4 Appendix: Completed Field Forms and Associated Photos

4.1 Bad Canyon Creek barrier repair (003-2005)

FFIP PROJECT & LAND USE MONITORING FORM									
Project #:	003-05		Project Title:	Bad Canyon					
Date:			Evaluator: Jaso	on Rhoten					1
Waterbook	ly Name:	Bad Cany		Project Type: Barrier repair					1
Landllan	Riparian, channel re , bank stabilization, passage,								
	Land Use Information (all projects) Does the project have a signed project agreement?								NA
				Amriaultura Timbar O	th or \	✓			
			al, Public, Recreational,	Agriculture, Timber, O	uner)				<u>*</u>
Was a PFC			proved since last visite	d or last photo?					
			project agreement?	d or last prioto?					
Comm		marice with	project agreement?						
Photo Poir									
Frame #		at	Long	Facing?	Scene de	oorinti	on/Dro	vious D	hoto
rraine #		at	Long	Facing?	Scelle de	scripti	OII/FIE	vious r	11010
Riparian (F	encina) P	rojects							
	-	_	grazing stipulations?(No	o, Exclosure, Grazing plan, U	Ink, NA)				-
						Yes	No	Unk	NA NA
Was fencing	installed to	exclude live	stock?						
If fenced, is t	the fencing i	n functional	condition?						
If fenced, ha	If fenced, has grazing occurred within the fenced area?								
If grazed, is	If grazed, is grazing in compliance with submitted mngt plans?								
Level of observed browsing on riparian shrubs. (None, Sparse, Moderate, Heavy, NA)								•	
Density of riparian shrubs present. (None, Sparse, Common, Abundant, NA)								•	
Age classes	of riparian s	hrubs prese	ent. (None, One, Severa	ıl, All, NA)		_			
Channel Stal	bility? (Stabl	le, Unstable	, Aggrading, Degrading	, Unknown)		_			
Channel Cor	nditions? (O	ver-widened	&shallow Narrow&deep	p; Intermediate; Multi-th	nread)				1

Streambank Stabilization Proj	ects	
Current length of stream bank prote	cted. (# Feet or Unknown)	
Type of stabilization used. (Root wa	ds, Soil wrap, Willow plantings, Rip rap, Other-describe)	-
Current condition of stream bank. (S	Stable, Unstable, Eroding, Percent stable/unstable)	~
Has stream bank migrated. (No, In	to stream, Into bank, Unknown)	•
ls any infrastructure (fence, etc.) in	danger of being compromised. (No, Yes-describe)	¥
Predominant bank angle within stab	ilization. (Under cut, 90°-45°, <45°)	▼
Channel Restoration Projects		
Channel stability? (Stable, Unstable	e, Aggrading, Degrading, Unknown)	¥
Channel Conditions? (Over-widened	d & shallow; Narrow & deep; Intermediate, Multi-thread)	▼
Condition of habitat enhancement s	tructures. (Stable, Eroding, NA)	•
Complexity of stream channel? (Po	ol-riffle, No pools, Wood forced pools, Lateral scour pools)	-
Percent of stream reach in pools. (~	total pool length/total stream length)	
Habitat enhancement structures inv	olved? (LWD, Rootwads, Cross vanes, Other)	-
Condition of habitat structures? (Sta	able, Eroded, Unknown)	*
Comments:		
(Existing land use?;Weeds?; Benef	icial to fishery?; Public access?; Needs? What did we learn	? ;etc.)
and applied piscicide the follo their previous abundance with the site and found accumulate breach the barrier. In addition stream above the barrier. In 2	sting natural barrier to prevent upstream invasion owing year. Yellowstone cutthroat trout population hin a few years. In 2012, Jason Rhoten, FWP's al- ion of woody debris that could back water flows, a n, flows between rock provided potential routes fo 2014, FWP made several repairs. This project illustructed or enhanced barriers.	is recovered to 10 times rea fish biologist, visited and allow nonnatives to r fish to access the
Land Owner Comments:		
Has this project been beneficial to y	ou?	
Has project improved stream/riparia	an conditions?	
Effects on land use?		
Weeds?		
Noticable change in fishery?		
Thoughts for future work?		

4.2 Big Timber Creek (004-2002)

	FFIP	PROJECT & LAN	D USE MONITORI	NG FORM	I			
Project #:	004-02	Project Title:	Big Timber Creek					
Date:	7/6/2016	Evaluator: Sha	annon Bockmon					-
Waterboo	dy Name: Big Timbe	r Creek	Project Type:	Channel	Stabil	izatior	ı	-
		Riparian, d	hannel re , bank stabl	lization, passage,	(Some pro	ojects may	have mult	pie types)
	Information (all proje	-			Yes	No	Unk.	NA
	oject have a signed proje		Andrewskers Timber O	u\	✓			
	pe (Livestock, Residentia		Agriculture, Timber, O	ther)			1 /	7
	assessment conducted? d in riparian condition im		or last photo?		/	_	٧	
	overall compliance with	-	d of last prioto?		V			\vdash
Comm		project agreement:			v			
Photo Poir								
Frame #	Lat	Long	Facing?	Scene de	ecrinti	on/Pre	vious F	Photo
1	Luc	Long	DS DS	Scotte at	_	of proje		Hoto
2			US			"		
3	45.96711	-110.05173	US	Gravel bar, cottonwood recruitment				
4	"	"	DS	Pool&vegeta	tion recru	itment (t	bank stab	ilization)
5	45.96690	-110.05141	DS	Root a	and log	jam (n	ew=Ap	ril)
6	45.96685	-110.05051	DS	New ve	g on p	revious	ly bare	bar
7	"	"						
8	45.96821	-110.04859	DS	New veg/ch	annel m	ovemer	nt/under	cut pool
9	45.96572	-110.04446	US		End (of proje	ect	
Riparian (F	Fencing) Projects							
Does the pro	oject agreement include	grazing stipulations?(No	o, Exclosure, Grazing plan, U	Ink, NA)				_
					Yes	No	Unk	NA
Was fencing installed to exclude livestock?						✓		
If fenced, is the fencing in functional condition?					✓			
If fenced, has grazing occurred within the fenced area?					✓			
If grazed, is grazing in compliance with submitted mngt plans?							✓	
Level of observed browsing on riparian shrubs. (None, Sparse, Moderate, Heavy, NA)					None			
Density of riparian shrubs present. (None, Sparse, Common, Abundant, NA)					Abundant			

Age classes of riparian shrubs present. (None, One, Several, All, NA)
Channel Stability? (Stable, Unstable, Aggrading, Degrading, Unknown)

Channel Conditions? (Over-widened&shallow; Narrow&deep; Intermediate; Multi-thread)

All

some O-w/s

Streambank Stabilization Projects 🗸

Streambank Stabinzation Frojecto		
Current length of stream bank protected. (# Feet or Unknown)		
Type of stabilization used. (Root wads, Soil wrap, Willow plantings, Rip rap, Other-describe)	Root wads/willows	-
Current condition of stream bank. (Stable, Unstable, Eroding, Percent stable/unstable)	Stable	
Has stream bank migrated. (No, Into stream, Into bank, Unknown)	Into stream	•
Is any infrastructure (fence, etc.) in danger of being compromised. (No, Yes-describe)	No	<u> </u>
Predominant bank angle within stabilization. (Under cut, 90°-45°, <45°)	<45 deg	•

Channel Restoration Projects

Channel stability? (Stable, Unstable, Aggrading, Degrading, Unknown)	•
Channel Conditions? (Over-widened & shallow; Narrow & deep; Intermediate, Multi-thread)	•
Condition of habitat enhancement structures. (Stable, Eroding, NA)	*
Complexity of stream channel? (Pool-riffle, No pools, Wood forced pools, Lateral scour pools)	•
Percent of stream reach in pools. (~total pool length/total stream length)	
Habitat enhancement structures involved? (LWD, Rootwads, Cross vanes, Other)	•
Condition of habitat structures? (Stable, Eroded, Unknown)	•

Comments:

(Existing land use?;Weeds?; Beneficial to fishery?; Public access?; Needs? What did we learn? ;etc.)

