed   Removed   Removed   Removed   Removed   Removed   Removed   Removed   Removed   Removed   Removed   Removed   Removed   Removed   Removed   Removed   Removed   Removed   Removed   Removed   Re					BLO	CKAGE SEVE	RITY: (circle	#)		
	If yes for fish barrier	CAUSE:  Drop too high Water D  Flow too shallow Water D	rop: (in)	road culvert on a greater stream be upstream moven anadromous fish passage device	3rd order or ocking the nent of no fish present.	tributary that wou significant reach or partial blockag interfere with the	uld isolate a build isolate a build isolate a build isolate a build isolate a build isolate a build isolate a build isolate a build isolate a build isolate a build isolate a build isolate a build isolate a build isolate a build isolate a build isolate a build isolate a build isolate a build isolate a build isolate a build isolate a build isolate a build isolate a build isolate a build isolate a build isolate a build isolate a build isolate a build isolate a build isolate a build isolate a build isolate a build isolate a build isolate a build isolate a build isolate a build isolate a build isolate a build isolate a build isolate a build isolate a build isolate a build isolate a build isolate a build isolate a build isolate a build isolate a build isolate a build isolate a build isolate a build isolate a build isolate a build isolate a build isolate a build isolate a build isolate a build isolate a build isolate a build isolate a build isolate a build isolate a build isolate a build isolate a build isolate a build isolate a build isolate a build isolate a build isolate a build isolate a build isolate a build isolate a build isolate a build isolate a build isolate a build isolate a build isolate a build isolate a build isolate a build isolate a build isolate a build isolate a build isolate a build isolate a build isolate a build isolate a build isolate a build isolate a build isolate a build isolate a build isolate a build isolate a build isolate a build isolate a build isolate a build isolate a build isolate a build isolate a build isolate a build isolate a build isolate a build isolate a build isolate a build isolate a build isolate a build isolate a build isolate a build isolate a build isolate a build isolate a build isolate a build isolate a build isolate a build isolate a build isolate a build isolate a build isolate a build isolate a build isolate a build isolate a build isolate a build isolate a build isolate a build isolate a build isolate a build isolate a build isolate a build isolate a build isolate a	eaver dar he very he ery little vi bove it; na is waterfal	n or a block ad of a stre able fish ha atural barrie	kage at eam with abitat
		Soll Moveme	nt/ clogical	5		4 3	(2	>	1	
Reported to authorities □ Ves □Mo										
REPORTED TO AUTHORITIES TO YES THON										
						REPOR	TED TO AUTH	ORITIES	□ YES	[X€No



SURVEY REACH	<b>D:</b> w	rrshd/Subshd: W	35	DATE: 12/3/09	Assessed by:	ź
START TIM	E:12 : 0> AM/0	<b>b</b> LMK:			IK;	GPS ID:
LAT4 . 50	27 " LONG 7	12. 45.04"	LAT 41 . 50 .	10 " LONG 72 . 44	1 57 "	avo
DESCRIPTION: CC		,	DESCRIPTION:	· ^ · · · · · · · · · · · · · · · · · ·	, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	Winds of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control
[	CALVIT & CYVE	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	•	
	D USE: ☐ Industria		· · · · · · · · · · · · · · · · · · ·	Suburban/Res SFore		itional Alone
SURROUNDING EAR					er: Wed mea	12/9 ) Cust
AVEDACI	CONDITIONS (che			SKETCH AND SITE IMPA	CT TRACKING	
			(i stannig Darust kingdomberkethiologistossigoperico	f survey reach. Track location		Shi ne sesto
BASE FLOW AS % CHANNEL WIDTH	□ 0-25% □ 25-50 %	□ 50%-75% ■ 75-100%	within the survey rea	och (OT, ER, IB,SC, UT, TR, I leemed appropriate. Indicate	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		As.	20017	
□ Glaver (0.1-2.5	,	Cu 100k		1	4	
	□ Clear  Turbi			./ \	TOH	
☐ Stained (clear, n		Opaque (milky)	•		) JE	
☐ Other (chemicals,	dyes)			0		المعين
AQUATIC PLANTS	Attached: nor	ne ⊠some □ lots		<b>*</b>		733-1-
IN STREAM	Floating: 🗆 non-	e 🖊 some 🗆 lots		11	1	149 d n
WILDLIFE IN OR	(Evidence of)				- H	WAY ACOM!
AROUND STREAM	☐ Fish ☐ Beav			to A	old	- Street
	☐ Snails 🖼 Othe			2	FARM	1,300,001
STREAM SHADING	☐ Mostly shaded		FLOODED Y	Suesteen PALMA	ycrasing	
(water surface)	☐ Partially shade		*	cowe	NTS 🔨	ł
,	☐ Unshaded (< 2:		50	No.		
~	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	hatchood
BAY)KHAII CHANNEL	Height: LT-bank	<b>2</b> ′ (ft)			NEW .	THE PROPERTY.
CHANNEL " DIMENSIONS	RT bank	(ft)		1	A	
(FACING	Width: Bottom			ملامر ،		
DOWNSTREAM)		'		mendani		
		(ft)	<u> </u>	thin &		
The state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the 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 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		1 LETON	- carlvert	,
public ownership, sufficient room to	adjacent to stream.	sensitive areas to get to		rai C	The second second 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				
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 prol	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 cylinson
Some R	esideutial	arcas owner	has vient n	H AC NAME CO		The second second
(partio, lav	ms, etc) o	therwise this	is beautifu	of to bank or II - MIX of for REPORTED TO	MACCS (CCC S) AUTHORITIES □	YES NO
wet Me	ichan 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; lack of habitat is obvious; substrate unstable or lacking.	
	20 19 18 17 16	<b>(15)</b> 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) <b>not</b> able to enter floodplain. Stream deeply entrenched.	High flows (greater than bankfull) not able to enter floodplain. Stream deeply entrenched.	
	<b>(20)</b> 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

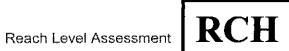
SC

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	<del></del>	•	air/rep	iacement Up	stream st	orage retrof	1 <b>t</b>
Ø no		Local stream	<del></del>						
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:	:ptii (iii <i>)</i>							
NOTES/SKET			5		4	3		2	1
TOTESISKET	CII.								
	•								
						,			
								,	
		1							
							·		
N.									
								THORITIES [	

Impacted Buffer

T	
	К.
▂	_

WATERSHED/SUBSHED: WBS		-	DATE: 12/05/09	ASSESSED BY: W//6
SURVEY REACH: 3	Тіме: 2	.: <u>30_</u> am/ <b>@</b>	<b>Рното ID:</b> (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		. 🗆	<b>Z</b> L 🗆	□:
RT Bank 🔲		\ <u></u>		<b>□</b> :
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	D: <u>WCS-04</u> W	rrshd/Subshd: WAS	H Brodic Soum	DATE: 12/3	109 ASSESSE	PHCM
START TIM	e: <u>12</u> : <u>30</u> am/65	LMK:	END TIME:_	: 00 AM/F	LMK:	GPS ID:
	40 " LONG	20 44 . 59 "	LAT41 . 50 '3	6 " Long 7	2 0 44 141	11
	M ONFWE					
DESCRIPTION: PR	IN GUTWA	OCE ON C	DESCRIPTION: CV	rvery letur	Truming be	74-12
D	vino (Tritonomio	□ St	Precent conditions	□ Uasırı min	☐ 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
Average	CONDITIONS (che	ck applicable)	REACH S	KETCH AND SIT	E IMPACT TRAC	KING
BASE FLOW AS % CHANNEL WIDTH	□ 0-25% □25-50 %	□ 50%-75% <b>□ 75-100</b> %	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	OMUBUTAN (END)		,	
WATER CLARITY  ☐ Stained (clear, n ☐ Other (chemicals,	aturally colored) dyes)	Opaque (milky)	LASTER +			TEAN, AM
AQUATIC PLANTS IN STREAM	Attached: In non-	e ⊠some □ lots e ⊠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		<b>一大</b>	ر ایملاییعد.
STREAM SHADING (water surface)	☐ Mostly shaded ☐ Halfway (≥50% ☐ Partially shaded ☐ Unshaded (< 25	%) d (≥25% )	UN MOTEOR Se Similary	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 SUIPMENT
CHANNEL DIMENSIONS (FACING DOWNSTREAM)	Height: LT bank UT bank Width: Bortom Top	(ft) (ft) (7' (ft) (gavefur (ft)				(1000)
	EACH ACCESSIBILI	IX	Strong strong			
Good: Open area in	Fair: Forested or	Difficult. Must cross	]			
public ownership,	developed area . adjacent to stream.	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	Stockpile areas	distance from stream.			•	
equipment using existing roads or trails.	small or distant from	Specialized heavy				
	stream.	equipment required. 2 1	-			
			One sh Care to		£ 1/6444 04	MA FARCINI
+ SEDIMENT	CONTROL,	PUTTING SEDI	MOND EXCAUA MONT INTO SEP UT, MONING;	LEAM. AC	so exter	ISIVE
BUTTER IM	PACTS : THA	SH, ERUIPME	UT, MODING;	POOL		
		•	, ,	REPOR	TED TO AUTHORIT	ies 🗌 Yes 🔲 No

	Optimal	Suboptimal	Marginal	Poor	
HABITAT 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 needs)		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 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	<b>(5)</b> 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	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 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 0 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	
	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	amera-Pic#)PC650	0 # 38,39,41,43	
SITE ID: (Condition	1-#) TR-one LAT_	* See below *		" LMK	GPS: (Unit 1D)	
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		Stream cleanup  Strea	am adoption segmen	t ⊠Removal/pre	vention of dumping	
If yes for trash or	EQUIPMENT NEEDED:	Heavy equipment T	rash bags 🔲 Unkno		DUMPSTER WITHIN 100 FT:	
debris removal	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) 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	over A large amount area, where acco	of trash or debris scattered over a large ess 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°44'41 Mental (	a tendor tires of  ""  "Alue + may have  to Authorities   YES   Ano	

