Barrier Evaluation Form - Multiple Culverts at Crossing

Location Information										
Project Name: Upper	SRFB Project #: 11-	unty: Chelan								
Parcel #: 25180683002	HPA #:									
GPS Location: Datum	rees	Latitude: 47.695		Loi	ngitude: -120.	638				
¼ Section: NE		Township: 25N		Ra	nge: 18 🛛 🖂	East 🗌 West				
Stream Name: Chums	stick Creek			Tributary To: Wena	atchee F	River		WRIA #: 45		
Driving Directions: From Leavenworth take the Chumstick Hwy north for approx. 6.5 miles turn right onto gravel driveway.										
Landowner Information										
Landowner Name: Ale	ex Saliby			Mailing Addre	ess: 994 !	5 Eagle Creek	Rd.			
City: Leavenworth	S	tate: WA		Zip: 98826		PI	none: ()			
Cell: ()			Fax: ()		Ema	il:				
Landowner Agent:				Mailing Addre	ess:					
City:		State:		Zip:	Zip:		hone: ()			
Cell: ()			Fax: ()		Ema	Email:				
Evaluator Informa	tion	-								
Evaluator Name: Colir	n Forsyth			Affiliation: US Bureau of Reclamation						
Mailing Address: 301		City: Wenatchee State: V		State: WA	WA Zip: 98801					
Phone: 509.708.8320		Fax:		Cell: Email:			syth@usbr.gc	٥v		
Barrier Informatio	n (measurei	nents in	meters)							
Is the stream fish-bea	ring? 🔀 Yes	🗌 No	Unknown	Species, if knc	wn: Ste	elhead	Date of Visi	it: 5/31/2011		
Fish-bearing criteria:	🛛 Fish Obser	vation	Stream Type	SSASI/Stream C	atalog	Physica	l Criteria 🛛	Other:		
Stream flow: 🔀 Pere	nnial 🗌 Inte	ermittent	Unknown S	ource of information	on:					
Will this culvert be en	tered into the	WDFW-FI	PDSI database?	Yes 🗌 No If	yes, Sit	te ID #:		Culvert 1 of 2		
Shape: RND	Material: CST	Γ	Apron: 🔀 Nor Both	ne 🗌 Upstream	n 🗌	Downstrear	tream 🗌 Span/Diam:			
Rise: 1.22m	Length: 6.09	6m	Water depth ir	ı culvert: 0.69	culvert: 0.69 Water Surface Drop(WSD): N/A					
Drop Location: 🗌 Ou	utlet 🗌 Inlet	🗌 Inside	e Countersunk: [: Yes No Unknown Culvert Slope(%): 1.25						
Bankfull width (upstre	eam of culvert)	: 3.66m	Culvert span/b	ankfull width ratio	: 0.67m	(Add all spa	ns, divide by	bankfull width)		
Plunge pool: Length	to tailout: 5.18	8m OHW	width: 5.03m Ma	x depth: 0.826m	Road f	ill at DS end	: 0.405m	Road width:		
Fishway Present?	Yes 🛛 No	Unknc	own (if yes, describe	e in comments)	Tide g	ate Present?	🗌 Yes 🛛	No 🗌 Unknown		
Is this culvert a fish pa	assage barrier	? 🗌 Yes	🗌 No 🗌 U	nknown 🗌 Leve	el B nee	ded				
Problem with culvert:		Slope 🗌 \	/elocity 🗌 Depth	Percent	passabi	ility: 🗌 0%	33%	67% 🗌 100%		
Habitat Quality: Excellent Good Poor Unknown										