Some Canada Thistle present, but in low numbers.

New construction done on a section of river near buildings that involved LWD jams and root wads to stabilize a bank (April, 2016).

Owners do allow horses to graze along river, but in low intensity. No evidence of any hoof shear was present.

Willow and Cottonwood recruitment high on previously bare gravel bars and banks.

From past pictures to looking at it now the change in riparian vegetation is evident.

Tom Coleman did mention that he has caught a few large brown trout in the stream and believes the reconstructed stretch does hold more fish now due to better habitat.

Land Owner Comments: Tom Coleman walked me though the project. Did not have contact with landowner							
Has this project been beneficial to you?							
Has project improved stream/riparian conditions?							
Effects on land u	ise?						
Weeds?							
Noticable change in fishery?							
Thoughts for future work?							





Photo 1. Overview from start of project looking down stream.



Photo 2. Overview of upper part of project.



Photo 3. Gravel bar with cottonwood recruitment



Photo 4. Created pool with overhanging willow.



Photo 5. Root wad and log revetment installed in April 2016.



Photo 6. Vegetation recruiting on new point bar.



Photo 7. Vegetation recruiting on point bar.



Photo 8. New vegetation, lateral channel mobility, and pool with undercut bank.



Photo 9. Overview of project from end.

4.3 Brackett Creek (002-2003)

		FFIF	PROJECT & LAN	ND USE MONITORI	ING FORM	1			
Project #:	002-2003		Project Title:	Brackett Creek					
Date:	6/16/2016	6	Evaluator: Sh	annon Bockmon/Ca	arol Endico	tt			•
Waterbor	dy Name:	Brackett C	Creek	Project Type:	Restorati	ion			•
l and Hep	I-farmatit	- /all proje		channel re , bank stab	bilization, passage,			•	
		o n (all proje a signed proje	ects) ect agreement?			Yes	No	Unk.	NA
_	-			I, Agriculture, Timber, O	Other)	Agric	ulture	/Livesto	ock -
		nt conducted?						/	
Has the tren	nd in riparian	condition in	nproved since last visite	ed or last photo?		√			
ls project in	overall com	pliance with	project agreement?			✓			
Comr	ments								
Photo Poir	nts								
Frame #	L	Lat	Long	Facing?	Scene de	escripti	ion/Pre	vious F	hoto
1	45.8	86626	110.66019			Start (of proje	ect	
2		"	"	DS	Eroding ba	nk and	point b	ar with v	willows
3	45.8	86639	110.66019		Eviden	ce of w	illow si	tabilizat	tion
4	45.8	86637	110.65954	DS			"		
5	45.8	86665	110.65849	DS		Aweso	ome ba	ink	
6	45.8	86689	110.65816	DS		Bank	(erosio	n	
7	45.8	86665	110.65254	DS	Av	wesome	stable	bank	
Riparian ((Fencing) P	Projects							
Does the pro	oject agreen	nent include	grazing stipulations?(N	lo, Exclosure, Grazing plan, l	Unk, NA)				·
	3.5					Yes	No	Unk	NA
_	_	exclude lives				لب	✓		
_		in functional				√			
			in the fenced area?			✓		لبا	
,	, ,		ith submitted mngt plar					✓.	
				arse, Moderate, Heavy,	NA)			game)	
		•	None, Sparse, Commo			Spars	se		•
Age classes	Age classes of riparian shrubs present. (None, One, Several, All, NA)					One _			

Channel Stability? (Stable, Unstable, Aggrading, Degrading, Unknown)

Channel Conditions? (Over-widened&shallow; Narrow&deep; Intermediate; Multi-thread)

Maintained plan form -

Overwidened/Shallor -

Streambank Stabilization Projects <a>V

Current length of stream bank protected. (# Feet or Unknown)	
Type of stabilization used. (Root wads, Soil wrap, Willow plantings, Rip rap, Other-describe)	Willow plantings -
Current condition of stream bank. (Stable, Unstable, Eroding, Percent stable/unstable)	Eroding
Has stream bank migrated. (No, Into stream, Into bank, Unknown)	Into bank
Is any infrastructure (fence, etc.) in danger of being compromised. (No, Yes-describe)	No _
Predominant bank angle within stabilization. (Under cut, 90°-45°, <45°)	Under cut <u>▼</u>

Channel Restoration Projects <

Channel stability? (Stable, Unstable, Aggrading, Degrading, Unknown)	Stable	-
Channel Conditions? (Over-widened & shallow; Narrow & deep; Intermediate, Multi-thread)		•
Condition of habitat enhancement structures. (Stable, Eroding, NA)	NA	Ŧ
Complexity of stream channel? (Pool-riffle, No pools, Wood forced pools, Lateral scour pools)	Pool-riffle	·
Percent of stream reach in pools. (~total pool length/total stream length)		
Habitat enhancement structures involved? (LWD, Rootwads, Cross vanes, Other)	NA	•
Condition of habitat structures? (Stable, Eroded, Unknown)	NA	•

Comments:

(Existing land use?; Weeds?; Beneficial to fishery?; Public access?; Needs? What did we learn? ;etc.)

Canada thistle present. Leafy spurge is present but is being targeted by lessee and is on the decline Willow requirement is up compared to previous years

Gravel present in pool tails, embedded with fine sediment

Stream has access to floodplain

Evidence of heavy brows most likely from game species.

Although it is grazed by cattle, there is no evidence of hoof shear or over browsing

Some lateral adjustments on outside bends

Overall maintained plan form

Land Owner Comments:						
Has this proje	project been beneficial to you?					
Has project improved stream/riparian conditions?			?			
Effects on lar	nd use?					
Weeds?						
Noticable change in fishery?						
Thoughts for future work?						





Photo 1. Start of project (the plug)



Photo 1. Eroding bank and point bar with willow recruitment



Photo 2. Evidence of willow stabilization



Photo 3. Stable constructed bank with willow recruitment.



Photo 5. Stable bank with willow recruitment.



Photo 6. More bank erosion



Photo 7. Functioning section of reconstructed channel with substantial willow growth.

4.4 Clear Creek (005-2004 & 005-2005)

Project #:	005-05	Project Title:	de: Clear Creek fish passage					
Date:	7/27/2016	Evaluator: Si	hannon Bockmon					*
Waterbody Name: Clear Creek Project Type: Passage					e			7
	e de como en		, channel re benk abo	bilitation, passes;	ge (Some pr	ojecki marj	Fore Itself	ple flybe
	Information (all proje				Yes	Mo	Unk.	N.A
	oject have a signed proje			200	V			ļ
	pe (Livestock, Residentia	275-1017-2017-2017	ai, Agriculture, Timber, C	xner)	Publi	C		
	assessment conducted?						1	
	nd in riparian condition in		ted or last photo?		1			
	overall compliance with	project agreement?			1		ļ	
	ments							
Photo Poi		le salaza	- estadas	1	والمترادية			
Frame #	Lat 45.37360	Long 109.14622	Facing?		Scene description/Previous Phot Bridge with pool up to bottom of culv			
2	45.37300	109.14622	US		Up strea			MIN
3	45.37379	109.14622	43			ect are		
4	40,01015	105.14022			FIN	eu ale	a	
- 1	1		7					
	1							
			+	1				
	1			1				
Landa et i				+				
	Fencing) Projects			7 T. Tale				200
Lives the pr	ojed agreement indude	grazing supulations:(No. Exclosure. Gregory plan,	URK, NAJ	Yes	No	Tünk	NA.
Was fencing	Installed to exclude live	stnek?			100	140	UIR	The Th
	the fencing in functional							
	as grazing occurred within				+			
	grazing in compliance w	THE PERSON NAMED IN	ans?					
Level of observed browsing on riparian shrubs. (None, Sparse, Moderate, Heavy, NA)							1	1 24
Density of riparian shrubs present. (None, Sparse, Common, Abundant, NA)								
	of riparian shrubs prese	CONTRACTOR OF STREET						
	ability? (Stable, Unstable,				1			
Hall III HALL 1990	and famous summer.	, agreeing, crayedus	g, annionily					