+ channel
Modifica
Impacted Buffer

IB

					<u> </u>			
WATERSHED/SUBSHED:	: WBS				DATE	12/3/09	Ass	sessed by: BG+CMV
SURVEY REACH:	ay		TIME:	_:AM/PM	Рноте	o <b>ID:</b> (Camera-P	ic #) <b>ρ</b> (	200 #31,32,34
SITE ID: (Condition-#)	START L	AT° <del>*</del>	see so	LONG	*	LMK_		GPS: (Unit ID)
<u> 18-2-14 (</u>	END L	AT°	<u>'"</u> " I	LONG°	* **	LMK		
IMPACTED BANK:  ☑LT ☑RT ☐ Both	REASON IN					☐ Widespread in		plants in Larook + no
LAND USE:	Private	Institutional	Golf Cou		Other Publ		4 6 4 44 44 81	plant
(Facing downstream) LT Ba	nk 🔼					:		'See 6
RT Ba	nk 🔼					:		
DOMINANT	Paved	Bare ground	Turf/lav	wn Tall grass	Shrub/s	crub Trees	Other	
LAND COVER: LT Ba	ınk 🔲	Ø		] 🗆			□:	
RT Ba	nk 🗌	<u> </u>					<u>:</u>	
Invasive Plants:	M None	Rare	☐ P	Partial coverage	☐ Ex	tensive coverage	unl unl	known
STREAM SHADE PROVI	DED? 🖄 Non	e Part	ial 🗆	] Full   WET	LANDS PI	RESENT? 🗌 No	□ >	es Unknown
POTENTIAL RESTORAT	ION CANDIDA	TE Activ	e reforestat	ion Greenway	design (2	Natural regenera	tion 🗀	Invasives removal
no no		☑ Othe	r:enfa	e coment	?			
RESTORABLE AREA	at 11	T '		Impacted area on p		Impacted area on eith	ner	Impacted area on private
IT BA	nz RT	REFORESTA	ATION	where the riparian	area does	public or private land	that is	land where road; building
Length (ft): $\frac{LT}{200}$	~200' ±	POTENTIAL	. <b>:</b>	not appear to be us specific purpose; p		presently used for a s purpose; available are		encroachment or other feature significantly limits
AAAA	<del>_</del> _	(Circle #)		area available for p	-	planting adequate	50 101	available area for planting
Width (ft):		ļ ·		5	4	1 3		2 1
POTENTIAL CONFLICTS  Poor/unsafe access to si				idespread invasiv				n Lack of sun
		= =				•		an orate an
NOTES: -> Dun Au	Above .	- shound	SWINN	mina paol	ACKS, W	41°50'22	1 /1	or, prikis or
- Grothe	1 days	chooms	Dean	dumei	le (r)	) + possibly	, 10 N.	re same
000000	ti de	51201111	المار مام	i avan		1 10500	۳۲۱ ح: م	teach
proper	1 1 There	CD A 1	ecenti	y exchina	eex  -	and thee	ዩ. ነ⊃	14-00 ha
Sedin	neut	excess i	more	was no	800	se cover	Ku	nott the
Mulo	n seed	down	an to	psoil -				
J SMARL	dom +	ster 1	د فغم	ith Room	-borid	ze here	42	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/(	<b>1</b>	Рното II	): (Camera-F	ic #) <b>R</b>	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> .	<del></del>				
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	<del></del>	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	of 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 Box Elliptical Circular Other:	# BARRELS:  Single Double Triple Other:	MATERIAL: Concrete Metal Other:	☐ Flo	NMENT: ow-aligned t flow-aligned not know	Barrel dia	Height:	(ft)
CROSSINGS ONLY	CONDITION: (Evidence of)  Cracking/chipping/corrosion Sediment deposition Other (describe):	□ Downstrean □ Failing emb		☐ Fla	ght $(2^{\circ} - 5^{\circ})$		ngth: Width: elevation:	(ft)(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 <b>V</b> 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):	1		☐ Fla	TERT SLOPE: at ght (2° - 5°) vious (>5°)		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 blockage 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		, j			_
	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 <b>Æ</b> Ø	PHO	ото ID	: (Camera-P	ic#) <b>pc o</b>	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			ght $(2^{\circ} - 5^{\circ})$	l		
	Other (describe):					vious (>5°)	Roadway	elevation:	(ft)
Potential	RESTORATION CANDIDATE	Fish barrier re	movel Trul	ont ec	mair/ec	Jacoment [	I Instrument	toroga retrofit	
no no	RESTORATION CANDIDATE	Local stream			ран/г <del>е</del> 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/ <b>(D)</b>	LMK:	END TIME:_	1 : 30 AM/PM	LMI	K:	GPS ID:
	LAT 41 ° 50 '	/5 " Loi	NG 72	° 44 ° 19 "	LAT41°50'	37" LONG 7	2044	<u>' 33  "</u>	(m)
	DESCRIPTION:	regence ob	<b>WBS</b>	-8 And WOS-	P DESCRIPTION: C	nvergence	WITH	UKS-5	
_	PA	RKED 20 1		lee's Supee 1					<del></del>
	RAIN IN LAST 24 HO	' <del>-</del> '		Steady rain	PRESENT CONDITIONS			ly rain ☐ Intern	
ļ	□ None	☐ Interm	ittent	☐ Trace	☐ Clear	☐ Trace	■ Over		y cloudy
	SURROUNDING LAND			☐ Commercial ☐ Park	<ul><li>□ Urban/Residential</li><li>□ Crop</li></ul>	☐ 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 DE LA COMPANSIA DE LA COMPANSIA DE LA COMPANSIA DE LA COMPANSIA DE LA COMPANSIA DE LA COMPANSIA DE LA COMPANSIA DE LA COMPANSIA DE LA COMPANSIA DE LA COMPANSIA DE LA COMPANSIA DE LA COMPANSIA DE LA COMPANSIA DE LA COMPANSIA DE LA COMPANSIA DE LA COMPANSIA DE LA COMPANSIA DE LA COMPANSIA DE LA COMPANSIA DE LA COMPANSIA DE LA COMPANSIA DE LA COMPANSIA DE LA COMPANSIA DE LA COMPANSIA DE LA COMPANSIA DE LA COMPANSIA DE LA COMPANSIA DE LA COMPANSIA DE LA COMPANSIA DE LA COMPANSIA DE LA COMPANSIA DE LA COMPANSIA DE LA COMPANSIA DE LA COMPANSIA DE LA COMPANSIA DE LA COMPANSIA DE LA COMPANSIA DE LA COMPANSIA DE LA COMPANSIA DE LA COMPANSIA DE LA COMPANSIA DE LA COMPANSIA DE LA COMPANSIA DE LA COMPANSIA DE LA COMPANSIA DE LA COMPANSIA DE LA COMPANSIA DE LA COMPANSIA DE LA COMPANSIA DE LA COMPANSIA DE LA COMPANSIA DE LA COMPANSIA DE LA COMPANSIA DE LA COMPANSIA DE LA COMPANSIA DE LA COMPANSIA DE LA COMPANSIA DE LA COMPANSIA DE LA COMPANSIA DE LA COMPANSIA DE LA COMPANSIA DE LA COMPANSIA DE LA COMPANSIA DE LA COMPANSIA DE LA COMPANSIA DE LA COMPANSIA DE LA COMPANSIA DE LA COMPANSIA DE LA COMPANSIA DE LA COMPANSIA DE LA COMPANSIA DE LA COMPANSIA DE LA COMPANSIA DE LA COMPANSIA DE LA COMPANSIA DE LA COMPANSIA DE LA COMPANSIA DE LA COMPANSIA DE LA COMPANSIA DE LA COMPANSIA DE LA COMPANSIA DE LA COMPANSIA DE LA COMPANSIA DE LA COMPANSIA DE LA COMPANSIA DE LA COMPANSIA DE LA COMPANSIA DE LA COMPANSIA DE LA COMPANSIA DE LA COMPANSIA DE LA COMPANSIA DE LA COMPANSIA DE LA COMPANSIA DE LA COMPANSIA DE LA COMPANSIA DE LA COMPANSIA DE LA COMPANSIA DE LA COMPANSIA DE LA COMPANSIA DE LA COMPANSIA DE LA COMPANSIA DE LA COMPANSIA DE LA COMPANSIA DE LA COMPANSIA DE LA COMPANSIA DE LA COMPANSIA DE LA COMPANSIA DE LA COMPANSIA DE LA COMPANSIA DE LA COMPANSIA DE LA COMPANSIA DE LA COMPANSIA DE LA COMPANSIA DE LA COMPANSIA DE LA COMPANSIA DE LA COMPANSIA DE LA COMPANSIA DE LA COMPANSIA DE LA COMPANSIA DE LA COMPANSIA DE LA COMPANSIA DE LA COMPANSIA DE LA COMPANSIA DE LA COMPANSIA DE LA COMPANSIA DE LA COMPANSIA	
	BASE FLOW AS % CHANNEL WIDTH	□ 0-25% □25-50 %		□ 50%-75% <b>Æ</b> \$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	west 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	Nings ->	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: <del>LT l</del> RT l		4' (ft)		BANK	/ (	2 pg	nded
	DIMENSIONS (FACING	Width: Bott		23' (ft)		$\triangle$	1	<del>-</del>	
	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	<del></del>	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	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	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)	that are <u>not</u> new fall and <u>not</u> transient).  20 19 18 17 16	rate at high end of scale).  (3) 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) 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	<b>8</b> 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	<b>(8</b> ) 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	<b>8</b> 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)	<b>РНОТО ID:</b> (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 to 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 GUIDGUED 1.10	<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. Apartangangan pandarah menang	1.1	<del> </del>		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	
	<del></del>	/lawn Tall grass	Shrub/scrub Trees	Other
<del></del> _		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	<del></del>	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			
olad o	eq-city.		1	here there purely sandra et
stretch of	Approximately	300 m	1,000 Ht. W	were there
is 775% c	ioner of invins	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( <b>==</b> 0 (1 ), 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			DA	те: <u> Ә</u>	<u>101 / 09</u>	ASSES		cunt	36
	SURVEY REA	TO AND 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 THE PROPERT	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		er Da		Geological Form	***************************************	Other:		
		SHAPE:  Arch Bottomless	#BARRELS:	MATERIAL:			NMENT:	DIMENSI Damal dia		ariable, ske.  Ə'	
		☐ Arch ☐ Bottomless ☐ Box ☑ Elliptical	☐ Single ☑ Double	Concrete  Metal		-	w-aligned t flow-aligned	Barrel dia		1 <del>0</del> 7'	_(ft)
ļ	FOR ROAD/	☐ Circular	Triple	Other:			not know		Height:	<u> </u>	_(ft)
	RAILROAD	Other:	Other:	, a cuitar			- I Of Kilo	Culvert le	noth:		_(ft)
	CROSSINGS ONLY	CONDITION: (Evidence of)	_			CULV ☐ Fla	ERT SLOPE:		width:		_(ft) _(ft)
		Cracking/chipping/corrosion					ght (2° – 5°)		Width.		_(11)
		☐ Sediment deposition☐ Other (describe):	Failing emb	ankment	1		vious (>5°)	Roadway	elevation:		(ft)
J		Other (describe).								-	
	POTENTIAL R	RESTORATION CANDIDATE	Fish barrier re	moval 🔲 Culv	ert re	epair/rep	olacement 🔲 U	Jpstream st	orage retro	ofit	
ŀ	<b>Д</b> ло		Local stream	epair 🔲 Othe	er:						
	IS SC ACTING	G AS GRADE CONTROL	□ No □ Ye	es 🔲 Unk	nowr	n					
		EXTENT OF PHYSICAL BLO				BLO	CKAGE SEVER	ITY: (circl	e #)		
		☐ Total ☐ Partial		A structure such	as a d	am or	A total fish blocka	ne on a	A temporar	y barrier suci	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	
	<b>J</b>		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>	<u>/01</u> As	SESSED BY: CM + BG
SURVEY REACH:	06			<b>РНОТО ID</b> (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	t and/or RT	й Т	op widthft
Sed. deposition	Channelized	Bank Angle	LT	° and/or RT	° v	Vetted Widthft
LAND OWNERSHIP	Private Publi	c Unknown	LAND COVER	: Forest I	Field/Ag 🔲 D	Developed:
	DRATION CANDIDATI		_	Bank stabilizatio	n .	
	<u>e - unknamn i</u> erty/Infrastructi					
	erty/infrastruct an Width: √ARY	<del></del>	☐ Yes (Describ : ☐ 25 - 50 ft [		5-100ft □>	·100 <del>ft</del>
	<u> </u>		. <u> </u>		7-100it	10011
EROSION SEVERITY(circle#)	Active downcutting; tall ban of the stream eroding at a f	ast rate; erosion	Pat downcutting evid widening, banks activ			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: Foreste adjacent to stream. A removal or impact to Stockpile areas small	ccess requires tree	other sensitive a stockpile areas distance from st	s. Must cross wetland, steep slope or areas to access stream. Minimal available and/or located a great read section. Specialized heavy
	trails.		4 3		equipment requi	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

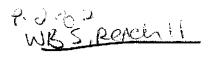
WBS, ROACHIL

Reach Level Assessment



Alana.

			r		
SURVEY REACH ID:	WTRSHD/SUBSHD: WY	, <del></del>	DATE: 11 /30		M/36
START TIME: 12: 15 A	м <b>/РМ LMK:</b>	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	<del></del>
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
Deminoration and a cost —	If course  Park		☐ Pasture	Other:	institutional
AVERAGE CONDITION		<del> </del>	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 %	<b>₫</b> .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 <sup>y</sup>		
	☐ 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 Deer Chip Deer Chip Deer Chip Deer Chip Deer Chip Deer Chip Deer Chip Deer Chip Deer Chip Deer Chip Deer Chip Deer Chip Deer Chip Deer Chip Deer Chip Deer Chip Deer Chip Deer Chip Deer Chip Deer Chip Deer Chip Deer Chip Deer Chip Deer Chip Deer Chip Deer Chip Deer Chip Deer Chip Deer Chip Deer Chip Deer Chip Deer Chip Deer Chip Deer Chip Deer Chip Deer Chip Deer Chip Deer Chip Deer Chip Deer Chip Deer Chip Deer Chip Deer Chip Deer Chip Deer Chip Deer Chip Deer Chip Deer Chip Deer Chip Deer Chip Deer Chip Deer Chip Deer Chip Deer Chip Deer Chip Deer Chip Deer Chip Deer Chip Deer Chip Deer Chip Deer Chip Deer Chip Deer Chip Deer Chip Deer Chip Deer Chip Deer Chip Deer Chip Deer Chip Deer Chip Deer Chip Deer Chip Deer Chip Deer Chip Deer Chip Deer Chip Deer Chip Deer Chip Deer Chip Deer Chip Deer Chip Deer Chip Deer Chip Deer Chip Deer Chip Deer Chip Deer Chip Deer Chip Deer Chip Deer Chip Deer Chip Deer Chip Deer Chip Deer Chip Deer Chip Deer Chip Deer Chip Deer Chip Deer Chip Deer Chip Deer Chip Deer Chip Deer Chip Deer Chip Deer Chip Deer Chip Deer Chip Deer Chip Deer Chip Deer Chip Deer Chip Deer Chip Deer Chip Deer Chip Deer Chip Deer Chip Deer Chip Deer Chip Deer Chip Deer Chip Deer Chip Deer Chip Deer Chip Deer Chip Deer Chip Deer Chip Deer Chip Deer Chip Deer Chip Deer Chip Deer Chip Deer Chip Deer Chip Deer Chip Deer Chip Deer Chip Deer Chip Deer Chip Deer Chip Deer Chip Deer Chip Deer Chip Deer Chip Deer Chip Deer Chip Deer Chip Deer Chip Deer Chip Deer Chip Deer Chip Deer Chip Deer Chip Deer Chip Deer Chip Deer Chip Deer Chip Deer Chip Deer Chip Deer Chip Deer Chip Deer Chip Deer Chip Deer Chip Deer Chip Deer Chip Deer Chip Deer Chip Deer Chip Deer Chip Deer Chip Deer Chip Deer Chip Deer Chip Deer Chip Deer Chip Deer Chip Deer Chip Deer Chip Deer Chip Deer Chip Deer Chip Deer Chip Deer Chip Deer Chip Deer Chip Deer Chip Deer Chip Deer Chip Deer Chip Deer Chip Deer Chip Deer Chip Deer Chip Deer Chip Deer Chip Deer Chip Deer Chip Deer Chip Deer Chip Deer Chip Deer Chip Deer Chip Deer				
	•	- 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-	# Cres	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)	<del></del> , ,		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 <b>0</b> 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+ D+ D+ D+ D+ D+ D+ D+ D+ D+ D+ D+ D+
NOTES: (biggest problem you see in	survey reach) 50mene	bank wasi	an myder	enthing	(50 4-of
<b>7</b>				**	
			REPOR	TED TO AUTHO	RITIES 🔲 YES 🔲 NO



		OVERALL STREAM CONDI	TION			
\\.	Optimal	Suboptimal	Marginal	Poor		
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).	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 <b>(18)</b> 17 <sup>.</sup> 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	ALL BUFFER AND FLOODPLAI	N 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 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  Right Bank 10 9  Right Bank 10 9  Right Bank 10 9  Right 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  Right Bank 10 9  Right Bank 10 9  Right Bank 10 9  Right Bank 10 9  Right Bank 10 9  Right Bank 10 9  Right Bank 10 9  Right Bank 10 9  Right Bank 10 9  Right Bank 10 9  Right Bank 10 9  Right Bank 10 9  Right Bank 10 9  Right Bank 10 9  Right Bank 10 9  Right Bank 10 9  Right Bank 10 9  Right Bank 10 9  Right Bank 10 9  Right Bank 10 9  Right Bank 10 9  Right Bank 10 9  Right Bank 10 9  Right Bank 10 9  Right Bank 10 9  Right Bank 10 9  Right Bank 10 9  Right Bank 10 9  Right Bank 10 9  Right Bank 10 9  Right Bank 10 9  Right Bank 10 9  Right Bank 10 9  Right Bank 10 9  Right Bank 10 9  Right Bank 10 9  Right Bank 10 9  Right Bank 10 9  Right Bank 10 9  Right Bank 10 9  Right Bank 10 9  Right Bank 10 9  Right Bank 10 9  Right Bank 10 9  Right Bank 10 9  Right Bank 10 9  Right Bank 10 9  Right Bank 10 9  Right Bank 10 9  Right Bank 10 9  Right Bank 10 9  Right Bank 10 9  Right Bank 10 9  Right Bank 10 9  Right Bank 10 9  Right Bank 10 9  Right Bank 10 9  Right Bank 10 9  Right Bank 10 9  Right Bank 10 9  Right Bank 10 9  Right Bank 10 9  Right Bank 10 9  Right Bank 10 9  Right Bank 10 9  Right Bank 10 9  Right Bank 10 9  Right Bank 10 9  Right Bank 10 9  Right Bank 10 9  Right Bank 10 9  Right Bank 10 9  Right Bank 10 9  Right Bank 10 9  Right Bank 10 9  Right 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, submerged 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 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 are agit stable habitat are agit stable habitat are agit stable habitat are agit stable habitat are agi	IN-STREAM HABITAT  Greater than 70% of substrate tavorable for optionation and fish cover, mix of snags, submerged logs, undercut banks, cobbe for snags, submerged logs, undercut banks, cobbe for snags, submerged logs, undercut banks, cobbe for snags, submerged logs, undercut banks, cobbe for snags, submerged logs, undercut banks, cobbe for snags, submerged logs, undercut banks, cobbe for snags, submerged logs, undercut banks, cobbe for snags, submerged logs, undercut banks, cobbe for snags, submerged logs, undercut banks, cobbe for snags, submerged logs, undercut banks, cobbe for snags, submerged logs, undercut banks, cobbe for snags, submerged logs, undercut banks, cobbe for snags, submerged logs, undercut banks, cobbe for snags, submerged logs, undercut banks, cobbe, snags, snags, snags, snags, snags, snags, snags, snags, snags, snags, snags, snags, snags, snags, snags, snags, snags, snags, snags, snags, snags, snags, snags, snags, snags, snags, snags, snags, snags, snags, snags, snags, snags, snags, snags, snags, snags, snags, snags, snags, snags, snags, snags, snags, snags, snags, snags, snags, snags, snags, snags, snags, snags, snags, snags, snags, snags, snags, snags, snags, snags, snags, snags, snags, snags, snags, snags, snags, snags, snags, snags, snags, snags, snags, snags, snags, snags, snags, snags, snags, snags, snags, snags, snags, snags, snags, snags, snags, snags, snags, snags, snags, snags, snags, snags, snags, snags, snags, snags, snags, snags, snags, snags, snags, snags, snags, snags, snags, snags, snags, snags, snags, snags, snags, snags, snags, snags, snags, snags, snags, snags, snags, snags, snags, snags, snags, snags, snags, snags, snags, snags, snags, snags, snags, snags, snags, snags, snags, snags, snags, snags, snags, snags, snags, snags, snags, snags, snags, snags, snags, snags, snags, snags, snags, snags, snags, snags, snags, snags, snags, snags, snags, snags, snags, snags, snags, snags, snags, snags, snags, snags, snags, snags, snags, snags, snags, snags, snags, snags, snags, snags		

