FFIP PROJECT & LAND USE MONITORING FORM

Project #:	016-01	**Project Title:**	Shields River
Date:	8/22/2017	**Evaluator:**	Carol Endicott, Kyrsten Wolterstorff
Waterbody Name:	Shields River	**Project Type:**	Bank Stabilization

Riparian, channel re , bank stabilization, passage, (Some projects may have multiple types)

Land Use Information (all projects)

	Yes	No	Unk.	NA
Does the project have a signed project agreement?	✓			
Land use type (Livestock, Residential, Public, Recreational, Agriculture, Timber, Other)	Agriculture			
Was a PFC assessment conducted?		✓		
Has the trend in riparian condition improved since last visited or last photo?		✓		
Is project in overall compliance with project agreement?	✓			
Comments				

Photo Points

Frame #	Lat	Long	Facing?	Scene description/Previous Photo
1	46.06894	-110.63403	North	Debris, looking upstream towards project area
2	46.06894	-110.63403	South	Debris, looking downstream
3	46.06894	-110.63403	Northwest	Looking upstream towards moose on project site
4	46.06894	-110.63403	Northwest	Close up of moose on project site
5	46.06897	-110.63403	South	Looking downstream
6	46.06897	-110.63403	South	Riprap
7	46.06879	-110.63410	North	Floodplain with cottonwood recruitment
8	46.06880	-110.63412	North	Large woody debris
9	46.06880	-110.63412	North	Steep bank with cobble toe and large woody debris

Riparian (Fencing) Projects ☐

Does the project agreement include grazing stipulations?(No, Exclosure, Grazing plan, Unk, 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)				
Density of riparian shrubs present. (None, Sparse, Common, Abundant, NA)				
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)				

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)	Temporary jersey bloc
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˚)	<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.)

Cottonwood recruitment on floodplain, no willows seen
Cobbles imbricated
Riparian fence if five-strand barbed wire and loosely strung
Large, unnatural riprap downstream of project as well as large woody debris. May be a combination of natural flood debris and human intervention to prevent erosion.
Beaver may be trying to establish a dam
Reed canary grass dominant in area
Large point bars with gravel and vegetation, excellent riparian access
Unclear where exactly bank treatments were, but all looks healthy. It does appear that the area we believe was treated has significantly eroded and a backwater channel formed (see project overview).

Land Owner Comments: Jim Willis (406)366-0331 Ranch address: 22 Bright Lane, Wilsall

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?	

Figure 1

Figure 2

Figure 3

Figure 4

Figure 5

Figure 6

Figure 7

Figure 8

Figure 9


Shields River
Riparian Fence
Moose
Backwater Channel
Large, woody Debris
Food Plain
30%
Grade
N

FFIP PROJECT & LAND USE MONITORING FORM

Project #:	047-03	**Project Title:**	South Fork Fridley fish ladder
Date:		**Evaluator:**	Carol Endicott, Kyrsten Wolterstorff
Waterbody Name:	Shields River	**Project Type:**	Passage

Riparian, channel re , bank stabilization, passage, (Some projects may have multiple types)

Land Use Information (all projects)

	Yes	No	Unk.	NA
Does the project have a signed project agreement?	✓			
Land use type (Livestock, Residential, Public, Recreational, Agriculture, Timber, Other)	Agriculture			
Was a PFC assessment conducted?		✓		
Has the trend in riparian condition improved since last visited or last photo?		✓		
Is project in overall compliance with project agreement?	✓			
Comments	See main document for photos			

Photo Points

Frame #	Lat	Long	Facing?	Scene description/Previous Photo

Riparian (Fencing) Projects

Does the project agreement include grazing stipulations? (No, Exclosure, Grazing plan, Unk, 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)				
Density of riparian shrubs present. (None, Sparse, Common, Abundant, NA)				
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)				

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, Into stream, Into bank, Unknown)	
Is 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)	
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.)

Flows through ladder appear to be a velocity barrier. It is unknown if the baffles provide enough turbulence to break up the velocity. It does not feel like there are slower areas. The baffles cannot be removed by hand and are buried by cobbles.