Channel Conditions? (Over-widened&shallow; Narrow&deep; Intermediate; Multi-thread)

Streambank Stabilization Projects			
Current length of stream bank protected. (# Feet or Unknown)			
Type of stabilization used. (Root wads, Soil wrap, Willow plantings, Rip rap, Other-describe)		+	
Current condition of stream bank. (Stable, Unstable, Eroding, Percent stable/unstable)	*		
Has stream bank migrated. (No, Info stream, Into bank, Unknown)		-	
is any infrastructure (fence, etc.) in danger of being compromised. (No, Yes-describe)		3.0	
Predominant bank angle within stabilization. (Under cut, 90'-45', -45')		18.	
Channel Restoration Projects			
Channel stability? (Stable, Unstable, Aggrading, Degrading, Unknown)	Stable	Ŧ	
Channel Conditions? (Over-widered & shallow; Narrow & deep; Intermediate, Multi-thread)	Narrow/deep	-	
Condition of habitat enhancement structures. (Stable, Eroding, NA)	Stable	•	
Complexity of stream channel? (Pool-riffle, No pools, Wood forced pools, Lateral scour pools)	Pool-riffle	1	
Percent of stream reach in pools. (~total pool length/total stream length)			
Habitat enhancement structures involved? (LWD, Rootwads, Cross vanes, Other)	large rocks	×	
Condition of habitat structures? (Stable, Eroded, Unknown)	Stable	1	
Comments:			
(Existing land use?;Weeds?; Beneficial to fishery?; Public access?; Needs? What did we learn	2 (etc.)		
With the amount of over growth it was hard to access the stream, but could se well as the large rocks along the stream banks are still in working conditions. Pool at base of culvert is even with the bottom of the culvert that was previous Plant recruitment is high, thus the lack of decent pictures. Some evidence of rock movement with in project area, but pools are still prese	ly a plunge pool.	JUIS dS	
Land Owner Comments:			
Has this project been beneficial to you?			
Has project improved stream/riparian conditions?			
Effects on land use?			
Weeds?			
Noticable change in fishery?			
Thoughts for future work?			





Photo 1. Bridge with pool up to bottom of culvert.



Photo 2. Upstream of culvert and project area.



Photo 3. Photo area showing constructed step-pools.



Photo 4. Close up of step-pools in project area.



Photo 5. Another view of step-pools.

4.5 Crooked Creek fish barrier (027-2006)

Project#:	027-06	Project Title:	Crooked Creek fis	h barrier				
Date:	7/26/2016	Evaluator: Sh	annon Bockmon					*
Waterbox	dy Name: Crooked	Creek	Project Type:	Barrier				¥
			charvel re , bank st	abilitation, passag	pi. (Storpe p	najedi me	y foews multi	pie lyce
	Information (all pro				Yes	No	Unk.	N/A
	oject have a signed pro				1			
Land use ty	pe (Livestock, Residen	tial, Public, Recreationa	f, Agriculture, Timber,	Other)	Pub	lie		13
Was a PFC	assessment conducter	d?					1	
Has the tren	nd in riparian condition	improved since last visit	ed or last photo?		1			
is project in		1						
Comr	ments							
Photo Poi	nes							
Frame #	45.06389	-108.39089	Facing?	Numerous ph	otos	Þr	evious i	Photo
	From Mapper							
				7				
				+				
			1					
			4	*				
				+				
			+	4				
		<u> </u>		4				
Riparian (Fencing) Projects							
Does the pr	oject agreement includ	e grazing stipulations?()	lo, Excourre, Creating plan	Link, NA)				T
					Yes	No	Unk	NA
Was fencing	g installed to exclude liv	restock?				4		
f fenced, is	the fencing in function.	al condition?						
f fenced, ha	as grazing occurred wit	hin the fenced area?						
f grazed, is	grazing in compilance	with submitted mngt pla	ins?			J		
Level of obs	served browsing on ripa	irlan shrubs. (None, Spa	arse, Moderate, Heavy	, NA)				
Density of ri	parlan shrubs present.	(None, Sparse, Commo	on, Abundant, NA)					
Age classes	of riparian shrubs pre	sent. (None, One, Sever	ral, All, NA)					
	THE PROPERTY OF STREET	e, Aggrading, Degrading	100 100 100					
PORTON DE	The state of the s		ep; Intermediate; Multi	Hanning!				

Streambank Stabilization Proje	ects					
Current length of stream bank prote	cted. (# Feet or Unknown)					
Type of stabilization used. (Root wa	ds, Soil wrap, Willow plantings, Rip rap, Other-describe)	<u>•</u>				
Current condition of stream bank. (S	<u>+</u>					
Has stream bank migrated. (No, Int	o stream, into bank, Unknown)					
is any infrastructure (fence, etc.) in o	danger of being compromised. (No, Yes-describe)	<u>*</u>				
Predominant bank angle within stab	ilization. (Under cut, 90'-45', <45')	*				
Channel Restoration Projects						
Channel stability? (Stable, Unstable	e, Aggrading, Degrading, Unknown)	*				
Channel Conditions? (Over-widened	d & shallow; Narrow & deep; Intermediate, Multi-thread)	-				
Condition of habitat enhancement st	7					
Complexity of stream channel? (Pod	*					
Percent of stream reach in pools. (~						
Habitat enhancement structures involved? (LWD, Rootwads, Cross vanes, Other)						
Condition of habitat structures? (Sta	ble, Eroded, Unknown)	<u>*</u>				
Comments:						
(Existing land use?;Weeds?; Benefi	dal to fishery?; Public access?; Needs? What did we learn	? ;etc.)				
Lower natural barrier blew ou form a pool. Upper barriers also blew out a become abundant in some ar Mike Ruggles had us shock a Still no fish above for a ways.	bove the dam to see if the cutthroat have moved abundance of Brown trout. Although in high num	ain gradient and not or spawning gravel to down to the dam yet.				
Land Owner Comments:						
Has this project been beneficial to y	ou?					
Has project improved stream/riparia						
Effects on land use?						
Weeds?						
Noticable change in fishery?						
Thoughts for future work?						





Photo 1. Splash pad in good condition, and not providing passage over structure

FFIP 2016 Field Monitoring Appendix Field Forms and Geo-referenced Photos Yellowstone River Watershed



Photo 2. Accumulation of gravel behind wall of barrier forming a solid surface.



Photo 3. Slight amount of scour at downstream of apron, but not deep enough to allow to leap.

4.6 Daisy Dean Creek off stream watering and fencing (039-1999)

Project #:	039-1999		Project Title:	Daisy Dean Creek off stream watering and fencing				
Date:	6/14/201	6	Evaluator: Sh	Shannon Bockmon				
Waterbody Name: Dalsy Dea		n Creek	Project Type:	Riparian	-			

Land Use Information (all projects)	Yes	No:	. Unk.	MA
Does the project have a signed project agreement?	1			
Land use type (Livestock, Residential, Public, Recreational, Agriculture, Timber, Other)	Lives	tock.		*
Was a PFC assessment conducted?			1	
Has the trend in riparian condition improved since last visited or last photo?				
is project in overall compliance with project agreement?	1			
Comments	2-1-1			

Photo Points

Frame #	Lat	Long	Facing?	Scene description/Previous Photo
1	46.02554	110.62342		Off site watering #1
2	46.02270	110.62096		Off site watering #2
3	46,02034	110.62267		Off site watering well and pump
4		1000		healing bank.
5	46.01848	110.52044		Off site watering #3
6	46,01988	110.62032		End of electric fence/start of fenced area
7	46.01985	110,62091	DS	Murky water, old cattle watering place
5	46.01974	110.62125	DS	Head cut
9	46.01959	110.62140		Overview of stream segment win fenced area
10	46.01966	110,62160		Healing cattle/game trail

