Swan View Coalition

Nature and Human Nature on the Same Path



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February 19, 2025

Rob Davies Hungry Horse Ranger District PO Box 190340 Hungry Horse, MT 59919

PDF submitted via https://cara.fs2c.usda.gov/Public//CommentInput?Project=67436 and to robert.davies@usda.gov and pdomentInput?Project=67436

Re: West Reservoir PA

Dear Ranger Davies;

Please accept these comments in the above matter into the public record. These comments and the attached documents supplement the comments and documents we submitted in this matter yesterday, primarily regarding poor management of culverts and the leaving of stream-aligned culverts in abandoned or decommissioned roads.

Wheeler Creek Road 895F

The Wheeler Creek Road 895F ends at a trailhead at MP 6.863. There, the last mile of the decommissioned road is used as the first segment of Trail 64.

We hiked this trail in July of 2015 and found four stream-aligned culverts that had been left in place, largely in avalanche chutes. We took photos of these four culverts and the brush and avalanche debris that was largely blocking the culvert inlets. We reported these culverts to the Flathead NF as a violation of then-Amendment 19's requirement that all stream-aligned culverts be removed from reclaimed/decommissioned roads.

The Flathead NF responded by having Ron Krueger inspect the culverts left in the roadbed above the trailhead. We've attached Ron Krueger's six 8/6/15 culvert inspection forms as Attachment 1 (ignore the 2/5/16 receipt date in the upper right-hand corner). He confirms two have medium risk of blockage and that one was "Fnd ¾ full of dirt/deposition." Were these culverts ever removed? If not, when were they last inspected?

We include a photo of the first culvert inlet past the trailhead on the following page:



We also reported a culvert on the open portion of the road that had plugged and was depositing gravel onto the road surface, as shown in the photo on the following page:



Included as Attachment 2 are 5 culvert monitoring forms filled out by E. Lovering on September 25 and 27, 2005 (ignore the 2/5/16 receipt date in the upper right-hand corner). All five culverts are marked as "High Risk CMP." What is the current condition of these culverts today? How often have they been inspected since 2005?

These circumstances are in the project area and are examples of the kind of information that must be disclosed in the West Reservoir NEPA analyses and EIS.

Sincerely,

Neith

Keith J. Hammer Chair

Attachments:

- 1. Ron Krueger's six 8/6/15 culvert inspection forms
- 2. Five culvert monitoring forms filled out by E. Lovering

Mike Church

CULVERT INVENTORY

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Field verific	ation repo		Da	ometer Other) ite _ 8 - 6 - 6
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Northing:			Easting:Feet	
		(f)	s, or evidence of erosi	
O Attac	h drawings	s (if needed) depicting	g the current situation.	
		Physical Data	on the Culvert	
Width: 2	4 4	7	Lengt	h•
Skew:	° Slope	e:% (slope fro	om Inlet to Outlet)	
Rust line hei	ght: at inlet	30% at outlet 5	~	Medium (Low)
Shape:		Construction:	Material:	Corrugation:
Round		☐ Spiral CMP	B'Galvanized Steel	
☐ Arch				□ 3 x 1 in.
□ Box		THE RESERVE OF THE PART OF THE	☐ Concrete	□ 5 x 1 in.
Open Bott		☐ Smooth	☐ Plastic	□ 6 x 2 in.
☐ Other		Other	□ Wood/Log	□ Smooth
			☐ Other	☐ Other
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ocation:	Type:			Material:
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Outlet	☐ Drop Ir	nlet 🗆	Wingwall	☐ Aluminum
Barrel	□ Downs	pout	Debris Rack	☐ Concrete
2.00		Control Device		☐ Plastic
	☐ Other _			□ Wood
				☐ Other

Pipe Condition (c	check all that apply)
 □ Bank Erosion □ Barrel Broke ☑ Barrel Debris □ Beaver Activity □ Fill Eroding □ Flow Exceeds Capacity □ Inlet Bent 	☐ Inlet Plugged ☐ Invert Rusted Through ☐ Invert Worn Through ☐ Outlet Bent ☐ Outlet Plugged ☐ Water Flowing Under ☐ Other
Bank Full WidthFt Blockage Flow Path □ Over Road □ Along road	Estimated Fill HeightFt (0'-5) or 5'-15' or over 15')
Deposition (sand/gravel bars) Upstream ☐ Little or none ☐ Significant Amount Evidence of Flooding or Overflow-Yes No Shrubs Blocking Inlet-Yes No	Bank Mass Failure Upstream- Yes No Movement of streambed Material- Yes No
Channel Gradient Upstream % Channel Gradient Downstream % Riprap: Upstream Downstream None Road Width Ft Road Length in Channel Ft (Measured along centerline of road)	Downstream Fill Slope Length Ft (Measured top of fill to toe of fill) Downstream Fill Slope
Substrates in Culvert: Inlet: Sta Dept	th Sta Depth
Baffles, weirs or other internal structures:	Note type and number:
Fish Passage Data Tag Number:	(if found – normally inside barrel)