## Storm Water Outfalls



WATERSHED/SUBSHE	WATERSHED/SUBSHED: ₩BS			DATE: 11/30/09 ASSESSED BY: CM + C6.					
SURVEY REACH ID:	, ,	ME:AM/PM	Рното ID: (Camera-	PHOTO ID: (Camera-Pic #) /#					
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 CONCERNS: Secular 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 outfall.
- 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>			<b>):</b> (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	Barrel dia	IONS: (if varial ameter:	ole, sketch) (ft)
For Board	Box Elliptical	Double	☐ Metal		ot flow-aligned		Height:	```
FOR ROAD/ RAILROAD	Circular Other:	☐ Triple☐ Other:	Other:	☐ Do	not know		•	
CROSSINGS			l.	CULV	ERT SLOPE:	Culvert le	ength:	(ft)
ONLY	Cracking/chipping/corrosio	n 🔲 Downstream	n scour hole	Fla			Width:	(ft)
	Sediment deposition	☐ Failing emb	ankment	l l	ght (2° – 5°) ovious (>5°)	D	_1	(0)
	Other (describe):				7 ( C < )	Roadway	elevation:	(ft)
POTENTIAL I	RESTORATION CANDIDATE	☐ Fish barrier re	emoval  Culve	rt repair/re	placement []	Upstream s	torage retrofit	
no		Local stream	repair  Other	:		-	_	
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 tributary that we greater stream blocking the significant read			h of stream, the very head of a stream with		
fish barrier	CAUSE:  Drop too high Water D	rop:(in)	upstream moveme anadromous fish; r	nt of	or partial blockag		very little viable above it; natural	fish habitat
	☐ Flow too shallow Water D		passage device pro		anadromous fish			
	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	, <sub>0</sub> 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 ri adudustra di peagunia endago i un ciada	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					ight (2° – 5°)		_		_(-,
	Other (descr	•	oankment -K.PRAP		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	
<b>D</b> 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 ☐ Temporary	☐ Partial ☐ Unkno	137 <b>n</b>	A structure such	as a dam or	A total fish blocks	age on a	A temporary	barrier such	n as a
If yes for	remporary		***11	road culvert on a greater stream b		tributary that wou significant reach		beaver dam the very hea	•	· "
fish barrier	fish barrier CAUSE:				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 i		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:		MENT:		ONS: (if variable	sketch)		
	SHAPE:  ☑ Arch ☐ Bottomless	#BARRELS:	Concrete		w-aligned	Barrel dia	- <del>-</del>	(ft)		
	Box Elliptical Do		Box Elliptical Double		Metal		flow-aligned		Height:	(ft)
FOR ROAD/ RAILROAD	☐ Circular ☐ Other:	☐ Triple☐ Other:	Other:	☐ Do	not know					
CROSSINGS	CONDITION: (Evidence of)	J. <del> </del>	<u></u>	CULVI	ERT SLOPE:	Culvert le	_	(ft)		
ONLY	Cracking/chipping/corrosio	n scour hole	☐ Flat			Width:	(ft)			
	Sediment deposition	☐ Failing emb	ankment		ght (2° – 5°) vious (>5°)	Daaduunu	elevation:	(ft)		
	Other (describe):					Koadway	elevation	(10)		
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		A temporary barrie beaver dam or a t			
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	anadromous fish; no fish interfere with the								
_	☐ Flow too shallow Water I	Depth: (in)	passage device pre	esent.	anadromous fish.	h. as waterfalls.				
	Other:		5		3		2 1			
Notes/Sket	сн:									
\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \			•							
	•						•			
					•			ļ		
	•									
							•	ļ		
			•							
					Repoi	RTED TO AU	THORITIES 🔲	YES No		

### Trash and Debris

TR

WATERSHED/SUI	BSHED: WRS		DATE: 1/30/07 ASSESSED BY: CM+B(0)				
SURVEY REACH		ГІМЕ::АМ/РМ	<b>РНОТО ID:</b> (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 REST	TORATION CANDIDATE	Stream cleanup 🛚 Strea Other:	m adoption segment	⊠ Removal/pro	evention of dumping		
If yes for trash or	EQUIPMENT NEEDED:	DUMPSTER WITHIN 100 FT:					
debris removal	WHO CAN DO IT:						
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	ver area, where ac	t of trash or debris scattered over a large cess is very difficult. Or presence of drums f hazardous materials		
	5	(4)	3	2	1		
	nd the medical -, AC unit, golf ba d parking lot ld of golf balls whe	where and will i	1 livere 12 Au	ker contest or	including A where umping 241.4100"/72.441		
				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	
MPACTED BANK:  ☐ RT	
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 here has a 10' wide forested buffer (this) belief coudo is  + residential knowns on other side to forested steep.  The RK has Rigidable + source exprise a 2 41° 48' 54" /722 157"	uni f
Medical center.  The belief residential house is mun + diventy of 41° 48's 4"/73' 44' 10"  LB here has a 10' wide forested buffer (this) belief coudo is  + residential knowns on other side to forested steep.  The RK has Rigidable + source exprise a 2 41° 48' 54" /722 157"	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 courde 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 N 25' 1 enorth 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 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 N 25' 1 enorth 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 forested buffer (thin) believed counds to the thing believed counds to the thing have the thing to the thing.  The RB has Rip-RAP + severe erosion of 41° 48'56"/72° 44'15"  LB here has 10' strip of Frested buffer (thin) + have an other side the here has concrete shallo in channel  The RB has the both banks for no 25' length of 41° 48'59"/72° 44'16"  The leaf dumping on RB of 41° 49' of "/70" 44' 15" + parking lot here.  The has thin forested buffer + lawns opposite that (no' wide fore) and 41° 49' of "/42° 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 shallo 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.)  Of 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 20 41° 48'59"/72° 44' 16"  The leaf dumping on RB 20 41° 49' 07"/70" 44' 15" + parking for here.  The has thin forested buffer + lawns opposite that (ND' wide forested)	enit

# Severe Bank Erosion

ER

WATERSHED/SUBS	SHED: WBS			DATE: 1/3	109	ASSESSED BY: (	CM+B6
SURVEY REACH:	11		AM/PM	<b>РНОТО ID</b> (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	<b>GPS:</b> ( <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	P: Private Publi	c Unknown	LAND COVER	: Forest	Field/Ag	Developed:	
□No	ORATION CANDIDATI	Other	·	⊠ Bank stabilization			
THREAT TO PROP	PERTY/INFRASTRUCT	URE: No	Yes (Describ	oe): Bloownfield	L AVE		
EXISTING RIPARIA	AN WIDTH:	<b>△</b> ≤25 ft	25 - 50 ft	□ 50-75ft □ 7	5-100 <del>ft</del>	□>100ft	
EROSION SEVERITY(circle#)	Active downcutting; tall bar of the stream eroding at a f contributing significant amo stream; obvious threat to pr infrastructure.	ast rate; erosion ount of sediment to	Pat downcutting evid widening, banks activ moderate rate; no thr infrastructure	ely eroding at a	failure/ero	d width stable; isolated a sion; likely caused by a paired riparian vegetation	pipe outfall, local
Channelized= 1	(5)		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: Foreste adjacent to stream. A removal or impact to Stockpile areas smal	ccess requires tree	other sens stockpile a distance fi	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 3		2	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/6		END TIME:		LMK	:	GPS ID:
LAT41°51'	42" LONG	12 . 43 . 51 "	LAT410521	" Long 7	2.43	33"	(Gara)
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 %	<b>12</b> 75-100%		ach (OT, ER, IB,SC, i 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	-
<del></del>		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 I	-				
NOTES: (biggest pro-		reach)	الم الله ع			. '	1.11.4.11
		includes to	es, ad care, sto	re, da Bud	chilon.	horden	PIDE. AUX
	د.لہ	and Arna De	51 Woodland	A	HOT T	المرسو وروساني	
		MT TIEPP OUT	2 I VYEXONIANOL	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).	ed for full colonization potential; quate habitat for maintenance of ulations; presence of additional strate in the form of newfall, but yet prepared for colonization (may		
•••	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	WATERSHED/SUBSHED: NBN DATE: 103/09 ASSESSED BY: CM/86								
AND CONTRACTOR AND CONTRACTOR AND CONTRACTOR AND CONTRACTOR AND CONTRACTOR AND CONTRACTOR AND CONTRACTOR AND CONTRACTOR AND CONTRACTOR AND CONTRACTOR AND CONTRACTOR AND CONTRACTOR AND CONTRACTOR AND CONTRACTOR AND CONTRACTOR AND CONTRACTOR AND CONTRACTOR AND CONTRACTOR AND CONTRACTOR AND CONTRACTOR AND CONTRACTOR AND CONTRACTOR AND CONTRACTOR AND CONTRACTOR AND CONTRACTOR AND CONTRACTOR AND CONTRACTOR AND CONTRACTOR AND CONTRACTOR AND CONTRACTOR AND CONTRACTOR AND CONTRACTOR AND CONTRACTOR AND CONTRACTOR AND CONTRACTOR AND CONTRACTOR AND CONTRACTOR AND CONTRACTOR AND CONTRACTOR AND CONTRACTOR AND CONTRACTOR AND CONTRACTOR AND CONTRACTOR AND CONTRACTOR AND CONTRACTOR AND CONTRACTOR AND CONTRACTOR AND CONTRACTOR AND CONTRACTOR AND CONTRACTOR AND CONTRACTOR AND CONTRACTOR AND CONTRACTOR AND CONTRACTOR AND CONTRACTOR AND CONTRACTOR AND CONTRACTOR AND CONTRACTOR AND CONTRACTOR AND CONTRACTOR AND CONTRACTOR AND CONTRACTOR AND CONTRACTOR AND CONTRACTOR AND CONTRACTOR AND CONTRACTOR AND CONTRACTOR AND CONTRACTOR AND CONTRACTOR AND CONTRACTOR AND CONTRACTOR AND CONTRACTOR AND CONTRACTOR AND CONTRACTOR AND CONTRACTOR AND CONTRACTOR AND CONTRACTOR AND CONTRACTOR AND CONTRACTOR AND CONTRACTOR AND CONTRACTOR AND CONTRACTOR AND CONTRACTOR AND CONTRACTOR AND CONTRACTOR AND CONTRACTOR AND CONTRACTOR AND CONTRACTOR AND CONTRACTOR AND CONTRACTOR AND CONTRACTOR AND CONTRACTOR AND CONTRACTOR AND CONTRACTOR AND CONTRACTOR AND CONTRACTOR AND CONTRACTOR AND CONTRACTOR AND CONTRACTOR AND CONTRACTOR AND CONTRACTOR AND CONTRACTOR AND CONTRACTOR AND CONTRACTOR AND CONTRACTOR AND CONTRACTOR AND CONTRACTOR AND CONTRACTOR AND CONTRACTOR AND CONTRACTOR AND CONTRACTOR AND CONTRACTOR AND CONTRACTOR AND CONTRACTOR AND CONTRACTOR AND CONTRACTOR AND CONTRACTOR AND CONTRACTOR AND CONTRACTOR AND CONTRACTOR AND CONTRACTOR AND CONTRACTOR AND CONTRACTOR AND CONTRACTOR AND CONTRACTOR AND CONTRACTOR AND CONTRACTOR AND CONTRACTOR AND CONTRACTOR AND CONTRACTOR AND CONTRACTOR AND CONTRACTOR AND CONTRACTOR AND CONTRACTOR AND CONTRACTOR AND CONTRACTOR AND CO	SURVEY REACH ID: 4 TIME: 2 14 AM/N PHOTO ID: (Camera-Pic #) PC 0500 /# 45								
SITE ID: (Con	SITE ID: (Condition #) SC- A LAT 41 ° S 1 ' 42 " LONG 72 ° 43 ' S 1 " LMK GPS (Unit ID)								
m	Mucko Road (gra								
TYPE: KROS	ad Crossing								
	SHAPE:  Arch Bottomless	# BARRELS:	MATERIAL:			MENT:		IONS: (if variable, sketch) ameter:	
	Box Elliptical	☐ Double	☐ Concrete  ☐ Metal			v-aligned flow-aligned		<del></del>	
FOR ROAD/	Circular	☐ Triple ☐ Other:	Other:			not know		Height:(ft)	
RAILROAD CROSSINGS	Other:				Culvert le	ength:(ft)			
ONLY	CONDITION: (Evidence of)	ī 1	_	CULVE	RT SLOPE:	047,0107	Width:(ft)		
	☐ Cracking/chipping/corrosion☐ Sediment deposition	n ☐ Downstream ☐ Failing emb			_	ht $(2^{\circ} - 5^{\circ})$		( ',	
	Other (describe): When	r anning cinio الأحكاد المصادمة	Destan	Obvious (>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			tributary that wou significant reach of		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 70	REACH IS CHIRLEN	my havesn	t. a	P-10	1		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						
•									
<b></b>						REPOR	TED TO AUT	THORITIES YES NO	

WATERSHED	/SUBSHED: WBN			DATE: 📗	<u> २/६३ /८</u> ९	ASSE	ESSED BY: C	<u>un+ B6</u>
SURVEY REA	<u>.cн ID: 4</u>	Тіме::	_AM/PM		<b>D:</b> (Camera-Pi	c #)	/# No	ne
SITE ID: (Con	dition-#) SCB LAT	41°51 '5	" Long 7	2 <u> • 43</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:	□ F	GNMENT: low-aligned lot flow-aligned to not know	Barrel dia	Height:	(ft)(ft)
CROSSINGS ONLY	CONDITION: (Evidence of)  Cracking/chipping/corrosion Sediment deposition Other (describe):	n scour hole eankment	CULVERT SLOPE:    Flat   Slight (2° - 5°)   Obvious (>5°)		Width:(ft		(ft) (ft) (ft)	
POTENTIAL I	RESTORATION CANDIDATE	☐ Fish barrier re		-	eplacement 🔲	Upstream s	torage retrofit	
IS SC ACTING	G AS GRADE CONTROL	□ No □ Yo	es 🔲 Unkı	nown				
	CKAGE:	A structure such a	s a dam or	A total fish blocks	age on a	A temporary b	arrier such as a	
If yes for fish barrier	If yes for fish barrier  CAUSE: Drop too high Water Drop: Flow too shallow Water Depth: Other:		greater stream bloc upstream movemen		of or partial blockag ish interfere with the		nge that may very little viable fish e migration of above it; natural ba	
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	SUBSHED: WKN			DATE: 10 / 03 / 09   ASSESSED BY: CM + Bo					
SURVEY REA		Тіме: <u>З</u> : <i>Э</i> €				: (Camera-Pic	:#) PC3	00 /# 58	
SITE ID: (Con	distor#) SCC Lat	41.52.04	<u>† " Long <del>]</del></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:		ALIGNMENT:    Flow-aligned   Not flow-aligned   Do not know		DIMENSIONS: (if variable, sketch)  Barrel diameter:(ft)  Height:(ft)		
CROSSINGS ONLY	CONDITION: (Evidence of)  Cracking/chipping/corrosion Sediment deposition Other (describe):	□ Downstrean □ Failing emb	n scour hole Slight (2° – 5°)		Culvert le	ength:(ft) Width:(ft) elevation:(ft)			
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 Partial Temporary Unknown				n or	A total fish blocka	ge on a	A temporary barrier such as a	
If yes for fish barrier	-	Drop too high   Water Drop: (in)     Flow too shallow   Water Depth: (in)		road culvert on a 3rd orde greater stream blocking th upstream movement of anadromous fish; no fish passage device present.		the significant reach of str or partial blockage tha interfere with the migri		stream, the very head of a stream with very little viable fish habitat	
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 ho- pote	~ 10'c	dans	THORITIES YES NO	