Riparian (Fencing) Projects

Does the project agreement include grazing stipulations?(No, Excession, Griging plan, Unix, NA)			Grazing Plan			
	Yes	No	Unk	MA.		
Was fending installed to exclude livestock?	1					
f fenced, is the fencing in functional condition?	1					
f fenced, has grazing occurred within the fenced area?	1					
f grazed, is grazing in compilance with submitted mingt plans?	1					
Level of observed browsing on riparian shrubs. (None, Sparse, Moderate, Heavy, NA)		Sparse				
Density of ripartan shrubs present. (None, Sparse, Common, Abundant, NA)	Abundant			*		
Age classes of riparian shrubs present. (None, One, Several, Ali, NA)		All				
Channel Stability? (Stable, Unstable, Aggrading, Degrading, Unknown)	Stable			-		
Channel Conditions? (Over-widened&shallow Narrow&deep Intermediate; Multi-thread)	Narrow/Deep			¥		

Current length of stream bank protected. (# Feet or Unknown)	
Type of stabilization used. (Root wads, Soil wrap, Willow plantings, Rip rap, Other-describe)	-
Current condition of stream bank. (Stable, Unstable, Eroding, Percent stable/unstable)	4
Has stream bank migrated. (No, Into stream, Into bank, Unknown)	P\$
is any infrastructure (fence, etc.) in danger of being compromised. (No, Yes-describe)	*
Predominant bank angle within stabilization. (Under cut, 90'-45', <45')	14
Channel Restoration Projects	
Channel stability? (Stable, Unstable, Aggrading, Degrading, Unknown)	*
Channel Conditions? (Over-widened & shallow; Narrow & deep; Intermediate, Multi-thread)	¥
Condition of habitat enhancement structures. (Stable, Eroding, NA)	*
Complexity of stream channel? (Pool-riffle, No pools, Wood forced pools, Lateral scour pools)	
Percent of stream reach in pools. (~total pool length/total stream length)	
Habitat enhancement structures involved? (LWD, Rootwads, Cross vanes, Other)	*
Condition of habitat structures? (Stable, Eroded, Unknown)	
Comments:	
(Existing land use?;Weeds?; Beneficial to fishery?; Public access?; Needs? What did we learn? ;el	tc.)
Existing land use?;Weeds?; Beneficial to fishery?; Public access?; Needs? What did we learn? ;e Frame # 11	l it was fine sediment
Frame # 11 46.01970, 110.62198 Old eroding bank healing over Frame # 12 New cattle/game trail across stream Frame # 13 46.02000, 110.62270 End Bindweed and Canada Thistle present Win electric fence = very little browse, old cattle trails are healing nicely Beaver above electric fence Flows are high making water murky and hard to see substrate (what I was able to fee Undercut banks, significant willow coverage, with woody debris making pools and hab Head gate on neighbors property down stream looks to be a possible fish barrier, cou from road. (picture added after project pictures) Land Owner Comments: Great project, noticeable change in stream habitat	l it was fine sediment
Frame # 11 46.01970, 110.62198 Old eroding bank healing over Frame # 12 New cattle/game trail across stream Frame # 13 46.02000, 110.62270 End Bindweed and Canada Thistle present W/in electric fence = very little browse, old cattle trails are healing nicely Beaver above electric fence Flows are high making water murky and hard to see substrate (what I was able to fee Undercut banks, significant willow coverage, with woody debris making pools and hat Head gate on neighbors property down stream looks to be a possible fish barrier, cou	l it was fine sediment

ner Comm	ents: Great pr	oject, noticead	vie change in stream habitat		
Has this project been beneficial to you?		J? Ye	26		
Improved s	tream/riparian	conditions?	Yes		
Effects on land use? Not really, same patterns a			as before with some modifications of cattle numbers		
Still here	but have been	working on th	nem (mostly by hand)		
Noticable change in tishery? N/A (doe		N/A (does not	es not fish the stream and has not paid attention to any fish in the system		
Thoughts for future work? More of		More of the sa	the same, maybe some more weed control		
	oject been b t improved s land use? Still here thange in fis	oject been beneficial to you t improved stream/riparian land use? Not really, s Still here but have been thange in fishery?	t improved stream/riparian conditions? and use? Not really, same patterns Still here but have been working on tr thange in fishery? N/A (does not		

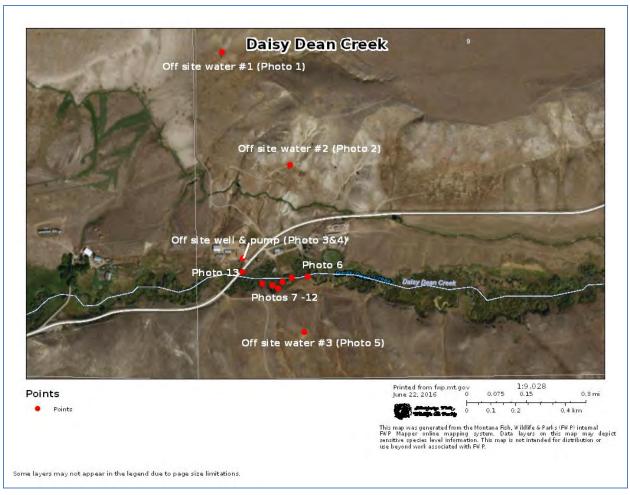




Photo 1. Off-channel watering source #1.



Photo2. Off-channel water source #2.



Photo3. Off-channel watering well and pump.



Photo 4. Healing stream bank downstream of corrals



Photo5. Off-channel watering source #3.



Photo 6. End of electric fence.



Photo 7.Murky water and cattle trail.



Photo 8. Small head cut.



Photo 9. Overview of a stream segment within the fenced area



Photo 10. Old cattle/game trail healing



Photo 11. Old eroding bank now healing and has access to floodplain



Photo 12. Newer cattle/game trail



Photo 13. View from road of end of project assessment

4.7 Elk Creek channel stabilization (029-2006)

FFIP PROJECT & LAND USE MONITORING FORM

Project #:	029-2006		Project Title: Elk Creek Channel Stabilization						
Date:	8/9/2016		Evaluator: Si	hannon Bockmon					*
Waterbo	dy Name:	Elk Creek		Project Type: Bank Stabilization					
		on (all projec				Yes	No	Unk.	NA
				al, Agriculture, Timber, (Other)	Lives	tock		×
Was a PFC	assessmen	t conducted?						1	
Has the tre	nd in ripariar	condition imp	proved since last vis	ited or last photo?		1			
is project in	overall com	pliance with p	roject agreement?			1			
Com	ments -								

Photo Points

Frame #	Lat	Long	Facing?	Scene description/Previous Photo
1	46.01807	-110,63251		Dalsy Dean
2	46.01831	-110.63121		Head gate on Dalsy Dean
3	46.02782	-110.63514	DS	Start of project/Head gate
4	*		US	Above head gate
5	45.02529	-110,63570	US	Emergency cattle access to water
6		1.00	DS	Proof of bank stabilization
7	46.02520	-110.63625		Spring stock water
8		(8)	DS	vertical bankinot done in project
9	46.02502	-110.63593		Re-sloped bank
10	**		DS	Willow Recruitment

Riparian (Fencing) Projects

Does the project agreement include grazing stipulations?(No, Extensive, Cristing plan, Unk, NA)		Grazing Plan				
	Yes	No	Unk	NA.		
Was fericing installed to exclude livestock?	1					
If fenced, is the fencing in functional condition?	1		11 -			
If fenced, has grazing occurred within the fenced area?	1	t –				
If grazed, is grazing in compliance with submitted mingt plans?	1					
Level of observed browsing on riparian shrubs. (None, Sparse, Moderate, Heavy, NA)		None				
Density of riparian shrubs present. (None, Sparse, Common, Abundant, NA)	Common			*		
Age classes of riparian shrubs present. (None, One, Several, All, NA)	Several					
Channel Stability? (Stable, Unstable, Aggrading, Degrading, Unknown)				-		
Channel Conditions? (Over-widened&shallow Narrow&deep Intermediate; Multi-thread)	Inter	medi:	ate	-		

And the second		the second second		
Smeam	nank	Stabiliza	Mon F	molecus

Current length of stream bank protected. (# Feet or Unknown)		
Type of stabilization used. (Root wads, Soil wrap, Willow plantings, Rip rap, Other-describe)	sloping	LY
Current condition of stream bank. (Stable, Unstable, Eroding, Percent stable/unstable)	Stable	P
Has stream bank migrated. (No, Into stream, Into bank, Unknown)	No	(A)
Is any infrastructure (fence, etc.) In danger of being compromised. (No, Yes-describe)	Yes	-
Predominant bank angle within stabilization. (Under cut, 90'-45', <45')	45	

Channel Restoration Projects

*
-
- E
¥
¥
-

Comments:

(Existing land use?; Weeds?; Beneficial to fishery?; Public access?; Needs? What did we learn? ;etc.)

photo 11 Lat. 46,02502, Long. -110.63593 2011 flood demolished part of bank, but most is holding Photo 12 Lat. 46,02382, Long. -110.63500 Off site stock water

Head gate on Daisy Dean is starting to become undercut. Landowner stated that he was going to try and get in touch with Scott Opitz about more rock.