SITE SKETCH Include: North Arrow (use compass) - Direction of stream flow - Inlet/channel alignment - Photo point locations and numbers - Multiple structures - Weirs and other instream structures - Debris jams inside, upstream, or downstream near site - Trash racks, screens, etc. that may affect flow - Location of Riprap

ATTACHMENT 1

2-5-16

CULVERT INVENTORY
(Flowing Water or Scour Present - Normally 24" or Larger) Aur Krungs Road # Whaeler Dist_____

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Norumig	Δ.	course	v of GPS Rea	ding: ± Feet		
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Round		☐ Spi	ral CMP	Galvanized Steel	□ 2 3 x 1/2 in.	
Arch		₩ An	nular CMP	□ Aluminum	□ 3 x 1 in.	
Box		□ Str	uctural Plate	☐ Concrete	□ 5 x 1 in.	
Open Botto	m Arch	☐ Sm	nooth Plastic		□ 6 x 2 in.	
Other		□ Oti	Other		☐ Smooth	
				□ Other		
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Pipe Condition (c	check all that apply)
 □ Bank Erosion □ Barrel Broke □ Barrel Debris □ Beaver Activity □ Fill Eroding □ Flow Exceeds Capacity □ Inlet Bent 	☐ Inlet Plugged ☐ Invert Rusted Through ☐ Invert Worn Through ☐ Outlet Bent ☐ Outlet Plugged ☐ Water Flowing Under ☐ Other
Bank Full WidthFt Blockage Flow Path □ Over Road □ Klong road	Estimated Fill Height (0'-5' or 5'-15' or over 15')
Deposition (sand/gravel bars) Upstream Little or none Significant Amount Evidence of Flooding or Overflow-Yes No Shrubs Blocking Inlet-Yes No Ckruel Fill Out The Following Informat Channel Gradient Upstream % Channel Gradient Downstream % Riprap: Upstream Downstream None Road Width / / Ft Road Length in Channel _ Ft (Measured along centerline of road)	CMP vs Channel Alignment <15 degrees > 15 Degrees (less than) (greater than) Floatable Debris Upstream- Yes No Bank Mass Failure Upstream- Yes No Movement of streambed Material- Yes No tion if Time or Conditions Permit Downstream Fill Slope Length Ft (Measured top of fill to toe of fill) Downstream Fill Slope % Upstream Fill Slope Length Ft Upstream Fill Slope % Bottom Fill Width Ft (Width of channel at bottom of fill)
Miscellaneous	S Information
Substrates in Culvert: Inlet: Sta Dept Barrel: Sta Dept Outlet: Sta Dept	h Sta Depth
Baffles, weirs or other internal structures: ☐ Yes ☐ No	Note type and number:
Fish Passage Data Tag Number:	_ (if found – normally inside barrel)

SITE SKETCH include: North Arrow (use compass) - Direction of stream flow - Inlet/channel alignment - Photo point locations and numbers - Multiple structures - Weirs and other instream structures - Debris jams inside, upstream, or downstream near site - Trash racks, screens, etc. that may affect flow - Location of Riprap

Mike Church Run Krangd

ATTACHMENT 1

CULVERT INVENTORY
(Flowing Water or Scour Present - Normally 24" or Larger)