Trash and Debris



WATERSHED/SUB	SHED: WBN		DATE: 101 B 109 ASSESSED BY: B6 CM						
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:       ☑ Heavy equipment ☑ Trash bags ☐ Unknown       DUMPSTER WITHIN 100 FT:         WHO CAN DO IT:       ☑ Volunteers ☑ Local Gov ☐ Hazmat Team ☐ Other       ☐ 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.	rash or debris scattered over a large is very difficult. Or presence of drums ardous materials					
(Circle #)	5	(4)	3	2	1,				
NOTES: -D DUMPS IT ON (B) 041°51'48"/72°43'43" including thes, old care (entire), store, old frindation, broken pipes. Illegal-looking dump (Photo PCB00-50)  -> old tank in Charned (oil tank?) 0041°51'56"/72°43'39"  -> trash invaled, including plastic Milk bottles, bleach bottles + garbage on (B) 041°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: <b>0</b> : <b>_0</b> 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 %	<b>€</b> 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	, <del>-</del>	SMANN	Γ
WILDLIFE IN OR	(Evidence of)  ☐ Fish ☐ Bea	aver Æ-Deer	,	\	11	
AROUND STREAM	☐ Snails ☐ Oth	,		[DIMP]	11	
		d (≥75% coverage)		I STEN	$H_{\Lambda}$	\a_
STREAM SHADING	☐ Halfway (≥50	)%)		¥/	ALL PINE	Warrings
(water surface)	☐ Partially shad☐ Unshaded (<		À		/ <b>X</b>	1/gra
			74	- 1/	•	
CHANNEL	Downcutting	·   =	<b>7</b>		)	
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	LFTY		/~/	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 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		
<u>.</u>	Right Bank 10 9	<b>8</b> 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 propert or infrastructure.		
	Left Bank 10 9	8 7 6	5 4 3			
	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		
16 (16 (16 (16 (16 (16 (16 (16 (16 (16 (	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		
<del></del>	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 \( \sqrt{1} \)  Volunteers \( \sqrt{1} \) Local (		ash bags ☐ Unknown  ov ❷ Hazmat Team ☐ Other  Other  DUMPSTER WITH						
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	nt of trash or debris scattered over a large ccess is very difficult. Or presence of drums of hazardous materials						
(Circle #)	- 5	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 J. Unsure of					
7	•			REPORTE	D TO AUTHORITIES 🔲 YES 🔀 NO					

### Storm Water Outfalls



	WATERSHED/SUBSHED: SHR				DATE: 10/08/09 ASSESSED BY: CM+B6				
	SURVEY REACH ID:	O- Tu	<b>ME:</b> :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		
	FOR COLOR: Clear Brown Grey Yellow Green Orange Red Other;  FLOWING ONLY FLOATABLES: None Sewage (toilet paper, etc.) Petroleum (oil sheen)  OTHER CONCERNS: Needs Regular Maintenance Bank Erosion Other:  Other: Other: Other: Other: Other: Other: Other: Other: Other: Other: Other: Other: Other: Other: Other: Other: Other: Other: Other: Other: Other: Other: Other: Other: Other: Other: Other: Other: Other: Other: Other: Other: Other: Other: Other: Other: Other: Other: Other: Other: Other: Other: Other: Other: Other: Other: Other: Other: Other: Other: Other: Other: Other: Other: Other: Other: Other: Other: Other: Other: Other: Other: Other: Other: Other: Other: Other: Other: Other: Other: Other: Other: Other: Other: Other: Other: Other: Other: Other: Other: Other: Other: Other: Other: Other: Other: Other: Other: Other: Other: Other: Other: Other: Other: Other: Other: Other: Other: Other: Other: Other: Other: Other: Other: Other: Other: Other: Other: Other: Other: Other: Other: Other: Other: Other: Other: Other: Other: Other: Other: Other: Other: Other: Other: Other: Other: Other: Other: Other: Other: Other: Other: Other: Other: Other: Other: Other: Other: Other: Other: Other: Other: Other: Other: Other: Other: Other: Other: Other: Other: Other: Other: Other: Other: Other: Other: Other: Other: Other: Other: Other: Other: Other: Other: Other: Other: Other: Other: Other: Other: Other: Other: Other: Other: Other: Other: Other: Other: Other: Other: Other: Other: Other: Other: Other: Other: Other: Other: Other: Other: Other: Other: Other: Other: Other: Other: Other: Other: Other: Other: Other: Other: Other: Other: Other: Other: Other: Other: Other: Other: Other: Other: Other: Other: Other: Other: Other: Other: Other: Other: Other: Other: Other: Other: Other: Other: Other: Other: Other: Other: Other: Other: Other: Other: Other: Other: Other: Other: Other: Other: Other: Other: Other: Other: Other: Other: Other: Other: Other: Other: Other: Other: Other: Other: Other: Other: Other: Other: Other: Other: Other: Other: Other: O								
		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	escription: facted + residential				
	SEVERITY: stroic com streic streic stroic com streic stroic com streic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic stroic 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			DATE: D /08 / OT   ASSESSED BY: CW1/80				
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	_	_					<del></del>
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/	<b>∆</b> 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) (ft)
07,27	Cracking/chipping/corrosion	n scour hole		Flat Slight (2° – 5°)		Width.	(11)	
	☐ Sediment deposition ☐ Other (describe):			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	<i>w</i> n	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	. <b></b>		•	6	40	- (1	
	1.3							
				·				•
ļ	•						•	
1								
		•						
								•
7					₩			□ v <sub>es</sub> □ v <sub>e</sub>
					REPOR	TED TO AU	THORITIES	YES NO

WATERSHED	SUBSHED: BHR		DATE: D-D8 OT 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:		ALIGNA		Barrel dia	MONS: (if variable, sketch) meter: 24"
	Box Elliptical	Double	Metal		☐ Flow-aligned☐ Not flow-aligned☐			Height: 18" (%)
FOR ROAD/	Circular Other:	Triple	Other:			ot know		OVEZ V
RAILROAD CROSSINGS		Other:	<u> </u>		C	DT SI OPD	Culvert le	ength:(ft)
ONLY	CONDITION: (Evidence of)  Cracking/chipping/corrosion	CULVERT			RI SLOPE:		Width:(ft)	
	Sediment deposition	n scour hole ankment	_	_	$t(2^{\circ}-5^{\circ})$			
	Other (describe):			[	Obvid	ous (>5°)	Roadway	elevation:(ft)
			. 🗆 .				•	. 6.
<b>l</b>	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 road culvert on a					A temporary barrier such as a beaver dam or a blockage at
If yes for	Cause:		greater stream b	locking th	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)	upstream moven anadromous fish passage device	; no fish	j	interfere with the	,	above it; natural barriers such
	☐ Flow too shallow Water Depth: (in)				1	anadromous fish.		as waterfalls.
	Other:		5		4	3		2 1
NOTES/SKET	TCH:	Jull in	nat a	<b>,</b> ∕≥⁄ <sub>Λ</sub>	. 7	ha In	6 Ad	Alpan
	4.1.	)((11100)		<b>4</b> 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 م	ر ا	und uces
	V(1/3/4)4C	NOON	necess.	- 51	UKKO	MINOCIVI	'' (C	400c 0202
	ARR RE	sidental	l /fre	FroGreat	<u> </u>			
						,		:
	•							
								·
	•							
		4						
			•					
						<u></u>		<b>-</b>
<u>'</u>	·					REPOR	TED TO AU	THORITIES YES NO



	WATERSHED	WATERSHED/SUBSHED: BHR			DATE: 12 10	3/9	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		ow channel	? ☐ Yes ☐ No		ADJACENT STI Available width Utilities Presen		(ft) RT(ft) 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								
				Metian with					
L				<del></del>					

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:	<del></del>	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 %	<b>≤</b> 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. 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	<b>1</b>	
	TOP TEACH ACCESSIBILE	Visite de control de montenante de control de control de control de control de control de control de control de control de control de control de control de control de control de control de control de control de control de control de control de control de control de control de control de control de control de control de control de control de control de control de control de control de control de control de control de control de control de control de control de control de control de control de control de control de control de control de control de control de control de control de control de control de control de control de control de control de control de control de control de control de control de control de control de control de control de control de control de control de control de control de control de control de control de control de control de control de control de control de control de control de control de control de control de control de control de control de control de control de control de control de control de control de control de control de control de control de control de control de control de control de control de control de control de control de control de control de control de control de control de control de control de control de control de control de control de control de control de control de control de control de control de control de control de control de control de control de control de control de control de control de control de control de control de control de control de control de control de control de control de control de control de control de control de control de control de control de control de control de control de control de control de control de control de control de control de control de control de control de control de control de control de control de control de control de control de control de control de control de control de control de control de control de control de control de control de control de control de control de control de control de control de control de control d		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,
+ PANCINE	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  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 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		
<del></del>	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 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 🚳	5 4 3	or infrastructure.		
	Right Bank 10 9	<b>3</b> 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.	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 encroachment (i.e. fill material, land development, or man-made structures). Significant effect on		
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		

### Storm Water Outfalls



-	WATERSHED/SUBSHED	: WTR		DATE: 2 /08 /09   ASSESSED BY: CM/BG					
	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 APPESCABLE			
	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:								
	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:					
	OUTFALL SEVERITY: (circle #)  Heavy discharge with a distinct color and/or a strong smell. The amount of discharge is significant compared to the amount of normal flow in receiving stream; discharge appears to be having a significant impact downstream.  Small discharge; flow mostly clear and odorless. If the discharge has a color and/or odor, the amount of discharge; staining; or appearance of causing any erosion problems.  Outfall does not have dry weather discharge is very small compared to the stream's base flow and any impact appears to be minor / localized.								
	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			

<b>C</b> 1	
2	

WATERSHED	/SUBSHED: WTK			DATE: 16				cm/66
SURVEY REA		TIME: 9:50			<b>):</b> (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: DIOS 100 ASSESSED BY: CM/B			
SURVEY REACH I		TIME::AM/PM	<b>Рното ID:</b> (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:	A small amount of trash (i.e., than two pickup truck loads) lo inside a park with easy access		nay have been dumped of it could be cleaned up i	or indications	nt of trash or debris scattered over a large ccess is very difficult. Or presence of drums of hazardous materials	
(Circle #)	5	(4)	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:			
© LB Sla Ca ND 2	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.  Ab proto. EASY Access, no heavy Machinery required.					
@ LB + vin	· RB trash o	dumping (inclu page cours, etc.)	iding plas Easy Acc	tic bud cess, her	kets, Auto parts, my machinery	
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	<b>v</b> ) 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 Q (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	<b>③</b> 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	<b>(8)</b> 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
	<b>(20)</b> 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):	n ☐ Downstrean ☐ Failing emb		☐ Fla	ert slope: t ght (2° – 5°) vious (>5°)	Culvert le	Width:	(ft) (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°			CM1/80
SURVEY REA	.cн ID: <i>О</i> Э	<u> Тіме: ७ : 1≤</u>			: (Camera-Pic	:#) PC0	80 /#	072
SITE ID: (Con	dition-#) SC- <u>B</u> LAT	41.51.30	2 " Long <u>7</u>	<u> 43 - </u>	<u>  16 " Li</u>	ИΚ	GPS	(Unit ID)
		enthe						
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	<b>⊠</b> 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)	<b>-</b>			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		arriam Operan		I (I)	
	EXTENT OF PHYSICAL BLO			BLO	CKAGE SEVER	ury: (circ	<i>іе #)</i>	
	☐ 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 movemen	nt of	or partial blockage	e 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:							
		•						
	·							

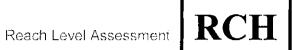
Trash and Debris



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	SITE ID: (Condition#) TR-OVE LAT 4   05   10 "LONG 7 043 124" 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	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, tizes, delaris, toilet, Gasy 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		-
		<del></del>					
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				• <b>≥</b> 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		<b>_</b>			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% <b>2</b> \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	<b>◎</b> 7 6	5 4 3	2 1 0			
		Right Bank 10 9	<b>(3)</b> 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	<b>⊘</b> 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-stream: 65 /80 + Buffer/Floodplain: 60 /80 = Total Survey Reach 125 /160							

Trash and Debris



WATERSHED/SUE	SHED: TOB	<del>-</del> .	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 REST	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 41°49'47"/72°45'02", likely illegally dumped on prevale residence.  O RB 2 41°49'47"/72°45'6" including Automobile, oil drums, these 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	<b>Р</b> 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:	☐ No ☐ Do	NMENT: ow-aligned t flow-aligned not know ERT SLOPE:	Barrel diar	meter: _ Height: _	riable, sketch)  (ft)  (ft)  (ft)  (ft)
ONLI	☐ Cracking/chipping/corrosic☐ Sediment deposition☐ Other (describe):	n Downstrear			t ght (2° – 5 <sup>0</sup> ) vious (>5°)		elevation:_	
POTENTIAL RESTORATION CANDIDATE ☐ Fish barrier removal ☐ Culvert repair/replacement ☐ Upstream storage retrofit ☐ Local stream repair ☐ Other:								
IS SC ACTING	G AS GRADE CONTROL	□No □Y	es Unk					
If yes for fish barrier	EXTENT OF PHYSICAL BLC  Total Partial  Temporary Unknow  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	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	<b>8</b> 7 6	5 4 3	2 1 0		
	Right Bank 10 9	<b>(8)</b> 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	<u> </u>				DATE: 130/09 ASSESSED BY: CM+BG						
SURVEY REACH ID:		ме: <u>З : IS </u> ам <b>е</b> й		<b>Р</b> ното <b>ID</b> : (Camera-P		/# /^	ore				
SITE ID (Condition=#): 0	T- ONLY ONE LA	vr <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		Depth: Vidth (Top):_ " (Bottom):_		NOT APPAICABLE				
CONDITION:       ODOR:       NO       DEPOSITS/STA         ☑ None       ☐ Gas       ☐ None         ☐ Chip/Cracked       ☐ Sewage       ☐ Oily         ☐ Peeling Paint       ☐ Rancid/Sour       ☐ Flow Line		Oily	S:	VEGGIE DENSITY:  None  Normal Inhibited	☐ Brown ☐ Other:	THIC GROV					
Corrosion Other:	Corrosion Sulfide Paint			Excessive Other:	☐ Good	Odors Algae	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:											
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				