Land Owner Comments: Supports the project

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?	

FFIP PROJECT & LAND USE MONITORING FORM

Project #:	018-07	**Project Title:**	SF Ross Cr habitat and wetland enhancement
Date:	8/4/2017	**Evaluator:**	Kyrsten Wolterstorff
Waterbody Name:	South Fork Ross Creek	**Project Type:**	Channel Reconstruction

Riparian, channel re , bank stabilization, passage, (Some projects may have multiple types)

Land Use Information (all projects)

	Yes	No	Unk.	NA
Does the project have a signed project agreement?	✓			
Land use type (Livestock, Residential, Public, Recreational, Agriculture, Timber, Other)	Agriculture			
Was a PFC assessment conducted?		✓		
Has the trend in riparian condition improved since last visited or last photo?	✓			
Is project in overall compliance with project agreement?	✓			
Comments	See attached files for photo points and project overview			

Photo Points

Frame #	Lat	Long	Facing?	Scene description/Previous Photo
	SEE ATTACHED			

Riparian (Fencing) Projects ☐

Does the project agreement include grazing stipulations?(No, Exclosure, Grazing plan, Unk, 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)				
Density of riparian shrubs present. (None, Sparse, Common, Abundant, NA)				
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)				

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, Into stream, Into bank, Unknown)	
Is 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)	Intermediate
Condition of habitat enhancement structures. (Stable, Eroding, 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)	Shrubs
Condition of habitat structures? (Stable, Eroded, Unknown)	NA

Comments:

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

Horse access to unnamed spring creek
Minnows present in pond B
Not many shrubs for cover
SF Ross is deeper, murky, and more silty than the unnamed creek
Many ducks present
Unnamed spring creek very straight and entrenched upstream from project. SF Ross Creek upstream from culvert not included in project.

Could benefit from more riparian shrubs and settling ponds

OWNER:
Ben Stanley
(406) 581-0994
113 Painter Rd, Belgrade

Land Owner Comments:

Has this project been beneficial to you?	
Has project improved stream/riparian conditions?	At first yes, starting to fill in with silt again
Effects on land use?	
Weeds?	
Noticable change in fishery?	Lots of fish and spawning first few years, now decreasing due to silt
Thoughts for future work?	Would love to do another project to reduce siltation (settling ponds?) and work on the rest of SF Ross

Frame #	Latitude	Longitude	Facing	Description
1	45.81299	-111.12182	South	Looking upstream from bridge on SC towards neighbors
2	45.81299	-111.12182	North	Looking downstream from bridge on SC towards Pond C
3	45.81305	-111.12183	North	Gravel riffle in SC
4	45.81310	-111.12182	North	Pool and silt after riffle in SC
5	45.81312	-111.12183	Northwest	Inlet Pond C
6	45.81355	-111.12239	West	Outlet Pond C
7	45.81366	-111.12241	North	Path mowed near stream
8	45.81426	-111.12323	North	Plants taking hold in SC
9	45.81426	-111.12337	Northwest	Inlet Pond B
10	45.81467	-111.12373	South	Confluence of SF Ross Cr and unnamed SC
11	45.81467	-111.12380	Northwest	Culvert outlet on SF Ross
12	45.81448	-111.12410	West	Gravel and pool in SF Ross
13	45.81466	-111.12457	Northwest	Eroding bank on SF Ross
14	45.81488	-111.12464	East	Tree/shrub cover on SF Ross, bank at bottom eroding
15	45.81663	-111.12424	North	Planting close to SF Ross
16	45.81572	-111.12535	South	Pond A
17	45.81572	-111.12535	West	Pond A
18	45.81572	-111.12535	North	Pond A
19	45.81572	-111.12535	South, West, North	Full view Pond A