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	(Source of	of Milepost:	Wheeled I	OMI Odo	meter Other		
Field verific Stream Nat	cation repo ne:	rt By: _	K-16	ru ezhd	Da	te <u>\$/6/17</u>		
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			vert, damage ded) depictin			on – Picture #		
			sical Data					
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Skew:	° Slope	3.	% (slope fr	om Inlet to (Outlet)	1,		
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Shape:			ruction:	Material:		Corrugation:		
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□ Box	According to the	1 1 1 1 1 1 1 1 1	tructural Plate		e	□ 5 x 1 in.		
□ Open Bot		the second second second	☐ Smooth ☐ Plastic ☐ Wood/Log ☐ Other ☐ Other		34	□ 6 x 2 in.		
☐ Other						☐ Smooth		
	-			U Other		☐ Other		
Inlet Type: ☐ Projection ☐ Mitered ☐ Mitered		☐ At Stream	Outlet Configuration: ☐ At Stream Grade ☐ Freefall Into Pool ☐ Below Stream Grade ☐ Freefall Into Riprap ☐ Cascade Over Riprap		all Into Riprapft			
			Culvert At	tachment	s:			
Location:	Type:		CMAT WAS A TAIL	VALLEVAL		Material:		
□ Inlet	☐ Flared	End Sec	tion [☐ Headwall		☐ Galvanized Steel		
☐ Outlet	☐ Drop Is			Wingwall				
□ Barrel	□ Downs			Debris Rac	ck	☐ Concrete		
	☐ Beaver	Contro	ntrol Device			☐ Plastic		
	☐ Other				_	□ Wood		
				-		☐ Other		
Location:	Type:					Material:		
☐ Inlet	☐ Flared			Headwall		☐ Galvanized Steel		
☐ Outlet	□ Drop I			Wingwall				
☐ Barrel	☐ Downs			Debris Rac	k	☐ Concrete		
	☐ Beaver	Contro	Device			□ Plastic		
	☐ Other _				_	□ Wood		
						☐ Other		

	(if found - normally inside barrel)
ish Passage Data	
Baffles, weirs or other internal structures: ☐ Yes ☐ No	Note type and number:
Outlet: StaDep	th Sta Depth th
	s Information # v weder for
(Measured along centerline of road)	(Width of channel at bottom of fill)
Road Length in Channel Ft	Bottom Fill WidthFt
Road Width Ft Road Length in Channel Ft	Upstream Fill Slope%
☐ Upstream ☐ Downstream ☐ None	Upstream Fill Slope Length Ft
Riprap:	Downstream Fill Slope%
Channel Gradient Downstream%	(Measured top of fill to toe of fill)
Channel Gradient Upstream %	tion if Time or Conditions Permit Downstream Fill Slope Length Ft
Fill Out The Following Informa	Movement of streambed Material- Yes No
Shrubs Blocking Inlet-Yes No	Bank Mass Failure Upstream- Yes No
Evidence of Flooding or Overflow No	
Service of none in Significant Amount	(less than) (greater than)
Deposition (sand/gravel bars) Upstream Little or none Significant Amount	CMP vs Channel Alignment <15 degrees > 15 Degrees
Blockage Flow Path ☐ Over Road ☐ Along road	(0'-5')or 5'-15' or over 15')
Bank Full Width N/4 Ft	Estimated Fill Height Ft (0'-5') or 5'-15' or over 15')
☐ Inlet Bent — Chena	☐ Inlet Plugged ☐ Invert Rusted Through ☐ Invert Worn Through ☐ Outlet Bent ☐ Outlet Plugged ☐ Water Flowing Under ☐ Other
Fill Eroding They on the	☐ Outlet Plugged
Beaver Activity	□ Outlet Bent
□ Barrel Debris	☐ Invert Worn Through
□ Barrel Broke 5 and set hand	☐ Invert Rusted Through
□ Bank Erosion	☐ Inlet Plugged

SITE SKETCH include: North Arrow (use compass) - Direction of stream flow - Inlet/channel alignment - Photo point locations and numbers - Multiple structures - Weirs and other instream structures - Debris jams inside, upstream, or downstream near site - Trash racks, screens, etc. that may affect flow - Location of Riprap

Pun Kungi

CULVERT INVENTORY
(Flowing Water or Scour Present - Normally 24" or Larger)

Dist	Roa	d#_ h	made		MP	ometer Other
Field verif Stream Na	ication repo	ort By: _	R_{1}	Wheeled I	Da	ometer Other teg / u / 15
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Rust line he Risk of Fail	ight: at inlet ure: H	13° by ligh Low	at outlet	blockage:	High	Medium Low
Shape: □/Round □ Arch □ Box □ Open Bot □ Other		☐ Spira ☐ Annu ☐ Struct ☐ Smooth	uction: al CMP alar CMP stural Plate oth	Material: ☐ Galvaniz ☐ Aluminu ☐ Concrete ☐ Plastic ☐ Wood/La ☐ Other	ed Steel m	Corrugation: 2 % x ½ in. 3 x 1 in. 5 x 1 in. 6 x 2 in. Smooth Other
Inlet Type: ☐ Projection ☐ Mitered		ction	☐ At Stream		☐ Freefa	all Into Poolft all Into Riprapft de Over Riprap
		C	ulvert At	tachments		
Location: ☐ Inlet ☐ Outlet ☐ Barrel	Type: ☐ Flared I ☐ Drop In ☐ Downs; ☐ Beaver ☐ Other	End Secti ilet pout Control I	on []	Headwall Wingwall Debris Rack		Material: ☐ Galvanized Steel ☐ Aluminum ☐ Concrete ☐ Plastic ☐ Wood ☐ Other
Location: □ Inlet □ Outlet □ Barrel	☐ Beaver	let out Control I	Device	Headwall Wingwall Debris Rack		Material: Galvanized Steel Aluminum Concrete Plastic Wood Other