Barrier Evaluation Form - Multiple Culverts at Crossing

Location Information											
Project Name: Upper Chumstick #2 Saliby					FB Project #: 11-1	1					
Parcel #: 251806830020				HPA #:							
GPS Location: Datum - WGS84 - decimal degrees					titude: 47.695		Lo	ongitude: -12	20.638		
¹ / ₄ Section: NE Section: 6					wnship: 25N		R	ange: 18	🛛 East 🗌 West		
Stream Name: Chums	stick Creek			Trił	butary To: Wenat	chee F	River		WRIA #: 45		
Driving Directions: From Leavenworth take the Chumstick Hwy north for approx. 6.5 miles turn right onto gravel driveway.											
Landowner Information											
Landowner Name: Ale	ex Saliby				Mailing Addres	s: 994	5 Eagle Cree	k Rd.			
City: Leavenworth	S	tate: WA			Zip: 98801		1	Phone: ()			
Cell: ()	L. C.		Fax: ()		•	Ema	il:				
Landowner Agent:					Mailing Addres	s:					
City:			Zip:				Phone: ()				
Cell: ()		Fax: ()				Email:					
Evaluator Information											
Evaluator Name: Colir	n Forsyth			A	Affiliation: US Bureau of Reclamation						
Mailing Address: 301	Yakima St., Roo	om 319		City: Wenatchee State: V			State: WA	WA Zip: 98801			
Phone: 509.708.8320		Fax:		Cell: Emai			Email: cfo	rsyth@usbr.	gov		
Barrier Informatio	n (measurer	nents in	meters)				-				
Is the stream fish-bea	ring? 🔀 Yes	🗌 No	Unknown		Species, if know	Species, if known: Steelhead Date of Visi					
Fish-bearing criteria:	🛛 Fish Obser	vation	Stream Type		SSASI/Stream Cat	alog	Physic	al Criteria	🔀 Other:		
Stream flow: 🔀 Pere	nnial 🗌 Inte	ermittent	Unknown S	Sour	rce of informatior	ו:					
Will this culvert be en	tered into the	WDFW-F	PDSI database?	Y	/es 🗌 No If yes, Site ID #:				Culvert 2 of 2		
Shape: RND	Material: CST	-	Apron: 🔀 No Both	one 🗌 Upstream 🗌 Downst				tream 🗌 Span/Diam: 1			
Rise: 1.22m	Length: 6.096	ôm	Water depth i	n cu	ulvert: 0.62	5D): N/A					
Drop Location: 🗌 Ou	utlet 🗌 Inlet	🗌 Inside	e Countersunk:	: Yes No Unknown Culvert Slope(%): 2.05							
Bankfull width (upstre	eam of culvert)	: 3.66m	Culvert span/b	banl	kfull width ratio: ().67m	(Add all sp	ans, divide b	y bankfull width)		
Plunge pool: Length	to tailout: 5.18	8m OHW	width: 5.03m Ma	ax d	lepth: 0.826m	Road f	ill at DS en	d: 0.405m	Road width:		
Fishway Present? 🗌	Yes 🛛 No 🛛	Unkno	own (if yes, describ	be in	n comments)	Fide ga	ate Present	? 🗌 Yes [🛾 No 🗌 Unknown		
Is this culvert a fish pa	assage barrier	? 🗌 Yes	🗌 No 🗌 l	Unk	nown 🗌 Level	B nee	ded				
Problem with culvert:		Slope 🗌 🛚	/elocity 🗌 Depth		Percent p	assabi	lity: 🗌 0%	33%	⊠ 67% □ 100%		
Habitat Quality: Excellent Good Poor Unknown											

Barrier Evaluation Form - Single Culvert at Crossing

Location Information	ı												
Project Name: Upper Chumstick #5 Baumann					SRF	B Project #: 11-1441	1		County: Chelan				
HPA #:					Parcel #: 261831120050								
GPS Location: Datum - WGS	- S84 -decir	mal degrees			Latitude: 47.714				Longitude: -120.6	37			
¹ ⁄ ₄ Section: NW	¹ / ₄ Section: NW Section: 31					nship: 26 N			Range: 18 🛛 E	ast 🗌 West			
Stream Name: Chumstick C	reek				Trib	utary To: Wenatche	e River		WRIA #: 45				
Driving Directions: From Leavenworth take the Chumstick Hwy north													
Landowner Informat	ion												
Landowner: Chuck & Judith Baumann						Mailing Address: 1	.6238 Chui	mstic	k Highway				
City: Leavenworth		State: WA				Zip: 98826			Phone: ()				
Cell: ()			Fax: (()			Email:						
Landowner Agent:	Landowner Agent:					Mailing Address:	·						
City:		State:				Zip:			Phone: ()				
Cell: ()			Fax: (()			Email:						
Evaluator Information													
Evaluator Name: Colin For	syth				Affiliation: US Bureau of Reclar			clama	nation				
Mailing Address: 301 Yakin	na St., Ro	om 319				City: Wenatchee			State: WA	Zip: 98801			
Phone: 509.708.8320		Fax:			Cell:				Email: cforsyth	@usbr.gov			
Barrier Information (measu	rements in	met	ers)	_								
Is the stream fish-bearing?	🛛 Yes	No	Unkno	own	Species: Steelhead				Date of Visit:	6/1/2011			
Fish-bearing criteria: 🔀 Fis	h Observa	ation 🗌 Str	eam Ty	ype 🗌 SASS	I/Str	eam Catalog	Physical Cr	iteria	Other:				
Stream flow: 🔀 Perennial	🗌 Inter	mittent 🔲 I	Unknov	wn Source of	f infc	ormation:							
Will this culvert be entered	into the V	NDFW-FPDSI	(forme	rly SSHEAR) da	ataba	ase? 🗌 Yes 🗌 N	lo If yes, S	Site II	D #:				
Shape: RND	Material:	SST		Apron: 🛛 N	None 🗌 Upstream 🗌 Dov			nstre	am 🗌 Both	Span: 1.35m			
Rise: 0.869m	Length: 7	7.62m		Water Depth i	in Cu	ılvert:	Water Su	urface	Drop: 0.28m				
Drop Location: 🗌 Outlet	🛛 Inlet	🗌 Inside		Countersunk:	۱ 🗌	/es ⊠No □U	nknown		Culvert Slope(%)	: 3.2			
Bankfull Width (outside infl	uence of (culvert): 3.51n	n			Culvert Span/Ban	nkfull Width	n Ratio	o: 0.38m				
Plunge Pool: Length (culver	t to tail-o	ut): 12.80m	OHW	width: 7.92m	Ma	ax depth: 4.27m	R	Road f	ill DS: 1.0m	Road width:			
Fishway Present? 🗌 Yes	🛛 No	(if yes, describ	be in Co	omments)			Tide gate Present? 🗌 Yes 🛛 No 🗌 Unknown						
Is this culvert a fish passage			No	Unknown		Level B needed							
Problem with culvert: WS drop Slope Velocity Depth Percent Passability: 0% 33% 67% 100%													
Habitat Quality: 🗌 Exceller		ood 🗌 Poo		Unknown									
Comments(Describe crossir	Comments(Describe crossing condition, fish observations, habitat quality etc):												