Figure 1

Figure 2

Figure 3

Figure 4

Figure 5

Figure 6

Figure 7

Figure 8

Figure 9

Figure 10

Figure 11

Figure 12

Figure 13

Figure 14

Figure 15

Figure 16

Figure 17

Figure 18

Figure 19


E Gallatin Rd
E Gallatin Rd
E Gallatin Rd
E Gallatin Rd
Close Plowing
Pond A
Path mowed along Creek
South Fork Ross Creek
confluence and Culvert
SF Ross Cr above culvert unchanged
Close Plowing
South Fork Ross Creek
Pond B
unnamed Spring Creek
Pasture
Painter Rd
Painter Rd
Pond C
Bridge
Spring Creek very straight and entrenched upstream

FFIP PROJECT & LAND USE MONITORING FORM

Project #:	021-07	**Project Title:**	Thiel Creek Fish Barrier
Date:	6/21/2017	**Evaluator:**	Kyrsten Wolterstorff
Waterbody Name:	Thiel Creek	**Project Type:**	Barrier

Riparian, channel re , bank stabilization, passage, (Some projects may have multiple types)

Land Use Information (all projects)

	Yes	No	Unk.	NA
Does the project have a signed project agreement?	✓			
Land use type (Livestock, Residential, Public, Recreational, Agriculture, Timber, Other)	Livestock			
Was a PFC assessment conducted?		✓		
Has the trend in riparian condition improved since last visited or last photo?				✓
Is project in overall compliance with project agreement?			✓	
Comments				

Photo Points

Frame #	Lat	Long	Facing?	Scene description/Previous Photo
1	45.280287	-109.347159	North	Overview of barrier
2	45.280287	-109.347159	Northwest	Overview of barrier from downstream river right
3	45.280287	-109.347159	East	Looking downstream from river right
4	45.280287	-109.347159	Southwest	Looking upstream from river left
5	45.280287	-109.347159	Southwest	View of crumbling concrete on right side of barrier
6	45.280287	-109.347159	Southwest	View of crumbling concrete on right side of barrier
7	45.280287	-109.347159	West	Riparian condition directly upstream

Riparian (Fencing) Projects ☐

Does the project agreement include grazing stipulations?(No, Exclosure, Grazing plan, Unk, 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)				
Density of riparian shrubs present. (None, Sparse, Common, Abundant, NA)				
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)				

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, Into stream, Into bank, Unknown)	
Is 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)	
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.)

May not withstand a large water event
Left wing wall may not prevent stream from circumventing barrier
Apron appears to be made of concrete, rather than steel as plans state. Appears to be narrower than the described 9 feet.
Only Brook Trout and Sculpin found in the stream when electrofished, no Yellowstone Cutthroat Trout

Land Owner Comments: N/A

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?	

Figure 1

Figure 2

Figure 3

Figure 4

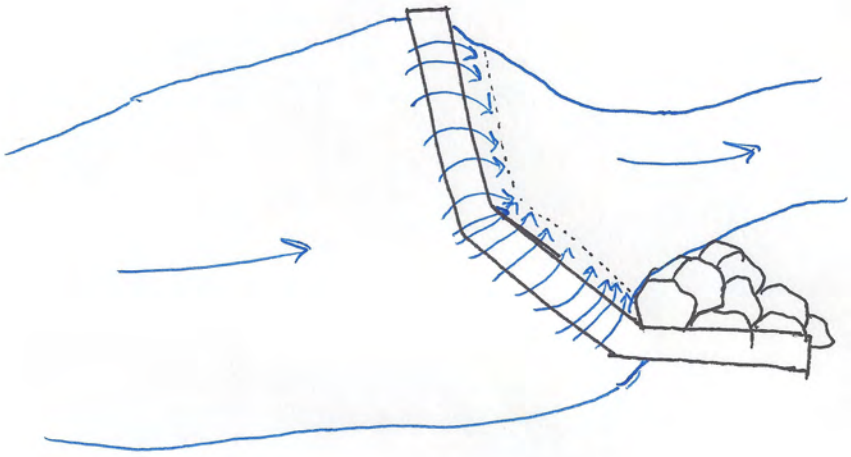
Figure 5

Figure 6

Figure 7

Figure 8

Figure 9



FFIP PROJECT & LAND USE MONITORING FORM

Project #:	022-07	**Project Title:**	Thompson/Story CreeksRiparian Protection
Date:	8/9/2017	**Evaluator:**	Kyrsten Wolterstorff
Waterbody Name:	Thompson Creek	**Project Type:**	Riparian