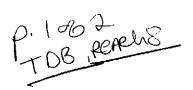
Impacted Buffer

IB

WATERSHED/SUBSHED: TOB					DATE!	1 /30 / 09	ASS	ESSED BY: (M/KG
SURVEY REACH:	7	FIME: 3	_: <u>&amp;O_</u> AM/{	<del></del>	<del></del>			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>	<del></del>	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					⊠:	<b>~</b>		
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 CANDIDAT	FE ☐Active	reforestati	on 🗹 Green	way des	ign 🔲	Natural regenera	ition 🔲	Invasives removal
RESTORABLE AREA			Impacted area	on public	and	Impacted area on eit	her	Impacted area on private
LT BANK RT Length (ft): 250 280	REFORESTAT POTENTIAL: (Circle #)	rion	where the ripa not appear to specific purpo area available	be used fo se; plenty	orany i	public or private land presently used for a : purpose; available ar planting adequate	specific.	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 : ~a:	telds to meter 80 mete	/mm s ns.	n h	· · ·		

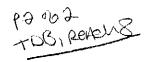
WATERSHED	SUBSHED:	-0B			D <sub>A</sub> 1	re:	<u> 130 / 09</u>	ASSE	SSED BY:	cm/B
SURVEY REA	СН ID:	<u>(o</u>	Тіме:	_AM/PM			: (Camera-Pi	c #)	/#	nare
SITE ID: (Con	idition-#) SC- <u>A</u>	LAT	<u>41 ° 49 3:</u>	<u> 5_" Long 7</u>	<u> </u>	<u>45 '</u>	<u>05</u> " L	MK	. GPS	(Unit ID)
TYPE: KRos	nd Crossing	d Crassi	ng	Dom D Book	n Do	🗆	Geological For	matian 🗆	Other:	
T T PE: [/NKO	SHAPE:	d Crossi	# BARRELS:	MATERIAL:	er Da		NMENT:			riable, sketch)
	☐ Arch ☐ Botto		⊠.Single	Concrete			w-aligned	Barrel dia		3811
FOR ROAD/	│ □ Box          Ellip │ □ Circular	tical	Double Triple	☐ Metal			t flow-aligned		Height:	(ft)
RAILROAD	Other:		Other:	Other:		∐ Do	not know			
CROSSINGS ONLY	CONDITION: (Evidence					CULV	ERT SLOPE:	Culvert le	ength:	(ft)
0,1121	☐ Cracking/chipping/clipsing/chipping/clipsing/chipping/chipping/chipping/chipping/chipping/chipping/chipping/chipping/chipping/chipping/chipping/chipping/chipping/chipping/chipping/chipping/chipping/chipping/chipping/chipping/chipping/chipping/chipping/chipping/chipping/chipping/chipping/chipping/chipping/chipping/chipping/chipping/chipping/chipping/chipping/chipping/chipping/chipping/chipping/chipping/chipping/chipping/chipping/chipping/chipping/chipping/chipping/chipping/chipping/chipping/chipping/chipping/chipping/chipping/chipping/chipping/chipping/chipping/chipping/chipping/chipping/chipping/chipping/chipping/chipping/chipping/chipping/chipping/chipping/chipping/chipping/chipping/chipping/chipping/chipping/chipping/chipping/chipping/chipping/chipping/chipping/chipping/chipping/chipping/chipping/chipping/chipping/chipping/chipping/chipping/chipping/chipping/chipping/chipping/chipping/chipping/chipping/chipping/chipping/chipping/chipping/chipping/chipping/chipping/chipping/chipping/chipping/chipping/chipping/chipping/chipping/chipping/chipping/chipping/chipping/chipping/chipping/chipping/chipping/chipping/chipping/chipping/chipping/chipping/chipping/chipping/chipping/chipping/chipping/chipping/chipping/chipping/chipping/chipping/chipping/chipping/chipping/chipping/chipping/chipping/chipping/chipping/chipping/chipping/chipping/chipping/chipping/chipping/chipping/chipping/chipping/chipping/chipping/chipping/chipping/chipping/chipping/chipping/chipping/chipping/chipping/chipping/chipping/chipping/chipping/chipping/chipping/chipping/chipping/chipping/chipping/chipping/chipping/chipping/chipping/chipping/chipping/chipping/chipping/chipping/chipping/chipping/chipping/chipping/chipping/chipping/chipping/chipping/chipping/chipping/chipping/chipping/chipping/chipping/chipping/chipping/chipping/chipping/chipping/chipping/chipping/chipping/chipping/chipping/chipping/chipping/chipping/chipping/chipping/chipping/chipping/chipping/chipping/chipping/chipping/chipping/chipping/chipping/chipping/chipping/chipping/chipping/		n ☐ Downstrear ☐ Failing emb				ght (2° – 5°)		widii.	(11)
	Other (describe):	)II	raning ento	ankment			vious (>5°)	Roadway	elevation:	(ft)
	RESTORATION CANDI	DATE		emoval Culv		pair/rep	olacement 🔲 🕻	Jpstream s	torage retro	ofit
⊠no Te SC ACTINA	G AS GRADE CONTRO	1	Local stream	-						
18 SC ACTING	EXTENT OF PHYSIC			es Unki	nown		CKAGE SEVEI	PITV* (circ	·le #)	
	Total	Partial		A structure such a				·		
If yes for	☐ Temporary ☐	Unknov	wn	road culvert on a	3rd ord	der or	A total fish blocks tributary that wou	ld isolate a	beaver dam	y barrier such as a nor a blockage at
fish barrier	CAUSE:	v . 5	71. \	greater stream blo upstream moveme	ent of		significant reach or partial blockag	e that may	very little via	ad of a stream with able fish habitat
	☐ Drop too high ☐ Flow too shallow	Water Di Water D		anadromous fish; passage device p			interfere with the anadromous fish.		above it; na as waterfall	tural barriers such s.
	Other:			5			<u> </u>		2	1
NOTES/SKET	CH:					•				
			٠							
										•
	-									
<b>b</b>								,		
7							Repor	TED TO AU	THORITIES	☐ YES ☐ No

WATERSHED	SUBSHED: TUB	<del> </del>		<b>DATE:</b> /	<u>1130 1<b>09</b> </u>	ASSESS	SED BY:	<u>cu</u>	185
SURVEY REA	. <u>сн ID:</u>		2 AM/(EN		<b>):</b> (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 leng	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	
<b>⊠</b> 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☐ Temporary ☐ Unkn		A structure such	asa dam or	A total fish blocka	geona /	A temporary	/ barrier suc	ch as a
If yes for	☐ remporary ☐ Onkii	OWII	road culvert on a greater stream bl		tributary that woul	d isolate a	eaver dam	or a blocka	ige at
fish barrier	sh barrier CAUSE:			ent of	or partial blockage that			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.,, г	ا
7					REPOR	TED TO AUTH	ORITIES	□ YES [	∃No↓





				<del></del>
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 second			
	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)	<del>- Top</del> (ft	)		31
REAC	CH ACCESSIBILITY			3//
Fair	r: Forested or Difficult. Must cross	$\dashv$		\$1 <b> </b>
Good: Open area in deve	veloped area wetland, steep slope, o			41
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.		<b>.</b>	
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
Lebt some	1. I we control on the		-	•
				<b></b>
			REPORTEI	D TO AUTHORITIES 🔲 YES 🔲 N



<del></del>	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 a a fast rate; erosion contributing significant amount of sediment to stream; obvious threat to property or infrastructure.		
	Left Bank 10 9	<b>®</b> 7 6	5 4 3	2 1 0		
	Right Bank 10 9	<b>®</b> 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  10 9 8 7 6	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: TOG			DA	ге: <u> {</u>	<u> 130   09</u>	ASSE	SSED BY:	Cin-	+ BC
SURVEY REA	urvey Reach ID: 8 Time: <u>2 : 40</u> am <b>(</b>					: (Camera-Pi	c#)  4	920/#	20 8	70°7
SITE ID: (Con	dition-#) SC-	41-49-22	2" LONG	<u> </u>	<u>45 ·</u>	oo "L	MK	GPS	(Unit ID)	
75-15- 57 B						~				
TYPE: M Roa	ad Crossing Railroad Crossi			Т		Geological For				
	SHAPE:  Arch Bottomless	#BARRELS: ☑Single	MATERIAL:			NMENT: w-aligned	Barrel dia	IONS: (if vo	ariable, ske 4	etch) <del>(R)</del>
,	Box 🖾 Elliptical	Double	☐ Metal			t flow-aligned	Barrer are	Height:		(ft)
FOR ROAD/ RAILROAD	☐ Circular☐ Other:	☐ Triple ☐ Other:	Other:		☐ Do	not know				_` /
CROSSINGS					CULV	ERT SLOPE:	Culvert le	ength:		(ft)
ONLY	Cracking/chipping/corrosion	n Downstrear	n scour hole		☐ Fla	t		Width:		(ft)
	Sediment deposition	☐ Failing emb	ankment			ght (2° – 5°) vious (>5°)				(0)
	Other (describe);					vious (~3 )	Roadway	elevation:		(ft)
POTENTIAL I	RESTORATION CANDIDATE	Fish barrier re	emoval 🔲 Culv	vert re	pair/rer	olacement []	Upstream si	torage retro	ofit	
<b>⊠</b> no		Local stream					-	<del>-</del>		
IS SC ACTING	G AS GRADE CONTROL	□ No □ Y	es 🔲 Unk	nown						
	EXTENT OF PHYSICAL BLO	CKAGE:			BLO	CKAGE SEVEI	RITY: (circ	le #)		
	☐ Total ☐ Partial ☐ Temporary ☐ Unknow	vn	A structure such			A total fish blocks			y barrier suc	
If yes for			road culvert on a 3rd or greater stream blocking			tributary that wou significant reach	of stream,	the very he	n or a blocka ad of a strea	am with
fish barrier CAUSE:  Drop too high Water Drop: (in)			upstream movem anadromous fish;		h	or partial blockag interfere with the			able fish hal atural barrier	
	Flow too shallow Water D	epth: (in)	passage device p	present		anadromous fish.		as waterfal	ls.	
	Other:		5		4			2	1	
NOTES/SKET	CH:	Along bo	Ha Lang	ΥΛ.	له د	unsteer	<del>a</del> ws 6	of co	سممداله	
	ich-kap	mony be	· OA	-	\@\.	ø				1:
	thin t	nested	butter	ውላ	KA	<b>5</b> .				
14 13 13										
			•				4			
						Repor	TED TO AU	THORITIES	YES [	□No

Impacted Buffer

IB

WATERSHED/SUBSHED: TOB			DATE: 130 109	ASSESSED BY: CW/B			
URVEY REACH:	TIME:	_:AM/PM	<b>Рното ID:</b> (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 CANDIDATE Active reforestation Greenway design Natural regeneration Invasives removal one Other:							
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	: <b>30</b> A <b>Q</b> /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	<b>1</b>	
WILDLIES IN OR (Evidence of)	Store Rabbit		(EUB)
STREAM SHADING (water surface)    Mostly shaded (\ge 75 \cdot 75 \cdot 75 \cdot 75 \cdot 75 \cdot 75 \cdot 75 \cdot 75 \cdot 75 \cdot 75 \cdot 75 \cdot 75 \cdot 75 \cdot 75 \cdot 75 \cdot 75 \cdot 75 \cdot 75 \cdot 75 \cdot 75 \cdot 75 \cdot 75 \cdot 75 \cdot 75 \cdot 75 \cdot 75 \cdot 75 \cdot 75 \cdot 75 \cdot 75 \cdot 75 \cdot 75 \cdot 75 \cdot 75 \cdot 75 \cdot 75 \cdot 75 \cdot 75 \cdot 75 \cdot 75 \cdot 75 \cdot 75 \cdot 75 \cdot 75 \cdot 75 \cdot 75 \cdot 75 \cdot 75 \cdot 75 \cdot 75 \cdot 75 \cdot 75 \cdot 75 \cdot 75 \cdot 75 \cdot 75 \cdot 75 \cdot 75 \cdot 75 \cdot 75 \cdot 75 \cdot 75 \cdot 75 \cdot 75 \cdot 75 \cdot 75 \cdot 75 \cdot 75 \cdot 75 \cdot 75 \cdot 75 \cdot 75 \cdot 75 \cdot 75 \cdot 75 \cdot 75 \cdot 75 \cdot 75 \cdot 75 \cdot 75 \cdot 75 \cdot 75 \cdot 75 \cdot 75 \cdot 75 \cdot 75 \cdot 75 \cdot 75 \cdot 75 \cdot 75 \cdot 75 \cdot 75 \cdot 75 \cdot 75 \cdot 75 \cdot 75 \cdot 75 \cdot 75 \cdot 75 \cdot 75 \cdot 75 \cdot 75 \cdot 75 \cdot 75 \cdot 75 \cdot 75 \cdot 75 \cdot 75 \cdot 75 \cdot 75 \cdot 75 \cdot 75 \cdot 75 \cdot 75 \cdot 75 \cdot 75 \cdot 75 \cdot 75 \cdot 75 \cdot 75 \cdot 75 \cdot 75 \cdot 75 \cdot 75 \cdot 75 \cdot 75 \cdot 75 \cdot 75 \cdot 75 \cdot 75 \cdot 75 \cdot 75 \cdot 75 \cdot 75 \cdot 75 \cdot 75 \cdot 75 \cdot 75 \cdot 75 \cdot 75 \cdot 75 \cdot 75 \cdot 75 \cdot 75 \cdot 75 \cdot 75 \cdot 75 \cdot 75 \cdot 75 \cdot 75 \cdot 75 \cdot 75 \cdot 75 \cdot 75 \cdot 75 \cdot 75 \cdot 75 \cdot 75 \cdot 75 \cdot 75 \cdot 75 \cdot 75 \cdot 75 \cdot 75 \cdot 75 \cdot 75 \cdot 75 \cdot 75 \cdot 75 \cdot 75 \cdot 75 \cdot 75 \cdot 75 \cdot 75 \cdot 75 \cdot 75 \cdot 75 \cdot 75 \cdot 75 \cdot 75 \cdot 75 \cdot 75 \cdot 75 \cdot 75 \cdot 75 \cdot 75 \cdot 75 \cdot 75 \cdot 75 \cdot 75 \cdot 75 \cdot 75 \cdot 75 \cdot 75 \cdot 75 \cdot 75 \cdot 75 \cdot 75 \cdot 75 \cdot 75 \cdot 75 \cdot 75 \cdot 75 \cdot 75 \cdot 75 \cdot 75 \cdot 75 \cdot 75 \cdot 75 \cdot 75 \cdot 75 \cdot 75 \cdot 75 \cdot 75 \cdot 75 \cdot 75 \cdot 75 \cdot 75 \cdot 75 \cdot 75 \cdot 75 \cdot 75 \		LE SYDEN G	
CHANNEL Downcutting [ DYNAMICS Widening Headcutting [ Unknown 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	<b>30'</b> (ft)	}}	
Top	(ft)	[]	
REACH ACCESSIBILITY			<b>\</b>
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; lack 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 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 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	
<del></del>	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				Рното II	<b>):</b> (Camera-Pic	#) PCal	o /# a	$\infty$ , $\infty$
SITE ID: (Con	adition-#) SC-	41-48-2	3" Long $3$	<u> 2 ° 45 '</u>	<u>/0</u> ", li	мк	GPS	(Unit ID)
TYPE: 🕅 Ros	ad Crossing	ng Manmade	Dam ☐ Beav	er Dam	Geological Form	nation [	Other:	
FOR ROAD/	SHAPE:  Arch Bottomless  Box Elliptical Circular Other:	#BARRELS: MATERIAL:  Bottomless Single Concrete Elliptical Double		ALIGNMENT:  Flow-aligned  Not flow-aligned  Do not know		DIMENSIONS: (if variable, sketch)		10'(ft)
CROSSINGS ONLY	CROSSINGS CONDITION: (Evidence of)			☐ Fla	VERT SLOPE: at ght (2° – 5°) ovious (>5°)	Culvert le	ength: _ Width: _ elevation:_	(ft) (ft)
<del>⊯ n</del> o	POTENTIAL RESTORATION CANDIDATE							
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   ASSESSED BY: CM /86				
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	<b>GPS:</b> (Unit ID)			
BANK:    X LT   RT   Head   Closed pipe   Moderate   R   Closed pipe   Closed pipe   Closed pipe   Closed pipe   Closed pipe   Closed pipe   Closed pipe   Closed pipe   Closed pipe   Closed pipe   Closed pipe   Closed pipe   Closed pipe   Closed pipe   Closed pipe   Closed pipe   Closed pipe   Closed pipe   Closed pipe   Closed pipe   Closed pipe   Closed pipe   Closed pipe   Closed pipe   Closed pipe   Closed pipe   Closed pipe   Closed pipe   Closed pipe   Closed pipe   Closed pipe   Closed pipe   Closed pipe   Closed pipe   Closed pipe   Closed pipe   Closed pipe   Closed pipe   Closed pipe   Closed pipe   Closed pipe   Closed pipe   Closed pipe   Closed pipe   Closed pipe   Closed pipe   Closed pipe   Closed pipe   Closed pipe   Closed pipe   Closed pipe   Closed pipe   Closed pipe   Closed pipe   Closed pipe   Closed pipe   Closed pipe   Closed pipe   Closed pipe   Closed pipe   Closed pipe   Closed pipe   Closed pipe   Closed pipe   Closed pipe   Closed pipe   Closed pipe   Closed pipe   Closed pipe   Closed pipe   Closed pipe   Closed pipe   Closed pipe   Closed pipe   Closed pipe   Closed pipe   Closed pipe   Closed pipe   Closed pipe   Closed pipe   Closed pipe   Closed pipe   Closed pipe   Closed pipe   Closed pipe   Closed pipe   Closed pipe   Closed pipe   Closed pipe   Closed pipe   Closed pipe   Closed pipe   Closed pipe   Closed pipe   Closed pipe   Closed pipe   Closed pipe   Closed pipe   Closed pipe   Closed pipe   Closed pipe   Closed pipe   Closed pipe   Closed pipe   Closed pipe   Closed pipe   Closed pipe   Closed pipe   Closed pipe   Closed pipe   Closed pipe   Closed pipe   Closed pipe   Closed pipe   Closed pipe   Closed pipe   Closed pipe   Closed pipe   Closed pipe   Closed pipe   Closed pipe   Closed pipe   Closed pipe   Closed pipe   Closed pipe   Closed pipe   Closed pipe   Closed pipe   Closed pipe   Closed pipe   Closed pipe   Closed pipe   Closed pipe   Closed pipe   Closed pipe   Closed pipe   Closed pipe   Closed pipe   Closed pipe   Closed pipe   Closed pipe   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.			
5 4 3 2 1 SKETCH/NOTES:						
		REPORTED	TO AUTHORITIES: YES NO			