Pipe Condition (c	heck all that apply)
 □ Bank Erosion □ Barrel Broke □ Barrel Debris □ Beaver Activity □ Fill Eroding □ Flow Exceeds Capacity □ Inlet Bent 	☐ Inlet Plugged
Bank Full WidthFt Blockage Flow Path Over Road Along road	Estimated Fill Height Ft (0'-5') or 5'-15' or over 15')
Deposition (sand/gravel bars) Upstream ☐ Little or none ☐ Significant Amount Evidence of Flooding or Overflow-Yes Mo Shrubs Blocking Inlet-Yes No	Bank Mass Failure Upstream- Yes No Movement of streambed Material- Yes No
Channel Gradient Upstream	Downstream Fill Slope Length Ft (Measured top of fill to toe of fill)
Substrates in Culvert: Inlet: Sta Dep Barrel: Sta Dep Outlet: Sta Dep	oth Sta Depth oth Sta Depth
Baffles, weirs or other internal structures: ☐ Yes ☐ No	Note type and number:
Fish Passage Data Tag Number:	(if found – normally inside barrel)

SITE SKETCH Include: North Arrow (use compass) - Direction of stream flow - Inlet/channel alignment - Photo point locations and numbers - Multiple structures - Weirs and other instream structures - Debris jams inside, upstream, or downstream near site - Trash racks, screens, etc. that may affect flow - Location of Riprap

CULVERT INVENTORY

(Flowing Water or Scour Present - Normally 24" or Larger) **ATTACHMENT 1** 5m part tracking Road # Whether MP (Source of Milepost: Wheeled DMI Odometer Other____) Field verification report By: 6/6/15 Stream Name: GPS: True North - CONUS NAD83 - and format of ddd.ddddd (ex: 47.26419") Easting: Northing: ___ Accuracy of GPS Reading: ± Feet Attach photos of the culvert, damages, or evidence of erosion - Picture #_____ O Attach drawings (if needed) depicting the current situation. Physical Data on the Culvert Height: Ve ____ Length: ____ Width: Slope: _____% (slope from Inlet to Outlet) Skew:____° Dieses outde Rust line height: at inlet 33 7 at outlet 337 Risk of Blockage: High Medium Low Risk of Failure: High Low Material: Corrugation: Construction: Shape: ☐ Galvanized Steel 22/3 x 1/2 in. Round ☐ Spiral CMP □ 3 x 1 in. ☑ Annular CMP ☐ Aluminum ☐ Arch \Box 5 x 1 in. □ Box ☐ Structural Plate ☐ Concrete □ 6 x 2 in. ☐ Smooth ☐ Plastic ☐ Open Bottom Arch □ Wood/Log ☐ Smooth ☐ Other ☐ Other □ Other ☐ Other **Outlet Configuration:** Outlet Type: Inlet Type: At Stream Grade ☐ Freefall Into Pool / ft ☐ Projection ☐ Projection ☐ Below Stream Grade ☐ Freefall Into Riprap — ft ☐ Mitered ☐ Mitered ☐ Cascade Over Riprap **Culvert Attachments:** Material: Type: Location: ☐ Galvanized Steel ☐ Flared End Section ☐ Headwall ☐ Inlet ☐ Wingwall ☐ Aluminum ☐ Outlet ☐ Drop Inlet ☐ Debris Rack ☐ Concrete □ Downspout □ Barrel ☐ Beaver Control Device ☐ Plastic □ Wood ☐ Other □ Other Material: Location: Type: ☐ Galvanized Steel ☐ Flared End Section ☐ Headwall ☐ Inlet ☐ Drop Inlet☐ Downspout ☐ Aluminum □ Wingwall ☐ Outlet ☐ Debris Rack ☐ Concrete □ Barrel