Riparian, channel re , bank stabilization, passage, (Some projects may have multiple types)

Land Use Information (all projects)

	Yes	No	Unk.	NA
Does the project have a signed project agreement?	✓			
Land use type (Livestock, Residential, Public, Recreational, Agriculture, Timber, Other)	Livestock			
Was a PFC assessment conducted?		✓		
Has the trend in riparian condition improved since last visited or last photo?			✓	
Is project in overall compliance with project agreement?			✓	
Comments	Fencing now different than proposed, possible that new owners modified. See map. Unable to contact landowner for Story Creek.			

Photo Points

Frame #	Lat	Long	Facing?	Scene description/Previous Photo
1	45.81669	-111.15673	South	New fencing
2	45.81643	-111.15643	South	Steep, but stable bank
3	45.81677	-111.15530	East	Hoof marks in stream
4	45.81677	-111.15530	East	Gravel
5	45.81549	-111.15603	Southwest	"Heavy Use" area(on original map)
6	45.81381	-111.15604	East	Armored stanchion water access
7	45.81377	-111.15589	East	"Heavy Use" area(on original map)
8	45.81455	-111.15643	East	Slight grazing near stream
9	45.81455	-111.15643	North	Difference in grazing (left is pasture right is near stream)

Riparian (Fencing) Projects ☐

Does the project agreement include grazing stipulations?(No, Exclosure, Grazing plan, Unk, NA)	Grazing Plan			
	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)	NA (slight browsing on			
Density of riparian shrubs present. (None, Sparse, Common, Abundant, NA)	None			
Age classes of riparian shrubs present. (None, One, Several, All, NA)	NA			
Channel Stability? (Stable, Unstable, Aggrading, Degrading, Unknown)	Stable			
Channel Conditions? (Over-widened&shallow; Narrow&deep; Intermediate; Multi-thread)	Overwidened/Shallow			

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, Into stream, Into bank, Unknown)	
Is 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)	
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.)

Cows in pasture area near stream, looks like a recent move. Hoof shear and manure present, but not much grazing pressure. Unsure if in compliance with grazing plan.
Very silty stream, little gravel visible.
Fence in good condition. Not as plans describe, but property is under new ownership.
No riparian shrubs present on property, but neighboring properties also have few/none.

Unable to contact landowner for Story Creek

Land Owner Comments: Sean Sime (406) 580-110

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?	