Impacted Buffer

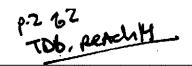
IB

WATERSHED/SUBSHED:	B	· · · · · · · · · · · · · · · · · · ·	DATE: 17 0	/ 09 ASS	SESSED BY: CM/O
URVEY REACH:	TIME: 7	: <u>/</u> /\$_ <b>(</b> M)PM	<del></del>		2010 #007
SITE ID: (Condition-#) START LA	<del></del>	Long 72 ° 45		1K	GPS: (Unit ID)
B MISSE END LA	······································	LONG °		 1K	
PRESIDENTES. CHRISTIAN POLICY STREET					
IMPACTED BANK: REASON IN BOTH	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 <sub>Α</sub>	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 x sz	chereford of	2 beginn 41°48'32'	11/79 95 07 "
·					
			•		
					· ·
<b>7</b>					

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 00 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).	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 🕖	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 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
	<b>(</b> 20 <b>)</b> 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: 101/01   ASSESSED BY: CM+BB				
SURVEY REACH ID:	IH TIN	ие: <u>9</u> : <u>45 (</u> Дурм	<b>РНОТО ID:</b> (Camera-Pi	ic#) /# <b>/</b>	rene		
SITE ID (Condition-#): O	T- LA	r°_ See 🛷	loro	' LMK	GPS: (Unit ID)		
BANK: Head  FLOW:	TYPE:	MATERIAL:  Concrete Me  PVC/Plastic Brid	<del>-</del>	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 Dank 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"/72045'09"  D Swate / Stockmarter input on RBD 41048'53"/72045'01"  POTENTIAL input on nutrient londing. Since this stream Reach is belatively open-compared Au Tin nutrients can lead to regelative exceptive opents / choke.							
	<b>51</b> 7	in nutriced	s can lead !	re vegeta-in	c exercise		
Reported to authorities: Yes Soo							

Impacted Buffer | IB

<del></del>			•	· I ———
WATERSHED/SUBSHED:		-	DATE: D O	Aggrees as Olea/
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: REASON I	NADEQUATE: Z Lack o	of vegetation \( \sum \) Too	narrow Widespread inva	give #lents
<del></del>		ly planted 🖾 Othe		woody wea
LAND USE: Private (Facing downstream) LT Bank	Institutional Golf Co	urse Park Otl	her Public /	7.00
RT Bank			1:+ Agram lan	人
DOMINANT Paved	Bare ground Turf/la	<u> </u>	: □ 1/	
LAND COVER: LT Bank				Other
RT Bank				<u></u>
INVASIVE PLANTS: None		Partial coverage	<del></del>	
STREAM SHADE PROVIDED? No.		<del></del>		unknown
	ne Partiai [	Full WETLA	NDS PRESENT? No	Yes Unknown
POTENTIAL RESTORATION CANDIDA	ATE Active reforestat	ion MGraenway de	d- DN t	
По	Other:	ion Dicheenway de	sign Natural regeneration	□ Invasives removal
RESTORABLE AREA				<del></del>
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	for 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 REFOR	ESTATION Wi	despread invasive pl	ants Potential contamina	<del></del>
Poor/unsafe access to site Existing	g impervious cover Sev	ere animal impacts (	(deer, beaver)	Lack of Suil
NOTES:				
·				
				,
•				,
•				
	,			
			•	

NBP-04

# **Photo Inventory**

(By Camera) > BY STYLEAM REACH

Project: 08-3233

Group: <u>B6 + CM</u>

Camera: OLYMPUS

This field sheet is to be completed AS photos are taken in the field. The intent is to force us to organize pictures taken on a camera basis. Fill out one sheet per camera (add sheets as needed). Only fill in Date/Reach/Location ID when you start in a new spatial or temporal location.

Date	Stream/ Reach	Location ID	Photo	Description
11/23/09		TOTAL STEAM END	(ma300) 7	AT CONFWENCE WOOD THE BUTTANY (R) BANK
	·		9	TYPICAL RIFFLE
			10	RESIDENTIAL LAWNS, (D) BANK
			11	PIPE + ENOSION, NONTHERN MOST GAWN
		U PSHEAM END	12	LOOKING-UPSMEAM@ PONTAGE CHOSSWG

COMMENTS!

#### NBP-09

# **Photo Inventory**

(By Camera) -> BY STAMAM REACH

Project: 08-3233

Group: BG+CM

Camera: OLYMPUS

This field sheet is to be completed AS photos are taken in the field. The intent is to force us to organize pictures taken on a camera basis. Fill out one sheet per camera (add sheets as needed). Only fill in Date/Reach/Location ID when you start in a new spatial or temporal location.

Date	Stream/ Reach	Location ID	Photo #	Description
		DOWNSTNEAM	(PB2300)	POND OUTLET UNDER CAMPOS TOAD,
11/23/09	NBP-09	END	- 31	ISLAND ON (R)
			<i>3</i> 2	TOPEUD OF ISLAND
			33	OUTFALL FROM CAMPUS PUPE BIBANIC ABOVE PEDESTMAN BRIDGE
			34	RIFFIE + PEDESTMAN BRUDGE
			35	AT BEND ABOVE UPSTREAM CAMPUS BRUDGE (BEGINNING OF BEDNICK SECTION)
			36	UPSTMEAN END OF BED NOCK SECTION
		CLOSE TO UPSTMEAM END	37	PIPE IN BEDMCK, @ BANK
			·	
				<u> </u>

COMMENTS!

## **Photo Inventory**

(By Camera) > BY STYLZAM REACH

Project: 08-3233

Group: BG +CM

Camera: OLYMPUS

This field sheet is to be completed AS photos are taken in the field. The intent is to force us to organize pictures taken on a camera basis. Fill out one sheet per camera (add sheets as needed). Only fill in Date/Reach/Location ID when you start in a new spatial or temporal location.

Date	Stream/ Reach	Location ID	Photo #	Description
		NEAR (		TREE + LIMB DAM, ENDDING BANK
11/23/09	NBP-10	DOWNSTRAM END	-aa	(SEE PERSONDE FOR THIN STREAMENT OF NBP-10+1
			23	EMDING (5) BANK
			24	ENOSION ()+(1) BANKS
			25	THOUGHOUD BANK @ TREES
			26	DEBMS IN PLIVER DOWNSTREAM FROM PARKE
			<b>a</b> 7	END OF PANGLAG, RIPMAP + CONCRETE
		:	28	ANOTHER STERMWATER ONTHALL FROM PARKAGE
			29	CALM STMETCH WITH PANGUE IN BUFFER
		NEAR UPSTREAM END	30	CONDUIT CLOSSING STREAM BELOW CAMPUS TOOLD

COMMENTS:

# NBP-11

## **Photo Inventory**

(By Camera) -> BY STALAM REACH

Project: 08-3233

Group: BG+CM

Camera: OLYMPUS

This field sheet is to be completed AS photos are taken in the field. The intent is to force us to organize pictures taken on a camera basis. Fill out one sheet per camera (add sheets as needed). Only fill in Date/Reach/Location ID when you start in a new spatial or temporal location.

Date	Stream/ Reach	Location ID	Photo #	Description
11/23/09	NBP-11	ABOVE ( REACH	(182300) - 13	CONCRETE BANK ABOVE RR CULVENT
		UPGREAM END	14	LOOKING UP STINEAM AT CULVERT
			15	100 DONNSMEAM FROM RR CULUSAT
			16	MASH + DEBMS DAM (BOM COMMON)
		·	17	TYPICAL ENDOED BANK ON O
			18	CULVERT UNDER MANKTWAIN DRIVE
			19	DONN STREAM M.T. DAWE CULVERT, LOWNWATER
			20	MONE STABLE STRETCH BELOW M. TWAIN
		TOWNSTREA END	ય	SICT-LADEN WATER ENTERING NORTH BRANCH

COMMENTS!

#### **Photo Inventory**

(By Camera) > BY STYLEAM REACH

Project: <u>07-3233</u>

Group: BG+CM

This field sheet is to be completed AS photos are taken in the field. The intent is to force us to organize pictures taken on a camera basis. Fill out one sheet per camera (add sheets as needed). Only fill in Date/Reach/Location ID when you start in a new spatial or temporal location.

Camera: OLYMPUS

Stream/ Location Photo Date Description Reach  $\mathbf{m}$ WEMAND, POTENTIAL VERNAL POOL, PANK (PBayoo-) DOWN SEAN 4/09 NBP-13 END BROKEN PIPE + COLLAPSE BEHIND 72 73 HEADWALL, (P) BANK

73 STONE STOWNE (REMAINS OF CHESSING/DAM)

THEFIE, TUST BELOW RIE. 44 BRIDGE UPSTNEAM END

COMMENTS!

(By Camera) > BY STALAM REACH

Project: 08-3233

Group: BG+CM

Camera: OLYMPUS

This field sheet is to be completed AS photos are taken in the field. The intent is to force us to organize pictures taken on a camera basis. Fill out one sheet per camera (add sheets as needed). Only fill in Date/Reach/Location ID when you start in a new spatial or temporal location.

Date	Stream/ Reach	Location ID	Photo #	Description
11/24/09	NBP-14	FINGT BEND ABOVE DOWNSTEAM END	Prayoo-	ESTATE + LAWN, B BANK
			59	BRANK ANMONEDUBY THEE, CHAIN LINK FENCE, I MON-WNTAMINATED SEEP (ADE)
			60	STONE REMAINS OF DAM OR CMSSING
			61	(HOOKEN PERES BRANK (HOOKEN PSPEAM) NEWS END OF WOODLAND DR
			62	ENDING BANKS ASOVE 544 PIPES
			63	TRASH TRAPPED AT DEBMS DAM
			64	OUTFALL, @BAWK (LOUILLAGUPSTMEAN)
			65	FALLENTRES + ENDING @ BANK
			66	FALLYG HEADWALL, @ BANK
			67	TYPICAL MIFFLE
			68	DEN TREE, @ BUFFER
		CLUSE TO VEGREAM END	70	ESTATE + LAWN, @ BANK, ABOVE STONE ABUTMENTS, ABANDONED BUDGE

# NBP-15

#### **Photo Inventory**

(By Camera) > BY SMEAM REACH

Project: 08-3233

Group: B6+CM

Camera: OLYMPUS

This field sheet is to be completed AS photos are taken in the field. The intent is to force us to organize pictures taken on a camera basis. Fill out one sheet per camera (add sheets as needed). Only fill in Date/Reach/Location ID when you start in a new spatial or temporal location.

Date	Stream/ Reach	Location ID	Photo #	Description
11/24/09	NBP-15	100.100-644	рвэноо- 49	STORMWATER HEADWALL + ASYLVM ANENUE BRIDGE
			50	STORMWATER OUTLET BELOW PAYKENG- LOT, (I) BANK
			51	RESIDENTI AL ESTATE NETAINING WALLS, BBANK
			sa	RIPARIAN WETTAND, 18 BANK
			53	KEADWALL+ PIPE, (DBANK
	·		54	OLD SNAS AND EMOSION, BBANK
			55	ENDRED SWALE W/WARRETE, @BANK
		UPSINEAM END	56	WETTANDS + TRIBUTARY ( BANK
		UPSTLEAM END	57	ENDOING TOF OF ISLAND, @ BANK

## NBP-16

#### **Photo Inventory**

(By Camera) -> BY STILLAM REACH

Project: 08-3233

Group: B6+CM

Camera: OLYMPUS

This field sheet is to be completed AS photos are taken in the field. The intent is to force us to organize pictures taken on a camera basis. Fill out one sheet per camera (add sheets as needed). Only fill in Date/Reach/Location ID when you start in a new spatial or temporal location.