Barrier Evaluation Form - Multiple Culverts at Crossing

Location Information												
Project Name: Upper Chumstick #4 Ott				SRFB Project #: 11-1441 County: Che					ınty: Chelar	r: Chelan		
Parcel #: 251806830020				HPA #:								
GPS Location: Datum	- WGS84 - deo	cimal deg	irees	Latitude: 47.71	1			Lon	gitude: -12	0.64		
¼ Section: NE	/4 Section: NE Section: 31							Ran	ige: 18	🛛 East 🔲 West		
Stream Name: Chums	stick Creek			Tributary To: V	Venat	chee F	River			WRIA #: 45		
Driving Directions: Fro	om Leavenworth	take the	Chumstick Hwy north	for approx. 7.6	miles t	urn left	t onto gr	avel d	riveway.			
Landowner Information												
Landowner Name: Lis	i Ott & Jeff Joh	inson		Mailing A	ddres	s: 1596	66 Chun	nstick	Highway			
City: Leavenworth	St	tate: WA		Zip: 98826	6			Ph	one: ()			
Cell: ()			Fax: ()			Ema	il:					
Landowner Agent:				Mailing A	ddres	s:						
City:		State:		Zip:				Ph	one: ()			
Cell: ()			Fax: ()				il:					
Evaluator Informa	tion											
Evaluator Name: Coli	n Forsyth			Affiliation: US Bureau of Reclamation								
Mailing Address: 301	Yakima St., Roc	om 319		City: Wenatchee State: V			WA		Zip: 98801			
Phone: 509.708.8320		Fax:		Cell: Email			Email:	cfors	yth@usbr.o	gov		
Barrier Informatio	on (measurer	nents in	meters)				_					
Is the stream fish-bea	aring? 🛛 Yes	🗌 No	Unknown	Species, if	f know	ın: Ste	elhead		Date of V	isit: 6/1/2011		
Fish-bearing criteria:	🛛 Fish Obser	vation [Stream Type [SSASI/Strea	m Cat	alog	🗌 Pł	nysical	Criteria	🔀 Other:		
Stream flow: 🔀 Pere	nnial 🗌 Inte	ermittent	Unknown S	ource of inforr	natior	n:						
Will this culvert be er	tered into the	WDFW-F	PDSI database?	Yes 🗌 No	If y	es, Sit	:e ID #:			Culvert 1 of 3		
Shape: RND	Material: CST	-	Apron: 🔀 No	one 🗌 Upstream 🗌 Downstream 🗌 Both Span/Diam: 0.7						Span/Diam: 0.76m		
Rise: 0.76 m	Length: 7.6m		Water depth in	n culvert: 0.3			Water	Surfac	e Drop(WS	SD): 0.6m		
Drop Location: 🗌 Ou	utlet 🔀 Inlet	🗌 Insid	e Countersunk:	Yes 🛛 N	0]Unkr	nown	Culve	ert Slope(%	ó):		
Bankfull width (upstre	eam of culvert)	: 3.7m	Culvert span/b	ankfull width r	ratio: ().6m (/	Add all	spans	, divide by	bankfull width)		
Plunge pool: Length	to tailout: 3.1 ı	m OHW	width: 4.8m Max	depth: 0.8m	F	Road f	ill at DS	s end:	end: Road width:			
Fishway Present?	Yes 🗌 No [Unkn	own (if yes, describ	e in comments	5) 1	Tide g	ate Pres	sent?	Yes	No 🗌 Unknown		
Is this culvert a fish p	assage barrier?	Yes	🗌 No 🗌 U	Jnknown	Level	B nee	ded					
Problem with culvert:	🛛 wsd 🗌 s	lope 🗌	Velocity 🗌 Depth	Perc	cent p	assabi	lity: 🗌	0%	33%	67% 🗌 100%		
Habitat Quality: 🗌 E	xcellent 🗌 🤇	Good [] Poor 🗌 Unkno	own								
Comments (Describe cross of the three culverts preserved										o complete plugging of one culverts.		