Figure 1

Figure 2

Figure 3

Figure 4

Figure 5

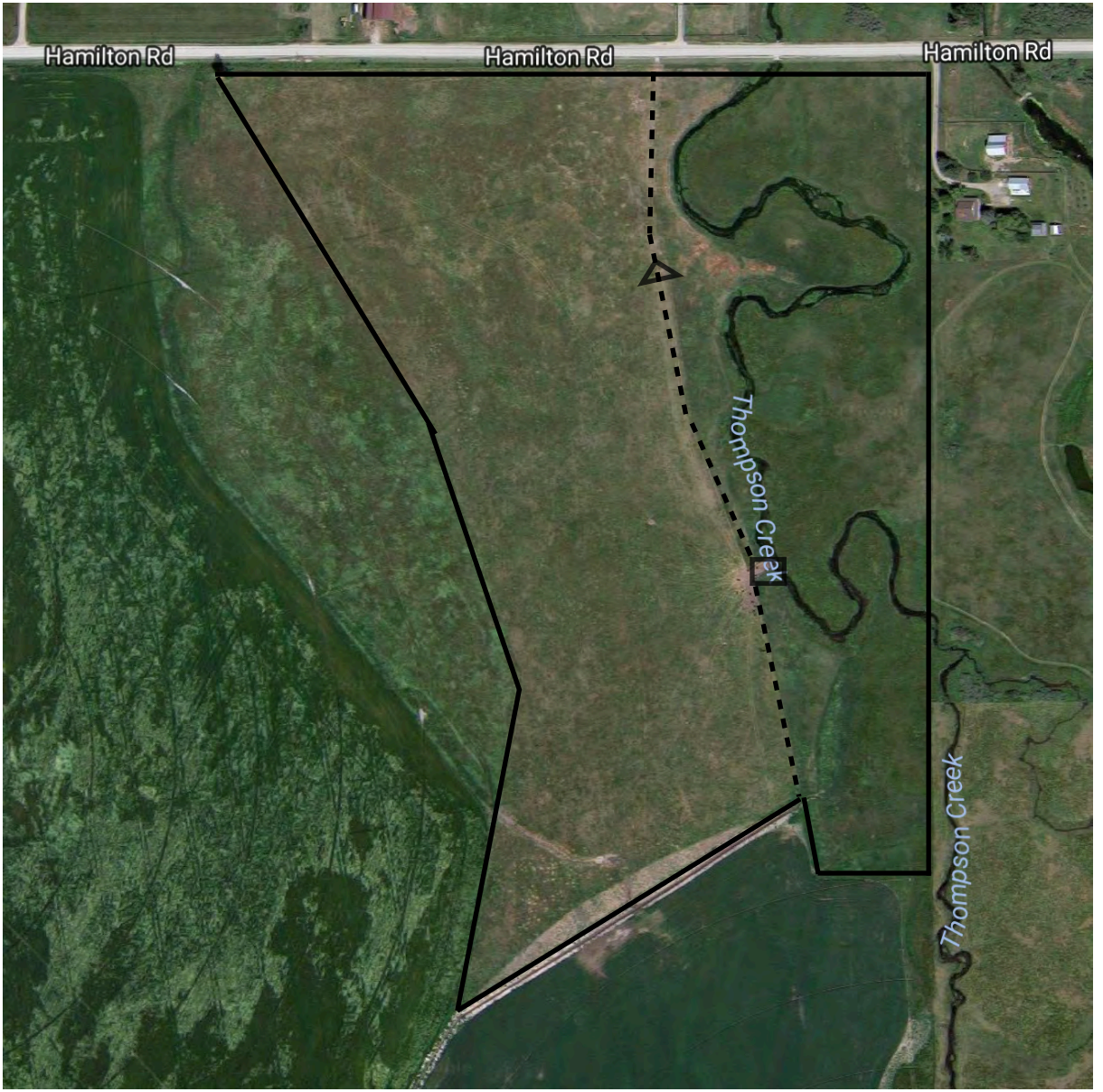
Figure 6

Figure 7

Figure 8

Thompson Spring Creek (022-07)

Figure 9



_____ = Pasture boundary
- - - - - - - - - = Subdivision of pasture
= Gate
= Armored stanchion water access

FFIP PROJECT & LAND USE MONITORING FORM

Project #:	024-11	**Project Title:**	Willow Creek
Date:	8/24/2017	**Evaluator:**	Carol Endicott, Kyrsten Wolterstorff
Waterbody Name:	Willow Creek	**Project Type:**	Channel Reconstruction

Riparian, channel re , bank stabilization, passage, (Some projects may have multiple types)

Land Use Information (all projects)

	Yes	No	Unk.	NA
Does the project have a signed project agreement?	✓			
Land use type (Livestock, Residential, Public, Recreational, Agriculture, Timber, Other)	Residential			
Was a PFC assessment conducted?		✓		
Has the trend in riparian condition improved since last visited or last photo?	✓			
Is project in overall compliance with project agreement?	✓			
Comments	See attached file for photo points			

Photo Points

Frame #	Lat	Long	Facing?	Scene description/Previous Photo
	See attached file			

Riparian (Fencing) Projects ☐

Does the project agreement include grazing stipulations?(No, Exclosure, Grazing plan, Unk, 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)				
Density of riparian shrubs present. (None, Sparse, Common, Abundant, NA)				
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)				

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, Into stream, Into bank, Unknown)	
Is 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)	Intermediate
Condition of habitat enhancement structures. (Stable, Eroding, 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)	Straw wattles
Condition of habitat structures? (Stable, Eroded, Unknown)	Stable

Comments:

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

At upstream end: Beavers moved in shortly after project was complete, obscuring most of the constructed channel and causing slow moving water. Unable to take matching photo looking downstream towards culvert 1 due to marsh.