☐ Beaver Control Device

☐ Other

☐ Plastic

□ Wood

☐ Other

Pipe Condition (c	heck all that apply)
 □ Bank Erosion □ Barrel Broke □ Barrel Debris □ Beaver Activity □ Fill Eroding □ Flow Exceeds Capacity □ Inlet Bent 	☐ Inlet Plugged →/ 52. ←/ debros ☐ Invert Rusted Through ☐ Invert Worn Through ☐ Outlet Bent ☐ Outlet Plugged ☐ Water Flowing Under ☐ Other
Bank Full Width Ft Blockage Flow Path □ Over Road ☑ Along road	Estimated Fill Height Ft (0'-5' or 5'-15' or over 15') 7'
Deposition (sand/gravel bars) Upstream Little or none Significant Amount Evidence of Flooding or Overflow-Yes No Shrubs Blocking Inlet-Yes No Fill Out The Following Informate Channel Gradient Upstream % Channel Gradient Downstream % Riprap: Upstream Downstream None Road Width Ft	CMP vs Channel Alignment <15 degrees > 15 Degrees (less than) (greater than) Floatable Debris Upstream- Yes No Bank Mass Failure Upstream- Yes No Movement of streambed Material- Yes No tion if Time or Conditions Permit Downstream Fill Slope Length Ft (Measured top of fill to toe of fill) Downstream Fill Slope % Upstream Fill Slope %
Road Length in ChannelFt	Bottom Fill Width Ft (Width of channel at bottom of fill)
Substrates in Culvert: Inlet: Sta Dept Barrel: Sta Dept Outlet: Sta Dept	th Sta Depth th
Baffles, weirs or other internal structures: □ Yes □ No	
Fish Passage Data Tag Number:	(if found – normally inside barrel)
	Disable of the Man Islants and Table

SITE SKETCH Include: North Arrow (use compass) - Direction of stream flow - Inlet/channel alignment - Photo point locations and numbers - Multiple structures - Weirs and other instream structures - Debris jams inside, upstream, or downstream near site - Trash racks, screens, etc. that may affect flow - Location of Riprap

Krueyi G		g Water	or Scour Pres	NVENTORY sent - Normally 24" or	Larger)
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O Atta	ch drawings	(if need	led) depicting	g the current situation.	
24 "		Phy	sical Data	on the Culvert	
Width:		Н	leight:	Lengt	h:
Skew:	_° Slope	a:	_% (slope fro	Lengt om Inlet to Outlet)	
Rust line bei	ght: at inlet		_at outlet		
Risk of Failu	ire: H	ligh Lov	Risk of		Medium Low
Shape:			ruction:	Material:	Corrugation:
☑ Round		[1] [. 하나 그렇게 그렇게 하시다요? 이번에 있는 그래 때문에 그리고 얼마나 없는 것이 없었다. 그렇게 하나 나를 했다.			
□ Arch			Annular CMP Aluminum		□ 3 x 1 in.
□ Box	March N. La B.	☐ Structural Plate ☐ Concrete ☐ Smooth ☐ Plastic ☐ Other ☐ Wood/Log		- 1.20m1270mm11.	□ 5 x 1 in.
☐ Open Bot					☐ 6 x 2 in.
□ Other		□ Оше	Other		☐ Smooth ☐ Other
Inlet Type: ☐ Projection		Type:		figuration: n Grade □ Freefa	all Into Poolft
☐ Mitered	☐ Miter	red		ream Grade 🗆 Freef	all Into Riprap f
				☐ Casca	de Over Riprap
			Culvert At	tachments:	
	Type:	-3-32			Material:
Location:		Part None	tion [Headwall	☐ Galvanized Steel
□ Inlet	☐ Flared				
□ Inlet□ Outlet	☐ Flared ☐ Drop In	nlet		Wingwall	☐ Aluminum
□ Inlet	☐ Flared ☐ Drop In ☐ Downs	nlet pout		Wingwall Debris Rack	□ Concrete
□ Inlet□ Outlet	☐ Flared ☐ Drop In ☐ Downs ☐ Beaver	nlet pout Control			☐ Concrete ☐ Plastic
□ Inlet□ Outlet	☐ Flared ☐ Drop In ☐ Downs	nlet pout Control	Device		☐ Concrete☐ Plastic☐ Wood
□ Inlet □ Outlet □ Barrel	☐ Flared ☐ Drop In ☐ Downs ☐ Beaver ☐ Other	nlet pout Control	Device		☐ Concrete ☐ Plastic ☐ Wood ☐ Other
☐ Inlet☐ Outlet☐ Barrel☐ Location:	☐ Flared ☐ Drop In ☐ Downs ☐ Beaver ☐ Other ☐ Type:	nlet pout Control	Device	Debris Rack	☐ Concrete ☐ Plastic ☐ Wood ☐ Other Material:
□ Inlet □ Outlet □ Barrel Location: □ Inlet	☐ Flared ☐ Drop Ir ☐ Downs ☐ Beaver ☐ Other ☐ Type: ☐ Flared	nlet pout Control End Sect	Device	Debris Rack Headwall	☐ Concrete ☐ Plastic ☐ Wood ☐ Other Material: ☐ Galvanized Steel
□ Inlet □ Outlet □ Barrel Location: □ Inlet □ Outlet	☐ Flared ☐ Drop Ir ☐ Downs ☐ Beaver ☐ Other ☐ Type: ☐ Flared ☐ Drop Ir	nlet pout Control End Sect	Device	Debris Rack Headwall Wingwall	☐ Concrete ☐ Plastic ☐ Wood ☐ Other Material: ☐ Galvanized Steel ☐ Aluminum
☐ Inlet ☐ Outlet ☐ Barrel Location: ☐ Inlet	☐ Flared ☐ Drop Ir ☐ Downs ☐ Beaver ☐ Other ☐ Type: ☐ Flared ☐ Drop Ir ☐ Downs	nlet pout Control End Sect nlet pout	Device	Debris Rack Headwall	☐ Concrete ☐ Plastic ☐ Wood ☐ Other Material: ☐ Galvanized Steel ☐ Aluminum ☐ Concrete
☐ Inlet ☐ Outlet ☐ Barrel Location: ☐ Inlet ☐ Outlet	☐ Flared ☐ Drop Ir ☐ Downs ☐ Beaver ☐ Other ☐ Type: ☐ Flared ☐ Drop Ir	End Sectilet Control	Device	Debris Rack Headwall Wingwall	☐ Concrete ☐ Plastic ☐ Wood ☐ Other Material: ☐ Galvanized Steel ☐ Aluminum