Riparian has came back strong since the grazing plan has been in use.

Some banks that are vertical have not migrated according to landowner.

Light grazing during non growing season is being implemented.

Canada thistle, hounds tongue

Landowners have issues with off channel stock water, pipes and well freeze during early winter, and has to chip ice on the outer portion frequently until cattle drink enough to keep it thawed.

Land Ow	ner Comm	ents:					
Has this project been beneficial to you?			you?	Yes			
Has project improved stream/riparian conditions?			ian conditio	ons?	Yes		
Effects on land use? Some, but overa		ut overall e	overall easier				
Weeds?	Some						
Noticable change in fishery? N/A		NA .					
Thoughts for future work? Sloping of		of more bar	nks from the current vertical angles				

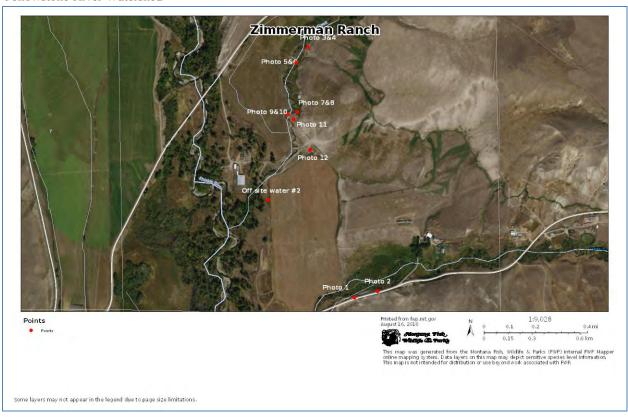




Photo 1: Daisy Dean Creek



Photo 2: Head gate on Daisy Dean Creek



Photo 3: start of project. (head gate on Elk Creek)



Photo 3a: Start of project different angle.



Photo 4: Above head gate





Photo 5: Emergency stock water.



Photo 6: Bank stabilization



Photo 7: Spring stock water

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Photo 8: Vertical banks. (no lateral shifting according to landowner)



Photo 9: Re-sloped bank



Photo 10: Willow recruitment.



Photo 11: Evidence of 2011 flood demolishing part of the bank.



Photo 12: Over view of lower end of project.



Photo 13: offsite stock water.

4.8 Emigrant Spring Creek (009-2004)

FFIP	PRO	JECT	2. 1	AMD	USE	MICHIEL	ORING	FORM
		Mary San Land	-				3.013.013.0	

Project #:	009-04		Project Title: Emigrant Spring Creek						
Date:	5/26/201	v2016 Evaluator: Shannon Bockmon/Carol Endicott					T		
Waterbody Name: Emigrant		Spring Creek Project Type: Chann			nel Reconstruction			+	
		on (all proje		channel re bank ab	bilation, pressy	Yes		Unk.	
				al, Agriculture, Timber,	Other)	Lives	tock	-	100
Was a PFC	assessmer	nt conducted?					1		
Has the tren	nd in riparia	n condition im	proved since last visi	ited or last photo?			1		
is project in	overall con	plance with	project agreement?			1			
Com	ments	was visited	In 2007, 3 years po	ost project implementa	tion (see co	mments	section	n)	

Photo Points

Frame #	Lat	Long	Facing?	Scene description/Previous Photo
1	45,33152	110,76120	DS	Lower end of exclusion (note fence)
2	*		US	
3	45.33110	110.76099	US	Veg. on point bar, woody plants above bank ful
4	45,33088	110,76091	stream bed	good spawning gravel
. 5		7	DS	
6	45.33055	110.76360		Large and of sounding with connected trastrees
7	45,3343	110,76450		Stock water
8			US	Start of meander
9	45.32873	110.76907	DS	End of channel restoration
10		-	US	Upper end of enclosure (spring)

Riparian (Fencing) Projects 🗸

Does the project agreement include grazing stipulations?(No. Excession Coloring plan, Unix, NA)		Grazing Plan				
	Yes	No	Unk	NA.		
Was fencing installed to exclude livestock?	1					
If fenced, is the fencing in functional condition?	1					
If fenced, has grazing occurred within the fenced area?	1					
If grazed, is grazing in compilance with submitted mingt plans?	1					
Level of observed browsing on riparian shrubs. (None, Sparse, Moderate, Heavy, NA)	None					
Density of riparian shrubs present. (None, Sparse, Common, Abundant, NA)	Common					
Age classes of riparian shrubs present. (None, One, Several, Ali, NA)				*		
Channel Stability? (Stable, Unstable, Aggrading, Degrading, Unknown)				9.0		
Channel Conditions? (Over-widened&shallow Narrow&deep Intermediate; Multi-thread)	Variable <u>*</u>					

Streambank	Conhidination	Diminute	1
Jurean nuarin	Judiumizatinum	I TUJE GLO	

Current length of stream bank protected. (# Feet or Unknown)	100				
Type of stabilization used. (Root wads, Soil wrap, Willow plantings, Rip rap, Other-describe)	Sedge mats				
Current condition of stream bank. (Stable, Unstable, Eroding, Percent stable/unstable)	Stable				
Has stream bank migrated. (No, Into stream, Into bank, Unknown)	No 💌				
is any infrastructure (fence, etc.) in danger of being compromised. (No, Yes-describe)	No 💌				
Predominant bank angle within stabilization. (Under out, 90°-45°, -45°)	e-channel *				

Channel Restoration Projects 1

Channel stability? (Stable, Unstable, Aggrading, Degrading, Unknown)	Stable	*
Channel Conditions? (Over-widened & shallow; Narrow & deep; Intermediate, Multi-thread)	Overwidened/shalk_	¥
Condition of habitat enhancement structures. (Stable, Eroding, NA)	NA	4
Complexity of stream channel? (Pool-riffle, No pools, Wood forced pools, Lateral scour pools)	see comments	*
Percent of stream reach in pools. (~total pool length/total stream length)	see comments	
Habitat enhancement structures involved? (LWD, Rootwads, Cross vaines, Other)	NA _	¥
Condition of habitat structures? (Stable, Eroded, Unknown)	NA _	*

Comments:

(Existing land use?; Weeds?; Beneficial to fishery?; Public access?; Needs? What did we learn? ;etc.).

Lower end has high quality spawning gravel pick 3 = densely vegetated point bar with woody vegetation above bank full mark

Nesting Sandhill cranes located in dense sedge along creek

Light cattle grazing, no evidence of degradation of stream banks

3 inches of fine sediment, but gravel under

Some Canada Thistle found, abundant amount of Timothy grass

Multiple spring inlets

Within restored area, most adjacent land is an emergent sedge wetland

Age class of riparian shrubs; healthy and functional, little recruitment

E6 channel due to silt

DA type channel at head of spring

Land Owner Comments:		
Has this project been beneficial to yo	u?	
Has project improved stream/riparian	conditions?	
Effects on land use?		
Weeds?		
Noticable change in fishery?		
Thoughts for future work?		