Culvert 1/ Old Burdette property: Channel is still narrow and deep. Gravel is still visible, but with heavy siltation. Very dense sedges and no sign of straw wattles.

Culvert 2 and 3: Aquatic macrophytes and silt choking stream, but some gravel still visible. Gradient increasing and more gravel becoming visible.

Olson property (between 3 and 4): Sparse gravel present in patches, no evidence of redds. Aquatic plants are ranunculus. Used to be where majority of spawning occurred.

Culvert 4: Good spawning gravel is silted in and unused. Wattles and stakes visible, but grown over by plants. Spotted frog seen. Good stream bed and gravel, especially with gradient increase. Landowner says no fish present in years, believes fish may not be able to access creek unless high water (we believe differently).

Culvert 5: Wattles in shade not as grown over as still very visible.

Excellent habitat and spawning areas at confluence with Soda Butte Creek.

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?	

Frame #	Lat	Long	Facing	Scene description
1	45.00748	-109.98814	South	Upstream end of project reach
2	45.00720	-109.98827	North	Facing upstream from culvert 1
3	45.00720	-109.98827	South	Facing downstream from culvert 1
4	45.00717	-109.98832	West	Sedges downstream from culvert 1 on old Burdette property
5	45.00717	-109.98832	South	Bridge on old Burdette property, matches old photo
6	45.00706	-109.98857	North	Facing upstream from culvert 2
7	45.00706	-109.98857	South	Facing downstream from culvert 2, culvert 3 in background
8	45.00702	-109.98867	North	Facing upstream from culvert 3, culvert 2 in background
9	45.00702	-109.98867	South	Facing downstream from culvert 3
10	45.00698	-109.98885	South	Facing downstream towards Olson property
11	45.00690	-109.98892	South	Facing downstream on Olson property, culvert 4 at road crossing, matches old photo
12	45.00680	-109.98905	East	Spawning gravel on Olson property
13	45.00674	-109.98923	North	Facing upstream from culvert 4 towards Olson property, matches old photo
14	45.00674	-109.98923	South	Facing downstream from culvert 4, matches old photo
15	45.00665	-109.98939	South	Facing downstream, taken from south of culvert 4 by blue propane tank, matches old photo
16	45.00652	-109.98962	South	Facing downstream, taken from south of culvert 4, showing exposed wattles
17	45.00637	-109.98980	North	Facing upstream, taken from south of culvert 4 by jack-leg fence, matches old photo
18	45.00637	-109.98980	West	Spawning gravel
19	45.00637	-109.98980	North	Looking upstream from jack leg fence, showing exposed wattles
20	45.00626	-109.98991	South	Looking downstream, taken from just north of culvert 5, showing exposed wattles in the shade
21	45.00626	-109.99012	North	Looking upstream from culvert 5
22	45.00626	-109.99012	South	Looking downstream from culvert 5
23	45.00602	-109.99032	West	Looking downstream towards confluence with Soda Butte Creek
24	45.00602	-109.99032	North	Sand bar near confluence
25	45.00614	-109.99052	East	Looking upstream from confluence with Soda Butte Creek, sand bar in background

Figure 1

Figure 2

Figure 3

Figure 4

Figure 5

Figure 6

Figure 7

Figure 8

Figure 9

Figure 10

Figure 11

Figure 12

Figure 13

Figure 14

Figure 15

Figure 16

Figure 17

Figure 18

Figure 19

Figure 20

Figure 21

Figure 22

Figure 23

Figure 24


#1
#2
#3
#4
#5
Bridge
Fence
Olson Property
Old Burdette Property
Upstream end
N