Pipe Condition (c	heck all that apply)
☐ Bank Erosion ☐ Barrel Broke ☐ Barrel Debris ☐ Beaver Activity ☐ Fill Eroding ☐ Flow Exceeds Capacity ☐ Inlet Bent Bank Full WidthFt Blockage Flow Path	leck all that apply) ☐ Inlet Plugged ☐ Invert Rusted Through ☐ Invert Worn Through ☐ Outlet Bent ☐ Outlet Plugged ☐ Water Flowing Under ☐ Other Estimated Fill Height Ft (0'-5' or 5'-15' or over 15')
□ Over Road □ Along road Deposition (sand/gravel bars) Upstream □ Little or none □ Significant Amount Evidence of Flooding or Overflow-Yes No	CMP vs Channel Alignment <15 degrees > 15 Degrees (less than) (greater than) Floatable Debris Upstream- Yes No Bank Mass Failure Upstream- Yes No Movement of streambed Material- Yes No
Fill Out The Following Information Channel Gradient Upstream	Downstream Fill Slope Length Ft (Measured top of fill to toe of fill)
Substrates in Culvert: Inlet: Sta Dep Barrel: Sta Dep Outlet: Sta Dep Baffles, weirs or other internal structures: Yes □ No Fish Passage Data	s Information th th Sta Depth th Note type and number:
Tag Number: SITE SKETCH Include: North Arrow (use compass) point locations and numbers - Multiple structures - Weirs and downstream near site - Trash racks, screens, etc. that may at	fother instream structures - Debris jams inside, upstream, or

Observers_ € - Lo	100ma	
Date 9/25/5	_	
Purpose: Routine Monito Other	oring 🗶	High Flow Event ✓
Road Mile Post		
1/3	S.	™ Sec
(LONG) - Degree LIT	Min 49	7.634 Sec
CMP Height ZY	Inches	3
CMP Width	Inches	3
CMP Rust Line Height_	o"	Inches
Bank Full Width Comments:	1"	Feet/Inches

Risk Criteria	Good Situation	Poor Situation
1 Culvert Capacity* ¿	< 173 CMP-LEDAP	> 1/3 CMP Height
2 Deposition Upstream of CMP	deposition e.g. gravel bars, poor filled with sand	Significant amounts of sand/gravel deposits, as bars or in pools
3 Evidence of Flooding, Backwater, or Overflow	NO	@
4 Stream Constriction Ratio**	33%	>33%
5 Shrubs Blocking CMP Inflow	NO	(ES)
6 CMR/Channel Alignment	<15 Degrees off	>15 degrees off line
7 Floatable Debris Upstream of CMP	ИО	(ES')
8 Streambank Mass Failure Upstream of CMP		YES
9 Movement of Streambed Materials	NO - e.g.algae on streambed rocks	YES – e.g. bright rocks no algae
10 CMP Location***	400	YES
11 Potential Diversion ****	NO	(ZES)

If either item 1, 2, 3 are a Poor Situation than CMP is considered as HIGH RISK CMP. If item 1, 2, or 3 are Poor Situation and CMP is above spawning (yes to #10), than this is a **critical situation**. A combination of several Poor Situations (#4-11) would equal a HIGH RISK CMP.