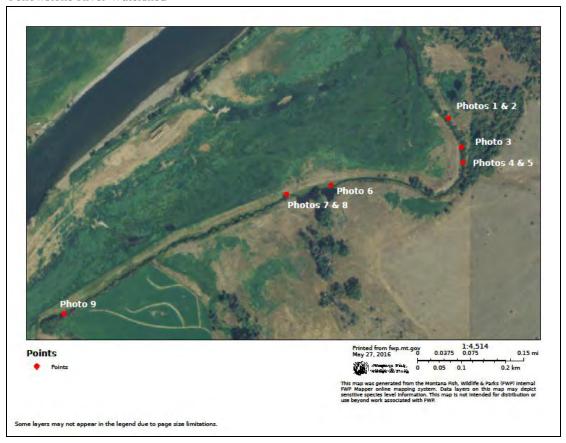




Photo 1: Lower end of exclusion.

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Photo 2: Upstream view of lower end of project.



Photo 3: Vegetation on point bar, woody plants above bank full.

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Photo 4: Good spawning gravel.



Photo 5: Good spawning gravel.



Photo 6: Large area of standing water connected to stream.



Photo 7: Stock water.



Photo 8: Start of meander.



Photo 9: End of channel restoration. (Downstream view)

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Photo 10: Upper end of enclosure.

4.9 ESP/Chambers Spring Creek (045-1998 & 011-2002)

		FFIF	PROJECT & LAN	ID USE MONITOR	ING FORM				
Project#:	045-98		Project Title:	ESP/Chambers Sp	oring Creek				
Date:	8/10/201	6	Evaluator: Sh:	annon Bockmon					
Waterbody Name: Chambers Spring Creek Project Type: Riparian						*			
Land Use	Informati	on (all proj		programme to position and	citization, paratage	Yes	No.	Unk.	NA.
Does the project have a signed project agreement?									
Land use ty	pe (Livestor	k, Residenti	al, Public, Recreational	, Agriculture, Timber,	Other)	Lives	tock		*
Was a PFC	assessmer	it conducted	į.					1	
Has the tren	nd in ripartar	condition in	proved since last visite	ed or last photo?		1			
s project in	overall com	pliance with	project agreement?			1			
Com	ments								
Photo Poi	nts	•							
Frame #		at	Long	Facing?	Scene d	escripi	ton/Pre	vious F	hoto
- 1	45.	79305	-109.82722		Start/conf	luence	Into the	e Yellor	wstone
2		-		Î					
3	45.7	79293	-109.82749						
4	45.	79276	-109.8277		Possible Stream movement				nt
5		-			Willow recruitment				
6	45.1	79222	-109.82856		Stock access				
7	45.	79209	-109.82843	US	End of project				
Riparian (Fencing) I	Projects							
	-		grazing stipulations?(N	a, Exclusion, Grazing plan,	Unit, NA)				+
	Tara Para					Yes	No	Unik	NA.
Was fencin	g installed to	exclude live	stock?			1			
If fenced, is the fencing in functional condition?						1			
If fenced, has grazing occurred within the fenced area?							1		
If grazed, is grazing in compliance with submitted mngt plans?						1			
Level of observed browsing on riparian shrubs. (None, Sparse, Moderate, Heavy, NA)						None			*
Density of n	parlan shru	bs present. (None, Sparse, Commo	n, Abundant, NA)		Abur	dant		×
Age classes	of riparian	shrubs prese	ent. (None, One, Sever	al, Ali, NA)		AII			¥
Channel Sta	ability? (Stat	ole, Unstable	, Aggrading, Degrading	, Unknown)		Stab	le		×
Channel Co	nditions? (0	ver-widened	&shallow Narrow&dee	p; Intermediate; Multi-	thread)	Narrow/Deep 🔻			

Weeds?

Noticable change in fishery? Thoughts for future work?

Streambank Stabilization Projects		
Current length of stream bank protected. (# Feet or Unknown)		
Type of stabilization used. (Root wads, Soil wrap, Willow plantings, Rip rap, Other-describe)		÷
Current condition of stream bank. (Stable, Unstable, Eroding, Percent stable/unstable)	10	
Has stream bank migrated. (No, Into stream, Into bank, Unknown)		Y
s any infrastructure (fence, etc.) in danger of being compromised. (No, Yes-describe)		
Predominant bank angle within stabilization. (Under cut, 90'-45', <45')		×
Channel Restoration Projects		
Channel stability? (Stable, Unstable, Aggrading, Degrading, Unknown)	Stable	-
Channel Conditions? (Over-widened & shallow; Narrow & deep; Intermediate, Multi-thread)	Narrow/deep	
Condition of habitat enhancement structures. (Stable, Eroding, NA)	NA.	¥
Complexity of stream channel? (Pool-riffle, No pools, Wood forced pools, Lateral scour pools)	Pool-riffle	*
Percent of stream reach in pools. (~total pool length/total stream length)		
Habitat enhancement structures involved? (LWD, Rootwads, Cross vanes, Other)		*
		¥
Condition of habital structures? (Stable, Eroded, Unknown)		
Condition of habital structures? (Stable, Eroded, Unknown) Comments: (Existing land use?;Weeds?; Beneficial to fishery?; Public access?; Needs? What did we learn	an or Table	_
Comments: (Existing land use?; Weeds?; Beneficial to fishery?; Public access?; Needs? What did we learn Step pools at the confluence looks passable still, but some of the large rocks that been displaced most likely by ice jams. Willow recruitment is high. Chuck Roloff said that the current willow density is a to was working on the project. Good sections of spawning gravel though out sections. Some aquatic plants are plenty CFS to flush areas of spawning habitat. Cattle do have access to a section for drinking/crossing. Area is very degraded. B having off channel water Hounds tongue, Canada Thistle, Milk weed present in high numbers within enclos Would recommend shocking the stream in the future to obtain an up to date data.	were placed there had 180 from when had seent, but there is not in needed with our or the seent.	nave ne
Comments: Existing land use?; Weeds?; Beneficial to fishery?; Public access?; Needs? What did we learn Step pools at the confluence looks passable still, but some of the large rocks that been displaced most likely by ice jams. Willow recruitment is high. Chuck Roloff said that the current willow density is a to was working on the project. Good sections of spawning gravel though out sections. Some aquatic plants are plenty CFS to flush areas of spawning habitat. Cattle do have access to a section for drinking/crossing. Area is very degraded. B having off channel water Hounds tongue, Canada Thistle, Milk weed present in high numbers within enclos Would recommend shocking the stream in the future to obtain an up to date data using the stream. Last documented survey was in 2000.	were placed there had 180 from when had seent, but there is not in needed with our or the seent.	nave ne
Comments: (Existing land use?; Weeds?; Beneficial to fishery?; Public access?; Needs? What did we learn Step pools at the confluence looks passable still, but some of the large rocks that been displaced most likely by ice jams. Willow recruitment is high. Chuck Roloff said that the current willow density is a towas working on the project. Good sections of spawning gravel though out sections. Some aquatic plants are plenty CFS to flush areas of spawning habitat. Cattle do have access to a section for drinking/crossing. Area is very degraded. B having off channel water Hounds tongue, Canada Thistle, Milk weed present in high numbers within enclos	were placed there had 180 from when had seent, but there is not in needed with our or the seent.	tave te





Photo 1: Start of project.



Photo 2: Start of project should have step-pools, but larger rocks have been displaced do to possible ice jams.



Photo 3: project above the downstream culvert.



Photo 4: possible stream movement, or sedges growing within a designed pool.



Photo 5: Willow recruitment. (with Chuck Roloff, NRCS district conservationist)



Photo 6: Cattle water gap.



Photo 6a: Next in line for water.

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Photo 7: End.



Extra photo: spawning gravel.