Stream/ Reach	Location ID	Photo #	Description
NBP-16	DOWNSTIEAN END	762400 38	BANKS
		39	ARMONED CHANNEL (RIPRAD), STEEP SUPE @ BANK
		40	SLOPE FALLUNE + BNOILEN PIPE, @ BANK
		42	RIPRAPPED BANK +SLOPE, ELODING BANK
		43	ELODING ( ) BANK + PIPE EXPOSED BY ELOSION
		44	GABION WALL, @BANK, WITH WHOLET STOLD
		45	MALLANDS + WOOD DUCKS BY UNDERCUT BANK
		46	OUTFALL PIPE, B BANK
		47	CONCRETE STINCTURE + ELODING-BRANK
	NEAR UPSINEAM END	48	OUTFAU PIPE + HEADWALL (BRANK, JUST BELOW ASYLUM AVE. BRIDGE
		-	
		1	
		Reach ID  NBP-16 END  NBP-16 END  NEARL UPSTREAM	Reach         ID         #           NBP-16         DOWNSTEAN PB34400-38           39         40           40         42           43         44           45         46           47         47

#### NBP-19

## **Photo Inventory**

(By Camera) -> BY STALAM REACH

Project: <u>08-3233</u>

Group: B6+ CM

Camera: OLYMPUS

This field sheet is to be completed AS photos are taken in the field. The intent is to force us to organize pictures taken on a camera basis. Fill out one sheet per camera (add sheets as needed). Only fill in Date/Reach/Location ID when you start in a new spatial or temporal location.

	Stream/	Location	Photo	
Date	Reach	ID	#	Description
11/23/09	NBP-19	DOWNSHEAM END	Cedu d	EXCAVATED CHANNEL + CONCRETE WALL
			a	OBANK, EXC. CHANNEL
			3	BROKEN PIPE + COLAPSED HEADWALL
			4	FACEN THEE + DEBMS DAM
		UPSTREAM END	5	CULVERT AT UPSTREAM END, WOKNE
			6	STOMWATER OUTFALL WEST OF STREAM

(By Camera) > BY STALLAM REACH

Project: 08-3233

Group: BG +CM

Camera: OLYMPUS

This field sheet is to be completed AS photos are taken in the field. The intent is to force us to organize pictures taken on a camera basis. Fill out one sheet per camera (add sheets as needed). Only fill in Date/Reach/Location ID when you start in a new spatial or temporal location.

Date	Stream/ Reach	Location ID	Photo #	Description
11/24/09	F48-02	TONUSTREAM END	75	LOOKING UPSTREAM FROM MOUTH
			76	ERUSION, THEE'S FALLING-IN
			77	DEBMS DAM
			78	ENDINO BANKS, DEEP POOL
			79	PIPE, (R) BANK (HOUSING SIDE)
			80	ANOTHER DEBMS DAM, WITH THASH
			82	STOPMWATER PIPE + THARM (1) BANK (BELON PANKLUG LOT)
		U PSTMEAM ENUS	83	CULVERT UNDER COTTAGE GROVE ROAD,
		UPSMEAM END	84	DOWNSTREAM FROM CULUERT
				<u>-</u>

(By Camera) > BY STABAM REACH

Project: 08-3233

Group: BG+CM

Camera: OLYMPUS 2

This field sheet is to be completed AS photos are taken in the field. The intent is to force us to organize pictures taken on a camera basis. Fill out one sheet per camera (add sheets as needed). Only fill in Date/Reach/Location ID when you start in a new spatial or temporal location.

Date	Stream/ Reach	Location ID	Photo #	Description
		DOWNSMERM	PC0300	
12/3/09	BBW-02	END	12	END AT THE BUTANN ONE (BBE-04) TH
	·		13	WINDOUBUMY ANT. CULVEST, FLOODED LAWD (E) OF PROTO
			15	LAWNS IN BUFFER ®
			16	FROM FILLER STREET
			17	TURBUD WATER SWIEMUS FLUEY STREET CULVENT
			18	TRIBUTAMY ON B, SCHOOL GAONUDS
		urstneam end	19	LAWN ONED, BEFORE ENTERNAL WOODED SECTION
•				

(By Camera) > BY STYLEAM REACH

Project: <u>08-3233</u>

Group: BG+CM

Camera: OLYMPUS 2

This field sheet is to be completed AS photos are taken in the field. The intent is to force us to organize pictures taken on a camera basis. Fill out one sheet per camera (add sheets as needed). Only fill in Date/Reach/Location ID when you start in a new spatial or temporal location.

Date	Stream/ Reach	Location ID	Photo #	Description
12/3/09	BBE-01	DOWNSTREAM END	PC0300.	ON R WITH TRUBUTARY
			10	FROM CULVERT UNDER DIKE
		UPSTREAM END	11	INLET STOWATURE E. OF DIKE, WITH FLOODING
		:		
			,	

(By Camera) -> BY STYLEAM REACH

Project: <u>08-3233</u>

Group: BG+CM

Camera: OLYMPUS 2

This field sheet is to be completed AS photos are taken in the field. The intent is to force us to organize pictures taken on a camera basis. Fill out one sheet per camera (add sheets as needed). Only fill in Date/Reach/Location ID when you start in a new spatial or temporal location.

Date	Stream/ Reach	Location ID	Photo	Description
		NEARL	PC1300	FLOODING IN SCRUB SHIMB WETCHAD,
12/3/09	BBE-02	DOOUTED!	06	NEAR CONFIDENCE NOW BBE-03
			07	TYPICAL WOODED SECTION, STREAM WITHIN BANKS
			08	ABANDONES CAL NEXT TO STREAM B BANK

(By Camera) -> BY STILLAM REACH

Project: 08-3233

Group: B&+CM

Camera: OLYMPUS 2

This field sheet is to be completed AS photos are taken in the field. The intent is to force us to organize pictures taken on a camera basis. Fill out one sheet per camera (add sheets as needed). Only fill in Date/Reach/Location ID when you start in a new spatial or temporal location.

Date	Stream/	Location	Photo	Description
	Reach	ID Carrelo-154 to	# PCA 28A-	
12/3/09	BBE-04	POWAUSTALEAM END	02	FROM WINTONBURY AVE. CULVEST, CONFLUENCE WITH BBW-OD AT TREES
			03	WINTONBUM ANT. WINET, WITH STREAM OVER BANKS
			04	STREAM OVER BANKS, THIBUTAMY FROM RESIDENCE ON (R)
			05	STREAM CHOSSING DISTURBED PONOR CHE EASEMENT, WITH FLOODING
				•
<u> </u>				
				·
		-		
	·			
	·			

WBS-03

#### **Photo Inventory**

(By Camera) > BY STYLZAM REACH

Project: 08-3233

Group: BG-+CM

Camera: OLYMPUS 2

This field sheet is to be completed AS photos are taken in the field. The intent is to force us to organize pictures taken on a camera basis. Fill out one sheet per camera (add sheets as needed). Only fill in Date/Reach/Location ID when you start in a new spatial or temporal location.

Date	Stream/ Reach	Location ID	Photo	Description
i .	11000	DOWNSMEAN	10cm 70-0	CONFLUENCE WITH THIBUTARY ON (L)
12/3/09	WBS-03	END	28	
			0 -	LOOKING UPSTREAM @ YAND WITH
			27	PAVED AMEA NEAR @BANK
			a	DOWNSTREAM FROM FARM NOAD CULVERT
			25	DEBNIS AT UPSMEAM SIDE OF BLOGGED FARM RUAD CULVENT
			24	IN FLOODED WOODS ABOVE CULVERT, FLOODED THUBUTOMY FROM (D)
			23	TUSSOCIESED GE HUMMUCICS LEADING TO WOODD
			ત્રેત્ર	WET MEADON
		UPSTM5AM END	21	FROM CULVERT UNDER DIKE
:				

(By Camera) > BY STYLEAM REACH

Project: <u>68-3233</u>

Group: BG+CM

Camera: OLYMPUS 2

This field sheet is to be completed AS photos are taken in the field. The intent is to force us to organize pictures taken on a camera basis. Fill out one sheet per camera (add sheets as needed). Only fill in Date/Reach/Location ID when you start in a new spatial or temporal location.

Date	Stream/ Reach	Location ID	Photo #	Description
12/3/09	WBS-04	DOWNSTIGAM END	120300- 43	STORMWATER FIPE @ , STONE DEBM'S DAM
			42	CATTAIL MANSH+ FLOODED SECTION ASOVE STONE+ DEBMS DAM
			41	ANOTHER STONE + DEBRIS DAM
			40	STOMWATER PIPE FROM ERUPT, YAMD
			39	FROM DIWEW AY CROSSING
			38	DONGLE DIMUEWAY CULVENTS
			37	STREAM IN CATTAL MANSH, HOUSE PASTURE ON PI
			36	FOOTBMO OF + DAM SPILLWAY+DOWNSTI
			35	BANNEW, END DING (R) BANK OF NEWLY REBUILT POND
			34	SMALL BROKE AND NEBULUT PIND WITH UNPMTECTED SOIL PILES + BANKS
			32	CULVENT ABOVE SMAN BRIDGE, WISH POOL AND EQUIPMENT
			31	JUNK ACROSS, IN , ANDONBANK OF STREAM, POOL IN @ BACKGROUD
			30	PHRAGMITES, MUGIFIONAROSE, AND ANTUMN OLIVE ON BOTH BANKS
		UPSTMEAN END	29	FROM CONFINENCE

# WBN-04

#### **Photo Inventory**

(By Camera) > BY STYLEAM REACH

Project: <u>08-3233</u>

Group: BG+CM

Camera: OLYMPUS 2

This field sheet is to be completed AS photos are taken in the field. The intent is to force us to organize pictures taken on a camera basis. Fill out one sheet per camera (add sheets as needed). Only fill in Date/Reach/Location ID when you start in a new spatial or temporal location.

Date	Stream/ Reach	Location ID	Photo #	Description
3 DEC 09	WBN-04	DOWN STREAM EUD	Ч Рсо 300- 45	STREAM FNTERING CULVENT UNDER MUCKO ROAD
			46	SINUOUS CHANNEL + FLOODING IN FLOODPLAIN N. OF MUCICO DOAS
			47	COUAPSING FOOTBINDGE TO BOY SCONT CABIN
			48	CONFLUENCE WITH THIBUTARY ON (C)
			49	MEANDER IN MUSS AND SKUNE LABBAGE FLOOD PLA IN
			50	OLD CROSSING WITH BROKEN PIPE, OLD FARM DUMP IN BACKGHOUND
			51	RESIDENTIAL YARD WOM UNDISTURSED BUFFER, @ BANK
			52	ATV BMDGE FROM SAME YARD
			53	MAN . MADE STONE BANK, SAME YAND
			54	TANKS IN STREAM AND ON @ BANK
			55	VERY THASHY YAMD ON (C) BANK, FROM DONNSMEAR END OF WHO COWERT
			56	STREAM APPROACHING CONG-CULVENT, UNDER 2 DAWEWAYS AND LAWN BEMIND FEN
			57	MONN BUFFER @ WITH JAPANESS LNOTWEED BOTH BANKS
			58	ROADSIDE CHANNEL WITH J. KNOTWEED, END OF CULVENT UNDER WOODLAND AVE.
		UPSTNEAM EN.D	59	NE CULVENT, BELOW POND E. OF ROAD

(By Camera) > BY STYLEAM REACH

Project: <u>08-3233</u>

Group: BG+CM

Camera: OLYMPUS 2

This field sheet is to be completed AS photos are taken in the field. The intent is to force us to organize pictures taken on a camera basis. Fill out one sheet per camera (add sheets as needed). Only fill in Date/Reach/Location ID when you start in a new spatial or temporal location.

Date	Stream/ Reach	Location ID	Photo #	Description
12/8/09	WTM-02	DOWNSTREAM END	1 PCOECO - 64	CULVERT UNISER OLD FARM DUANS
			65	SMALL ON (B), SEDIMENTON (D)
			66	OLD TIMBER SMOGE (FOOTBROOF)
			67	SINUONS CHANNEL, NEW FILL AND PIPE ON ( NEW OFFICE BUILDING)
			68	FENCES + FALLEN THEES ACROSS STREAM NEW BUILDING IN BACKGROUND
			69	AMOST-EQUAL TRIBUTARY ON (E)
			70	RELATIVELY STABLE UNDEROIT @ BANK
			71	UNSTABLE BANK ENDSION IN TOWNGUTTHAND UPSTREAM STREATTH
		UPSTREAM END	72	FUM PURE TUROVOH DUDIEN POND DAM
			i	
	;			

(By Camera) > BY STYLEAM REACH

Project: <u>08-3233</u>

Group: BG+CM

Camera: OLYMPUS 2

This field sheet is to be completed AS photos are taken in the field. The intent is to force us to organize pictures taken on a camera basis. Fill out one sheet per camera (add sheets as needed). Only fill in Date/Reach/Location ID when you start in a new spatial or temporal location.

Date	Stream/	Location	Photo	D
Date	Reach	ID	#	Description
2/8/09	1.3-0	DOWNSTMEAM	PC0800-	STREAM ENTERING MALSUAT N.END
12/01	WM-01	END	73	OF DUDLEYTOWN POND
			74	TYPICAL SECTION IN MIDDLE
		UPSTREAM END	75	FROM CULVERTS UNDER OUD FARM ROAD
	· · ·			
			:	
	<u> </u>			

F4B-03

## **Photo Inventory**

(By Camera) > BY STAZAM REACH

Project: 08-3233

Group: BG+CM

Camera: OLYMPUS 1 + DISPOSABLE This field sheet is to be completed AS photos are taken in the field. The intent is to force us to organize pictures taken on a camera basis. Fill out one sheet per camera (add sheets as needed). Only fill in Date/Reach/Location ID when you start in a new spatial or temporal location.

Date	Stream/ Reach	Location ID	Photo #	Description
11/30/07	FYB-03	DOWNSTMEAM END	<i>0</i> 02	BANK ENOSION + CULVENT UNDER COTTAGE GROVE ROAD
			00 3	TYPICAL SHINB STMETCH WALDERS, DOGWOOD
			004	RIFFIE WITH SAND BARS
			005	GRASSYNEW FLOODPLAND BELOW OLD FLOODPLAND (DOWNCETTING?)
			006	PIPE + ENODED CHANNEL FLOM SUBDIVISION
		lost change	007	BANK EROSION AND SWPE FALLURE @
NESLA	CED WIM	DISPOSABLE	DISP- 08	RIPMAP @ BANK
		UPSMEAM END	DISP -09	RIPMAP + MULTIFIONA MOSE FROM RR BED
				·

# FYB-01

#### **Photo Inventory**

(By Camera) -> BY STYLEAM REACH

Project: 08-3233

Group: BG+CM

Camera: DISAOS ABLE

This field sheet is to be completed AS photos are taken in the field. The intent is to force us to organize pictures taken on a camera basis. Fill out one sheet per camera (add sheets as needed). Only fill in Date/Reach/Location ID when you start in a new spatial or temporal location.