HIGH RISK CMP_____ LOW RISK CMP____

^{*} Culvert Capacity = CMP Rust Line Height/CMP Height

^{**} Constriction Ratio = CMP Width/Bank Full Width

^{***} CMP Location – If CMP is less than 600 feet above spawning reach,

^{****} Potential Diversion of a stream down a road segment if a CMP plugs.

Observers 6 LONSQUINC	
Date 9/25/06	
Purpose: Routine Monitoring X High Flow Event_	<u>X</u>
Road Mile Post	
GPS: Datum WGS84 45 38'	
LAT) - Degree 48" Mino4.1005 Sec	
LONG) - Degree <u>\\\^3\\^3\\\</u> Min <u>\\\^1.953\\</u> Sec	
MP Height 24" Inches	
MP Width 24 Inches	
CMP Rust Line Height <u>lo"</u> Inches	
ank Full Width Feet/Inches	
comments: CLOSUFO W/ FLATABLES & DEAD	FAU
Culvert Capacity = CMP Rust Line Height/CMP Height	
Constriction Ratio = CMP Width/Bank Full Width	
** CMP Location – If CMP is less than 600 feet above pawning reach.	
** Potential Diversion of a stream down a road segment	if a
MP plugs	

Risk Criteria	Good Situation	Poor Situation	
1 Culvert Capacity*	< 1/3 CMP Height	> 1/3 CMP Height	
2 Deposition Upstream of CMP	Little or no deposition e.g. gravel bars, pool filled with sand	Significant amounts of sand/gravel deposits, as bars or in pools	
3 Evidence of Flooding, Backwater, or Overflow	NO	(ES)	
4 Stream Constriction Ratio**	< 33%	>33%	
5 Shrubs Blocking CMP Inflow	NO	(YES)	
6 CMR/Channel Alignment	<15 Degrees off	>15 degrees off line	
7 Floatable Debris Upstream of CMP	NO	YES)	
8 Streambank Mass Failure Upstream of CMP	NO)	YES	
9 Movement of Streambed Materials	NO - e.g.algae on streambed rocke	YES – e.g. bright rocks no algae	
10 CMP Location***	NO	YES	
11 Potential Diversion ****	NO	(TES)	

If either item 1, 2, 3 are a Poor Situation than CMP is considered as HiGH RISK CMP. If item 1, 2, or 3 are Poor Situation and CMP is above spawning (yes to #10), than this is a **critical situation**. A combination of several Poor Situations (#4-11) would equal a HIGH RISK CMP.

HIGH RISK CMP	X	LOW RISK CMP

Observers E La Toung
Purpose: Routine Monitoring High Flow Event
Road Mile Post
GPS: Datum WGS84 (LAT) – Degree <u> ଏଖ Min ଫ.୯୫3</u> Sec
(LONG) - Degree 114 Min 49.616 Sec
CMP Height 24" Inches
CMP Width ZY" Inches
CMP Rust Line Height 6" Inches
Bank Full Width 48" Feet/Inches
Comments: No Pro Topy Shiry (w) 11/24 FLOWS * Culvert Capacity = CMP Rust Line Height/CMP Height ** Constriction Patie = CMP Width/Park Full Width

Risk Criteria	Good Situation	Poor Situation	
1 Culvert Capacity*	< 1/3 CMP Height	> 1/3 CMP Height	
2 Deposition Upstream of CMP	Little or no deposition e.g. gravel bars, pool filled with sand	Significant amounts of sand/gravel deposits, as bars or in pools	
3 Evidence of Flooding, Backwater, or Overflow	NO	YES	
4 Stream Constriction Ratio**	< 33%	>33%	
5 Shrubs Blocking CMP Inflow	NO	YES	
6 CMR/Channel Alignment	<15 Degrees off	>15 degrees off line	
7 Floatable Debris Upstream of CMP	NO	(YES)	
8 Streambank Mass Failure Upstream of CMP	(NO)	YES	
9 Movement of Streambed Materials	NO - e.g.algae on streambed rocks	YES - e.g. bright rocks no algae	
10 CMP Location***	(NO')	YES	
11 Potential Diversion ****	NO	MES	

If either item 1, 2, 3 are a Poor Situation than CMP is considered as HIGH RISK CMP. If item 1, 2, or 3 are Poor Situation and CMP is above spawning (yes to #10), than this is a critical situation. A combination of several Poor Situations (#4-11) would equal a HIGH RISK CMP.