4.10 Fishtail Creek corral relocation (031-2006)

Project#:	031-06		Project Title:	Project Title: Fishtall Creek corral relocation							
Date:	8/11/201	6	Evaluator: Si	nannon Bockmon		19					
Waterbody Name: Fishtali Creek Project Type: Col				Corral r	al removal						
			100	charmel re , barris ata	bilization, pressage	, (Some p	rojecto may	have mal	Aple bype		
		on (all proj				Yes	No	Unk.	N/A		
			ect agreement?			1					
Land use ty	e (Livestoc	k, Residenti	al, Public, Recreationa	al, Agriculture, Timber, (Other)	Lives	stock		- 3		
Was a PFC	assessmen	it conducted	?					1			
Has the tren	d in ripariar	condition in	nproved since last visi	ted or last photo?		1					
is project in	overall com	pllance with	project agreement?			1					
Comr	ments										
Photo Poi	nts										
Frame #		.at	Long	Facing?	Scene o	tescript	ton/Pre	vious	Photo		
1	45.3	39209	-109.57731		Fendi	ng & be	rm to d	lyert n.	mon		
2		•			C	Corrais landowner built					
3	45.3	9162	-109.67813			Recovered ripartan					
4			•	DS	1)	Old fence & riparian					
5			•	us							
5	45.3	9082	-109.67831			Off stream water					
.7	45.3	39069	-109.57627			Press	sure pur	mp			
8	45.3	9000	-109.67627			Frost free spickit					
9	N	tap				Off site water					
Riparian (Fencinal I	Projects									
			grazing stipulations?	No Exclusion Charing plan	Link, NAj						
		N. W. P. W. J. J.				Yes	No	Unk	NA.		
Was fending	Installed to	exclude live	estock?			1					
If fenced, is the fencing in functional condition?											
If fenced, has grazing occurred within the fenced area?							1				
if grazed, is	grazing in o	ompliance v	with submitted mingt pl	ans?		1					
Level of obs	erved brow	sing on ripar	tan shrubs. (None, Sp	arse, Moderate, Heavy,	NA)	NA	1	V	E		
Density of ri	parlan shrul	bs present. (None, Sparse, Comm	on, Abundant, NA)		Sparse					
Age classes	of riparian	shrubs pres	ent. (None, One, Seve	erai, Ali, NA)		Seve			-		
Channel Sta	ibility? (Stat	ole, Unstable	, Aggrading, Degradin	ig, Unknown)		Stab	le		_		
The second second	orthograph 2 (C)	war widona	Wishallow Namowada	ep; Intermediate; Multi-	through)	Stable Intermediate					

		The second second
	Stabilization	
		And the second second second
142 CA 152 CA 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	AND DESCRIPTION OF THE PROPERTY OF	The state of the s

Current length of stream bank protected. (# Feet or Unknown)	
Type of stabilization used. (Root wads, Soil wrap, Willow plantings, Rip rap, Other-describe)	+
Current condition of stream bank. (Stable, Unstable, Eroding, Percent stable/unstable)	¥
Has stream bank migrated. (No, Into stream, Into bank, Unknown)	÷
Is any infrastructure (fence, etc.) in danger of being compromised. (No, Yes-describe)	W
Predominant bank angle within stabilization. (Under cut, 90'-45', +45')	

Channel Restoration Projects

Channel stability? (Stable, Unstable, Aggrading, Degrading, Unknown)	
Channel Conditions? (Over-widened & shallow; Narrow & deep; Intermediate, Multi-thread)	*
Condition of habitat enhancement structures. (Stable, Eroding, NA)	
Complexity of stream channel? (Pool-riffle, No pools, Wood forced pools, Lateral scour pools)	1
Percent of stream reach in pools. (~total pool length/total stream length)	
Habitat enhancement structures involved? (LWD, Rootwads, Cross vanes, Other)	2.0
Condition of habitat structures? (Stable, Eroded, Unknown)	*

Comments:

(Existing land use?; Weeds?; Beneficial to fishery?; Public access?; Needs? What did we learn? ;etc.)

Berms that were built during the project to divert flow of runoff are still in place and still functioning. Landowner does maintain them from time to time.

Well and pressure pump are still in functioning condition

Off site water greatly helps landowner. It did freeze with in the holding tank last winter. But that was the first time he has ever had it happen.

Riparian has came back some, but most of it is weeds as of now. Some aspen are working their way in as well. Landowner has sprayed the weeds in the past.

Over all project is well kept by landowner and he states that what was part of the project is still as good as new.

Land Owi	ner Comm	ents:				
Has this project been beneficial to you?		Yes				
Has project improved stream/riparian conditions?			ms?	Yes		
Effects on land use? some, but has made it		e it more ea	s y			
Weeds? Yes						
Noticable change in fishery? Nope		Nope	ope .			
Thoughts for future work? Nope		Nope				





Photo 1: Riparian fencing and berm.



Photo 2: Corrals landowner built on his own time.



Photo 3: Old fence and recovering riparian area.



Photo 4: Old fence and recovering riparian area.



Photo 5: Offsite water with in corrals.



Photo 6: Pressure pump.



Photo 7: Frost free spikit. (one of several)

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Photo 8: Offsite water.

4.11 Fleshman Creek channel and riparian restoration (006-2009)

Project#:	006-09		Project Title:	Fleshman Creek o	k channel and riparian reconstruction				חמ	
Date:	6/2/2016 Evaluator: Shannon Bockmon/Carol End			arol Endico	cott					
Waterbo	dy Name:	Fleshman	creek	Project Type:	Recons	structio	n		¥	
				channel re , benk ab	billiotton, passag	pe, (Some pr	ojeda maj	town multi	ple type	
	AND THE RES	on (all proje				Yes	Mo	Unk.	N/A	
Does the project have a signed project agreement?						/				
Land use type (Livestock, Residential, Public, Recreational, Agriculture, Timber, Other)							tock		7	
	-4.50 -400 (4.0	it conducted?						1		
	A-1-1-1-1-1		proved since last visi	ted or last photo?		1				
is project in	overall com	pliance with p	roject agreement?			1				
	ments	Photo 11:4	5.65313, 110.5772	1, US, End of project						
Photo Poi	nts									
Frame #		at	Long	Facing?	Scene	descript	ion/Pre	avious F	hoto	
1	45.6	55496	110.58233	US	Water un	Water under bridge is passable by fi				
2		•	•	DS	Underput be	Underput bank, willow survival high (see commen				
3	45.4	55485	110.58205		Sc	Some sloughing of bank				
4	45.4	55485	110.58260		Some hoo	Some hoof shear through out project are				
S	45.4	55477	110.58114	us	Willow survival and recruitment					
Б	45.4	55461	110.58031	DS	Bottomiess arch culvert and over			er-flo		
7	45.4	55445	•	DS	Terrace t	Terrace banks show vegetation regro			growt	
8	45,4	55399	110.57948	DS	Cattle trail resulting in bank eros					
9	45.4	55359	110.57927	DS	2nd	bottomi	ess an	ch culve	at	
10	45.4	55285	110.57882		Access to f	lood plain t	edwynicy T	DESIGNATION AND	datron	
Riparian (Fencing) I	Projects V								
Does the pr	oject agreer	ment include g	razing stipulations?	No, Exclosure, Grazing plan,	Unk, NAI	Graz	ing Pla	an	¥	
						Yes	No	Unk	NA.	
Was fericing	ginstalled to	exclude lives	tock?				1			
If fenced, is	the fencing	in functional o	condition?			1				
f fenced, ha	as grazing o	courred within	the fenced area?			1				
if grazed, is	grazing in o	ompliance wit	th submitted mngt pl	ans?				1		
Level of obs	served brow	sing on riparta	in shrubs. (None, Sp	arse, Moderate, Heavy,	NA)	None			- 19	
Density of ri	parlan shru	bs present. (N	one, Sparse, Comm	on, Abundant, NA)		Common				
Age classes	of riparian	shrubs preser	nt. (None, One, Seve	eral, All, NA)		Several				
Channel Sta	ability? (Stat	ole, Unstable,	Aggrading, Degradin	ig, Unknown)		Stable				
Channel Conditions? (Over-widened&shallow Narrow&deep Intermediate; Multi-thread)							Stable Narrow/Deep			