Barrier Evaluation Form - Single Culvert at Crossing

Location Informatio	n											
Project Name: Upper Chumstick #6 Cann					SRFE	3 Project #: 11-1441	L		County: Chelan			
HPA #:					Parcel #: 261830430150							
GPS Location: Datum - WG	S84 -decii	mal degrees			Latitude: 47.715				Longitude: -120.636			
1/4 Section: NW	4 Section: NW Section: 31					nship: 26 N			Range: 18 🛛 🖾 E	ast 🗌 West		
Stream Name: Chumstick C	Creek				Tribu	utary To: Wenatche	e River		WRIA #: 45			
Driving Directions: From L	eavenwort	th take the Ch	numstio	ck Hwy north f	or ap	prox. 8 miles turn l	eft onto gra	avel c	Iriveway.			
Landowner Informat	tion											
Landowner: Michael & Susan Cann						Mailing Address:	16350 Chun	nsticl	k Hwy			
City: Leavenworth		State: WA				Zip: 98826			Phone: ()			
Cell: ()			Fax: (()			Email:					
Landowner Agent:						Mailing Address:						
City:		State:				Zip:			Phone: ()			
Cell: ()			Fax: (()			Email:					
Evaluator Informatio	on											
Evaluator Name: Colin For	rsyth					eau of Reclamation						
Mailing Address: 301 Yaki	ma St., Rc	om 319				City: Wenatchee			State: WA	Zip: 98801		
Phone: 509.708.8320		Fax:			Cell:				Email: cforsyth	@usbr.gov		
Barrier Information	(measu	rements in	met	ers)	-							
Is the stream fish-bearing?	🛛 Yes	No	Unkno	own	Species: Steelhead				Date of Visit	6/1/2011		
Fish-bearing criteria: 🔀 Fis	sh Observ;	ation 🗌 Stre	eam Ty	ype 🗌 SASS	SI/Stre	eam Catalog	Physical Cri	teria	Other:			
Stream flow: 🔀 Perennial	🗌 Inter	mittent 🔲 l	Unkno	wn Source o	f info	rmation:						
Will this culvert be entered	into the V	NDFW-FPDSI ((form <u>e</u>	rly SSHEAR) da	ataba	ise? 🗌 Yes 🗌 N	lo If yes, S	Site II	D #:			
Shape: RND	Material:	CST		Apron: 🛛 N	None Upstream Dow			nstre	am 🗌 Both	Span: 1.52m		
Rise: 1.52m	Length: S	9.14m		Water Depth	in Cu	lvert: 0.34m	Water Su	rface	Drop: 0.037m			
Drop Location: 🔀 Outlet	🗌 Inlet	🗌 Inside		Countersunk:	□ Y	Yes 🛛 No 🗍 Unknown Culvert Slope(%): 1.3						
Bankfull Width (outside inf	luence of	culvert): 3.51n	n			Culvert Span/Ban	nkfull Width	Ratio	o: 2.6			
Plunge Pool: Length (culve	rt to tail-o	ut): 4.27m C	OHW w	vidth: 5.03m	Max	depth: 1.25m	R	oad f	ill DS: 1.07m	Road width:		
Fishway Present? 🗌 Yes	🛛 No	(if yes, describ	be in C	omments)			Tide gate I	Prese	nt? 🗌 Yes 🛛 I	No 🗌 Unknov	vn	
Is this culvert a fish passage			No	Unknown		Level B needed						
Problem with culvert: 🗌 W	/S drop	🛛 Slope 🗌	Veloci	ty 🗌 Depth		Percent Passa	ability: 🗌 0	%	33% 🛛 67%	100%		
Habitat Quality: 🗌 Excelle		ood 🗌 Poor		Unknown								
Comments(Describe crossi	ng conditi	on, fish observ	vations	s, habitat quali	ty etc	:):						