HIGH RISK CMP_	X	LOW RISK CMP	
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^{***} CMP Location - If CMP is less than 600 feet above spawning reach.

^{*****} Potential Diversion of a stream down a road segment if a CMP plugs.

Road Number <u>en</u> S ≠			
Observers E Lovisa	406	T	
Date 9/27/04			
Purpose: Routine Moni Other	toring X	High Flow Event	X
Road Mile Post T=</td <td>4</td> <td></td> <td></td>	4		
GPS: Datum WGS84			
(LAT) - Degree	Min	Sec	
(LONG) - Degree	Min	Sec	
CMP Height 27"	Inches		
CMP Width Zx	Inches		
CMP Rust Line Height	8"	_Inches	
Bank Full Width	3'	Feet/Inches	
Comments: A.g.		NONE DOMESTICAL A 101	

Risk Criteria	Good Situation	Poor Situation
1 Culvert Capacity* <	< 1/3 CMP Height	> 1/3 CMP Height
2 Deposition Upstream of CMP	Little or no deposition e.g. gravel bars, pool filled with sand	elignificant amounts of sand/gravel deposits, as bars or in pools
3 Evidence of Flooding, Backwater, or Overflow	1105	YES
4 Stream Constriction Ratio**	< 33%	>33%
5 Shrubs Blocking CMP Inflow	NO	YES
6 CMR/Channel Alignment	<15 Degrees of	>15 degrees off line
7 Floatable Debris Upstream of CMP	NO	YES
8 Streambank Mass Fallure Upstream of CMP	NO	YES
9 Movement of Streambed Materials	NO - e.g.algae on streambed rocks	YES – e.g. bright rocks no algae
10 CMP Location***	(NO)	YES
11 Potential Diversion ****	100	YES

If either item 1, 2, 3 are a Poor Situation than CMP is considered as HIGH RISK CMP. If item 1, 2, or 3 are Poor Situation and CMP is above spawning (yes to #10), than this is a **critical situation**. A combination of several Poor Situations (#4;11) would equal a HIGH RISK CMP.

HIGH RISK CMP_	×	LOW RISK CMP
		-011 111011 01111

^{*} Culvert Capacity = CMP Rust Line Height/CMP Height

^{**} Constriction Ratio = CMP Width/Bank Full Width

^{***} CMP Location – If CMP is less than 600 feet above spawning reach.

^{****} Potential Diversion of a stream down a road segment if a CMP plugs.

Road Number
Observers E. WELING
Date 9/27
Purpose: Routine Monitoring X High Flow Event X
Road Mile Post TRAL SITE 3
GPS: Datum WGS84 (LAT) – Degree_48*MinSec
(LONG) - Degree 113° Min Sec Sec
CMP Height 18' Inches
CMP Width 18" Inches
CMP Rust Line Height5"Inches
Bank Full Width 3' Feet/Inches
Comments: H.O. TODAY DITCH ROUGH & STECHING SPEN NEWS SWALL FILL * Culvert Capacity - CMP Bust Line Height/CMP Height

Risk Criteria	Good Situation	Poor Situation
1 Culvert Capacity*	< 1/3 CMP Height	> 1/3 CMP Height
2 Deposition Upstream of CMP	Little or no deposition e.g. gravel bars, pool (Significant amounts of sand/gravel deposits, as bars or
	filled with sand	in pools
3 Evidence of Flooding, Backwater, or Overflow	10)	YES
4 Stream Constriction Ratio**	< 33%)	>33%
5 Shrubs Blocking CMP Inflow	MO	YES
6 CMR/Channel Alignment	<15 Degrees off	>15 degrees off line
7 Floatable Debris Upstream of CMP	NO	(ES)
8 Streambank Mass Failure Upstream of CMP	(NO)	YES
9 Movement of Streambed Materials	NO – e.g.algae on streambed rocks	YES – e.g. bright rocks no algae
10 CMP Location***	NO)	YES
11 Potential Diversion ****	NO (YES

If either item 1, 2, 3 are a Poor Situation than CMP is considered as HIGH RISK CMP. If item 1, 2, or 3 are Poor Situation and CMP is above spawning (yes to #10), than this is a critical situation. A combination of several Poor Situations (#4-11) would equal a HIGH RISK CMP.

LOW RISK CMP HIGH RISK CMP

^{**} Constriction Ratio = CMP Width/Bank Full Width

^{***} CMP Location - If CMP is less than 600 feet above spawning reach.

^{****} Potential Diversion of a stream down a road segment if a CMP plugs.