Streambank Stabilization Projects 🗸

Current length of stream bank profected. (# Feet or Unknown)	
Type of stabilization used. (Root wads, Soil wrap, Willow plantings, Rip rap, Other-describe)	Willow plantings 💌
Current condition of stream bank. (Stable, Unstable, Eroding, Percent stable/unstable)	Stable
Has stream bank migrated. (No, Into stream, Into bank, Unknown)	No 💌
is any infrastructure (fence, etc.) in danger of being compromised. (No, Yes-describe)	No 💌
Predominant bank angle within stabilization. (Under cut, 90'-45', <45')	Under out

Channel Restoration Projects 1

Channel stability? (Stable, Unstable, Aggrading, Degrading, Unknown)	Stable	*
Channel Conditions? (Over-widened & shallow; Narrow & deep; Intermediate, Multi-thread)	Narrow/deep	*
Condition of habitat enhancement structures. (Stable, Eroding, NA)	see comments	*
Complexity of stream channel? (Pool-riffle, No pools, Wood forced pools, Lateral scour pools)	Paol-riffle	*
Percent of stream reach in pools. (~total pool length/total stream length)		
Habitat enhancement structures involved? (LWD, Rootwads, Cross vanes, Other)	NA.	y
Condition of habitat structures? (Stable, Eroded, Unknown)	NA	*

Comments:

(Existing land use?;Weeds?; Beneficial to fishery?; Public access?; Needs? What did we learn? ;etc.)

Willows transplanted by students. Harvested in fall, soaked though winter, planted in spring

High survival rate of willows, and recruitment. Consider fall harvest, and spring sprigging for all projects

Sedges have fully vegetated most banks, and coir fabric has apparently biodegraded

Lots of trash in stream and floodplain (Livingston winds)

Pool talls had sediment, not good spawning habitat

Some alder recruitment

Weeds are abundant; tansy, Canada thistie, sticky bind weed

Upstream bottomiess arch culvert: the bank full rock placement still intact. Woody debris on stream banks suggests over bank

flows. Periodic cleaning debris from the inlet of over flow pipes is warranted

Talk with NRCS about weed control plan

Consider hardened watering areas for cattle to access with out causing bank erosion.

Overall, the stream restoration has tremendously improved habitat, by providing high quality pools, overhanging willows, and undercut banks. This is a sit rich stream, with considerable down cutting upstream.

Land Ow	ner Comm	ents:				
Has this pr	oject been b	eneficial to you?	Yes			
Has project improved stream/fiparian condition			tions?	not much of a change in water flow		
Effects on	land use?	Not much chang	e, water rights	s since maybe 1879		
Weeds?	not really.	deer seem to keep	them down			
Noticable change in fishery? no change n			ange noticed	noticed		
Thoughts for future work? not really,		ally, maybe o	ome in and clean up what was left behind by the contractors.			



Some layers may not appear in the legend due to page size limitations



Photo 1: Start of project.

FFIP 2016 Field Monitoring Appendix Field Forms and Geo-referenced Photos Yellowstone River Watershed



Photo 2: Undercut bank, willow survival high.



Photo 3: Some bank sloughing.



Photo 4: Some hoof shear. (Similar though out project)



Photo 5: Willow survival and recruitment.



Photo 6: Bottomless culvert and overflow.



Photo 7: Terrace banks show vegetation re-growth.



Photo 8: Cattle trail resulting in bank erosion.



Photo 9: Second bottomless culvert.



Photo 10: Floodplain bench still in working condition.



Photo 11: End of project.

4.12 Kickabuck Spring Creek spawning habitat enhancement (010-2009)

Project #:	010-09	Project Title:	Kickabuck Spring	Creek spawi	ning en	hance	ment.	
Date:	6/1/2016	Evaluator: St	nannon Bockmon					14
Waterbo	dy Name: Kickabus	k Spring Creek	Project Type:	Channel	Reco	nstruc	tion	149
			channel or bank etc	biliration, passage	(Some pr	ojects may	have much	Spile types
	Information (all pro				Yes	No	Unk	NA
	oject have a signed pro				1			
			al, Agriculture, Timber, (Other)	rech	eation		87
	assessment conducter						1	
las the trer	d in riparian condition i	mproved since last visi	ted or last photo?		1			
s project in	overall compliance with	project agreement?			1			
Com	ments							
Photo Por	nts							
Frame #	Lat	Long	Facing?	Scene d	escript	ion/Pre	evious i	Photo
1	45.84363	109,90591	US	Mouth of stream				
2	45,84362	109.90620	US	Start of project area				
3	-			Sloughing of stream bank				
4	45.84364	109.90620	us	Plants in stream with willow recruitme				
5	1=1	109.90688		Exposed gravel				
6	45.84377	109.90736	US	Possible Spawning gravel			el	
.7	-	109.90762	us	Fixed full of entireant (higher gredoverposed gri				ed grave
8		109.90836		Ideal Channel (width/depth ratio				ratio)
9	45.84368	109.90886	us	End of project				
Riparian (Fencing) Projects	19						
Does the pr	oject agreement Includ	e grazing stipulations?(No, Evidosure, Grazing plan,	Unk, NA)				184
					Yes	No	Unk	NA.
Was fencing	Installed to exclude liv	estock?						
f fenced, is	the fencing in functions	al condition?						
f fenced, ha	as grazing occurred with	nin the fenced area?						
f grazed, Is	grazing in compliance	with submitted mingt pl	ans?					
evel of obs	erved browsing on ripa	rlan shrubs, (None, Sp	arse, Moderate, Heavy,	NA)		•		*
Density of ri	parlan shrubs present.	(None, Sparse, Comm	on, Abundant, NA)					7
Age classes	of riparian shrubs pre	sent. (None, One, Seve	ral, All, NA)					14
Channel Sta	ability? (Stable, Unstabl	e, Aggrading, Degradin	ng, Unknown)					-
			ep; intermediate; Multi-	Director III				-

urrent length of stream bank protected. (# Feet or Unknown)		
pe of stabilization used. (Root wads, Soil wrap, Willow plantings, Rip rap, Other-describe)		-
urrent condition of stream bank. (Stable, Unstable, Eroding, Percent stable/unstable)	-	
as stream bank migrated. (No, Into stream, Into bank, Unknown)		-
any infrastructure (fence, etc.) in danger of being compromised. (No, Yes-describe)		7
redominant bank angle within stabilization. (Under cut, 90'-45', <45')		74
hannel Restoration Projects 🗸		
hannel stability? (Stable, Unstable, Aggrading, Degrading, Unknown)	Stable	7
hannel Conditions? (Over-wideried & shallow; Narrow & deep; Intermediate, Multi-thread)	see comments	
ondition of habitat enhancement structures. (Stable, Eroding, NA)	NA	- 7
omplexity of stream channel? (Pool-riffle, No pools, Wood forced pools, Lateral scour pools	see comments	-
ercent of stream reach in pools. (~total pool length/total stream length)		
abitat enhancement structures involved? (LWD, Rootwads, Cross vanes, Other)	NA	*
ondition of habitat structures? (Stable, Eroded, Unknown)	NA	- 5
omments:		
ixisting land use?;Weeds?; Beneficial to fishery?; Public access?; Needs? What did we lear	n? (etc.)	
nouth of stream not passable at current flow atches of Leafy spurge and Canada thistle ots of small fry (Browns?) naintaining project plan		

Land Owner Comments:	
Has this project been beneficial to you?	
Has project improved stream/riparian conditions?	
Effects on land use?	
Weeds?	
Noticable change in fishery?	
Thoughts for future work?	





Photo 1: Mouth of spring creek.



Photo 2: Start of project area.



Photo 3: Sloughing of stream bank.



Photo 4: Plants in stream with evidence of willow recruitment.



Photo 5: Exposed gravel.



Photo 6: Possible spawning gravel.



Photo 7: Pool full of sediment, higher grade=exposed gravel.



Photo 8: Ideal channel, width/depth ratio.



Photo 9: End of project.