Date	Stream/ Reach	Location ID	Photo	Description
11/30/09	F4801	PONNSMEAM END	1493000 3	- RR CULVENTS, CHANNEL ALONGSIDE RR
				CLEARED, GRADED, AND MULCHED BRANK AND BUFFER UNDER PRUBLICAGE TOWER
			5	FROM PANK ANENUE, WITH THASH
		·	b	PANK AVE. CULVERTS (3) FROM UPSMEAM
			7	TYPICAL MEADOW + SHOWB STRETCH
	-		8	TRIBUTANY FROM ®
		upsmeam End	9	TOPEND WIM MONN MEADON+SHINGS
			,	
<u> </u>	· · · · · · · · · · · · · · · · · · ·	l		

COMMENTS! SOME COWN ANOMALIES FROM WET FROM

### WBS-11

#### **Photo Inventory**

(By-Camera) > BY STABAM REACH

Project: 08-3233

Group: BG+CM

Camera: DISPOSABLE

This field sheet is to be completed AS photos are taken in the field. The intent is to force us to organize pictures taken on a camera basis. Fill out one sheet per camera (add sheets as needed). Only fill in Date/Reach/Location ID when you start in a new spatial or temporal location.

Date	Stream/ Reach	Location ID	Photo #	Description
11/30/09	WBS-11	DOWNSTNEAM EUD	149300-	- COVERED FOOTBRIDGE AT FORK IN CHANNEL (AU FLOW TO P)
			11	CULVENT FROM MEDICAL BLDG- PANICENO LOT
			12	BEDWAL SUPE ON @ BEDWAL AND GRAVEL STREAMBED
			13	(R) TRIBUTARY FROM (D) BANK
			14	ENOSION AND BROPE FALLURE ( BANK BEION GABION + MPMAP SLOPE
			15	GABION, RIPMAP, + BLOCK ON Q SLOPE
			16	@ SCOPE FAILU NE + MEPRAP NEAR BLOOMFIEW
	- <u></u>		17	COTTAGE GADUE NOTAD CULVERTS
			18	TMBUTAM (D) FROM (D) BANK
			19	OAKS ON ERODING ( BANK
			<i>30</i>	ANCH CULVENT UNDER BLOOMFIELD AUG
			ઢા	GOLFGART FOOTBANDGE AND NEMALUS OF DAM BLOOM FLEID AVE. IN BACKERSOND
			22	TYPICAL STNETCH IN WOODS WEST OF GOLF COUNSE
				· ——·

COMMENTS: DISCOLONATIONS FROM WET FILM, PHOTO AT UPSINEAM END RUINED

# BHR-01

#### **Photo Inventory**

(By Camera) > BY STALAM REACH

Project: 08-3233

Group: BG+CM

Camera: OLYMPUS 2

This field sheet is to be completed AS photos are taken in the field. The intent is to force us to organize pictures taken on a camera basis. Fill out one sheet per camera (add sheets as needed). Only fill in Date/Reach/Location ID when you start in a new spatial or temporal location.

Date	Stream/	Location ID	Photo #	Description
p/8/09	Reach  BHR-01	DOWNSMEAN		STREAM ENTERING CATTAIL POND
			85	ALDERS + PHRAGMITES ABOVE POND, STREAM CHANNEL DIFFUSE
			86	EXTENSIVE DUMPING @ SLAPE BY ALVIN BULLDING
			87	THIBUTAMY @ ABOVE AWIN SLOPE
			88	ALDERSWAMP, ALVIN BLDG. INBACKGA
			89	TYPICAL WOODED SECTION FROM OUR FARM R
			90	STREAM ENTERNIC FARM RD. WHENT, PART OF ASMIDONED CAR ON (R)
			91	EXTENSIVE SEPTMENT DEPOSITION IN WETCHUD, WASHOUT IN SINCE FROM INDUSTRIA
,			9a	INDUSTAINS, SEDIMENT DEPOSITION, AND MACCORDINACKS SOUTH OF MOUTE 187
			13	SEDIMENT FROM DIE 187 CULVERT, BARE TRUCKLE OF FLOW, COON THACKS
			94	SEDIMENTED STREAM FROM NE 187
			95	RTE 187 CULVENT INVENT, PHAROMITES AT EDGE OF POND
			96	CENTER OF POND
		dismeam End	97	NOW END OF POND, SEDOE MANYA, NO STREAMS FLOWING INTO POND

COMMENTS: NO SMEAN, NO CHANNEL NORM OF DATE 187

# BHR-02

# **Photo Inventory**

(By Camera) > BY STILEAM REACH

Project: <u>08-3233</u>

Group: BG+CM

Camera: OLYMPUS 2

This field sheet is to be completed AS photos are taken in the field. The intent is to force us to organize pictures taken on a camera basis. Fill out one sheet per camera (add sheets as needed). Only fill in Date/Reach/Location ID when you start in a new spatial or temporal location.

			,	
Date	Stream/ Reach	Location ID	Photo #	Description
12/8/09		DONNSTREAM	10500- 76	SMEAM ENTERNE CULVERT UN DER WEST DUDLEYTOWN ROAD
			77	NEARLY EQUAL TRIBUTARY ON (L)
			78	TYPICAL FORESTED STRETCH W/SANDBAR
			79	TRIBUTAM R
			80	BANK EROSION (MINON) ON (
			81	PHRAGMITES AND BARREIS (B)BANK
			82	MONE BARRELS + TRASH (R) BUFFER
		URSMEAM END	83	2 PIPES IN CATTALL POND DAM
	»	<b>*</b>		
				400

TDB-05

# **Photo Inventory**

(By Camera) > BY STMEAM REACH

Project: 08-3233

Group: BG+CM

Camera: DISPOSABLE

This field sheet is to be completed AS photos are taken in the field. The intent is to force us to organize pictures taken on a camera basis. Fill out one sheet per camera (add sheets as needed). Only fill in Date/Reach/Location ID when you start in a new spatial or temporal location.

Date	Stream/ Reach	Location ID	Photo #	Description
11/30/09		NEAL Downsmed END	149200- 4 10	SLOPING LAWN (B) BANK ABOVE SANDPIPEL DINNE CULVERT
				(JUST BEFORE ENTERNO-UPSTREAM WOODS NOT SURE WHERE TBD-05/06 BREAK IS)
				TBD-05/06 BREAK IS)
				·

COMMENTS: REMAINDER OF PHOTOS PUINED BY WATER ON FILM

#### TDB-06

#### **Photo Inventory**

(By-Camera) > BY STIBAM REACH

Project: 08-3233

Group: BG+CM

Camera: DISPOSABCE

This field sheet is to be completed AS photos are taken in the field. The intent is to force us to organize pictures taken on a camera basis. Fill out one sheet per camera (add sheets as needed). Only fill in Date/Reach/Location ID when you start in a new spatial or temporal location.

Date	Stream/ Reach	Location ID	Photo #	Description
uladoe			4444	· •
[ 35]5-1	105-06	DOWN STEAM	1 05	UPSTREAM FROM LAST WOODED SECTU
		200	06	TRIBUTANY IN CATTALL MARSH
			07	FROM WHENT NEAR (UNDER) MALLAND DRIVE
			·	
	_			
	···			
			_	

COMMENTS: REMANDING PROTOS THIS SECTION WINED BY WATER

# TBD-08

# **Photo Inventory**

(By Camera) -> BY STMEAM REACH

Project: <u>08-3233</u>

Group: BG+CM

Camera: DIS POSADLE

This field sheet is to be completed AS photos are taken in the field. The intent is to force us to organize pictures taken on a camera basis. Fill out one sheet per camera (add sheets as needed). Only fill in Date/Reach/Location ID when you start in a new spatial or temporal location.

Date	Stream/ Reach	Location ID	Photo #	Description
1/30/09			1440 300	BHO BANKS + CHANNEL, ON FWENCE
	<del>- 11</del>		02	ENTERNS MAPLE AVE. CULYENT
			03	LAWN TO ( BANK
		upstrea m END	04	CONFWENCE ON ®
		,		
	. <del></del>			

COMMENTS: SOME PHOTOS WOST TO WEX FILM IN 1ST DISPOSABLE

# TBD-12

#### **Photo Inventory**

(By Camera) > BY STABAM REACH

Project: 08-3233

Group: BG+CM

Camera: OLYMPUS 2

This field sheet is to be completed AS photos are taken in the field. The intent is to force us to organize pictures taken on a camera basis. Fill out one sheet per camera (add sheets as needed). Only fill in Date/Reach/Location ID when you start in a new spatial or temporal location.

Date	Stream/ Reach	Location ID	Photo #	Description
n/1/09	<u> </u>	Downstaga Eud	PC0100	CONFWENCE W/TMBUTARY ON (R), COMING ONT OF WOODED SELFON
			08	BANK SOUR ON (B), WOODED SECTION
			07	RIPRAP ON () + PIPE FROM  GOLF GOLSE
			06	2 TYPES OF A QUATIC PLANTS SEEN
			04	TYPICAL SE CITION BETWEEN OUD FIE
			03	FROM SIMSBUM MOND CULVENT
	_		02	WOUDED SECTION ABOVE SIMSBURY COUR
		UPSTREAM END	01	THIBUTAMY ON (E)
		·		
		>		

COMMENTS: PHOTOS LISTED FROM DOWNSTMEAN TO UPSTMEAM GND,
BUT STHEAM WAS WALKED UPSTMEAM TO DOWNSTMEAM

# TDB-14

#### **Photo Inventory**

(By Camera) -> BY STARAM REACH

Project: 08-3233

Group: BG+CM

Camera: OLYMPUS 2

This field sheet is to be completed AS photos are taken in the field. The intent is to force us to organize pictures taken on a camera basis. Fill out one sheet per camera (add sheets as needed). Only fill in Date/Reach/Location ID when you start in a new spatial or temporal location.

Date	Stream/ Reach	Location ID	Photo #	Description
12/1/09	TDB-14	DOWNSTMEAN END	PE0100	WITH MPNAP + PIPE ON (D) BANK
			17	WIDE + SION APPROACHING- GOLF GYRSE
		• .	16	TRIBUTARY IN OPEN FIELD, & BANK
			15	ALDER-GUENES BANKS ASSOLE TIMBOTH
	-		14	STONE AT OW CONSSING?
· · · · · · · · · · · · · · · · · · ·			13	HENSALEOUS CHONTH NEAR BANK (AANOW AR
			12	TRIBUTAMION (C) BANK
			7	ALDERS ON BANK IN OVERCHOULD PATURE
·		upstheam END	10	BHRUBISCRUB SECTION, DOWNSTRAM FROM ON FWENCE
,				
J***				
·				

COMMENTS: PHOTOS LISTED DOWNSTMEAM - OPSTREAM, BUT WALKED UP -> DOWN

# WBN-06

#### **Photo Inventory**

(By Camera) > BY SMEAM REACH

Project: 08-3233

Group: BG+CM

Camera: OLYMPUS 2

This field sheet is to be completed AS photos are taken in the field. The intent is to force us to organize pictures taken on a camera basis. Fill out one sheet per camera (add sheets as needed). Only fill in Date/Reach/Location ID when you start in a new spatial or temporal location.

Date	Stream/ Reach	Location ID	Photo #	Description
12/1/09		DOWNSTREAM		LOOKING DOWNEMEAM AT ON FLUENCE WITH WBN-07 - WBS-01
			42	SEDIMENT BAR AND MEANDER
•			43	GRASSY AQUATIC JEGETATION
			44	CHANNEL ON WEST SIDE OF RR
			45	FROM RR CULVENTS
			46	CATTALLS AND LYMINIMS. ON EAST SIDE RR
•.			47	FROM DEEP MANSY INTO LARGE PATCH OF PHRAGMITES NEXT TO RR
			48	CHANNEL IN SYMUS THICKET BY DEEP MANSK
			44	TYPICAL SECTION IN WOODS, HOUSING TO O OUT OF PHOTO
			50	THIBUTARY ON ®
			51	WHAT WOICS WICE MUTHER THURSDAVY ON B IS SPUT CHANNEL REJOINING MAKEN
			62	SPUT IN CHANNEL UPSMEAM
	·		54	FROM CULVERT UNDER PETERS ROAD
44177			55	POOL BETWEEN CULIENTS N. OF PETENS RD.
	-		56	JUNICIN CHANNEL ASOVE AND CULVENT
		JOSTANO M	p~03	CAME AND THE SECTION AND SECTION

COMMENTS:

UPSTAND M END 58 FROM CONFINENCE IN WOODED SECTION

(By Camera) -> BY STABAM REACH

Project: 08-3233

Group: BG+CM

Camera: OLYMPUS 2

This field sheet is to be completed AS photos are taken in the field. The intent is to force us to organize pictures taken on a camera basis. Fill out one sheet per camera (add sheets as needed). Only fill in Date/Reach/Location ID when you start in a new spatial or temporal location.

Date	Stream/ Reach	Location ID	Photo #	Description
12/1/09		DOWNSTREAM		CONFLUENCE WOM WBS-05 ON B
**			30	LAWNS ON @ BANIC + BUFFLER
			31	STORMWATER GULLY AND ENOSION BANK
			32	RIPRAP RIFFLE
			33	SMALL TIMBUTION ON (B) DMANUS SWAMP
			34	FROM DOROTHY DAWE
			35	DOUBLE BOX CULVERT UNDER DOMOTHY DR
<del>. :</del>	-		36	MULTIFRORA ADSE ARCHING OVER STREAM
			37	HALPIN OXROW
	_		38	TYPICAL WOODED SMETCA
			39	STONE NEMAUX OF OLD BOAD ON DAM
		upsimen m END	40	CONFLUENCE WITH WBN-06 ON (C)

# WBS-06

#### **Photo Inventory**

(By Camera) > BY STARAM REACH

Project: 08-3233

Group: **BG+CM** 

Camera: OLYMPUS 2

This field sheet is to be completed AS photos are taken in the field. The intent is to force us to organize pictures taken on a camera basis. Fill out one sheet per camera (add sheets as needed). Only fill in Date/Reach/Location ID when you start in a new spatial or temporal location.

Date	Stream/ Reach	Location ID	Photo #	Description
12/1/09	W85-06	DOWNSTHEAM END	PC0100-	CONFINENCE NEAR GAICEMY STONE
			20	LAWNON @ BANIC (LOOKCENS UPSTREAM)
			<b>ટ</b> ા	WOODY DEBMS + STONY @ BANK (NATIONAL?
			da	THEE BRIDGE/DAM + PLASTIC DEBRIS
			23	FOOTBRIDGE OVER TRUBUTARY ON @
			રજ	FROM MILLS LANE
			25	CULVERTS UNDER MILLS CAME
			26	PACKYSANDRA @ BANK, THIBUTALLY @
••			27	MEANDER SECTION WITH BENCHES
		NEAR UPSTMBAM GND	a8	MEANDEL, POINT BAR, APANTMENTS, LOOKING UPSTMEAM
· <u>-</u>				
				·

COMMENTS: SEE PHOTO # 29 IN WBS-OI FOR CONFWENCE AT UPSTREAM END