Montana Fish, Wildlife & Parks

1400 South 19th Avenue
Bozeman, MT 59718

August 27, 2014

To: FWP Region 3 EA Standard Distribution List
Environmental Quality Council
Montana Department of Environmental Quality
Montana Department of Fish, Wildlife and Parks
Fisheries Habitat Bureau Chief, Helena
Region 3 Headquarters, Bozeman
Julie Cunningham
Kevin Hughes
Mike Vaughn
Montana Department of Natural Resources & Conservation
Trust Land Division
Montana State Library, Helena
MT Environmental Information Center
Montana Audubon Council
Montana Wildlife Federation
Madison Conservation District
U.S. Army Corp of Engineers, Helena
U.S. Fish and Wildlife Service, Helena
State Historic Preservation Office, Helena
Madison-Gallatin Chapter Trout Unlimited
Madison River Foundation
Madison Valley History Association
Imerys Talc, Inc.
Walsh Ranch
Greater Yellowstone Coalition

Ladies and Gentlemen:

Please find enclosed an Environmental Assessment (EA) prepared for the Ruby Creek Stream Channel Restoration Project. The intent of the project is eliminate stream sedimentation from a 7-foot vertical eroding stream bank, and to eliminate the potential of an historic homestead structure collapsing into the stream by returning the active stream channel to the existing floodplain.

Please submit any comments by 5:00 P.M., September 27, 2014 to Montana Fish, Wildlife & Parks at the address provided on page 17 of the EA. The funding for this project is through grants from PPL Montana and the Greater Yellowstone Coalition. Please note that this draft EA will be considered as final if no

substantive comments are received by the deadline listed above.

Sincerely,

27 May 2014

Robert D. Harrington
Acting Region Three Supervisor

Montana Fish, Wildlife & Parks

Draft
Environmental Assessment

Ruby Creek Stream Channel Restoration

August 28, 2014

Draft Environmental Assessment
CHECKLIST

PART I. PROPOSED ACTION DESCRIPTION

1. Type of proposed state action:

Fish, Wildlife & Parks (FWP) is proposing to re-route a 120-foot section of Ruby Creek away from an eroding 7-foot vertical bank where an historic homestead cabin is perched on the precipice of the bank (cover photo). Unless the situation is addressed, this cabin is likely to collapse into the stream over a period of years, introducing debris, timbers, chicken wire and other obstructions into the active stream channel. If approved, this proposal will re-route the stream channel into the existing floodplain to the south of its current location, constructed to appropriate slope and length and using appropriate local materials for channel stability (Appendix A). Materials removed during the construction of the new channel will be used to develop the existing channel into floodplain. Ruby Creek is the site of an on-going westslope cutthroat trout (WCT) reintroduction project.

The project site is approximately 25 miles south of Ennis on the Montana Fish, Wildlife & Parks Wall Creek Game Range, along Ruby Creek, a tributary to the Madison River, Township 9 South, Range 1 West, Section 10, in Madison County.

One goal within Montana Fish, Wildlife and Park's six-year operations plan for the fisheries program is to "restore and enhance degraded fisheries habitats" by implementing habitat restoration projects. This proposed project would help meet this goal and would prevent further potential stream channel damage by eliminating the likelihood of the historic structure toppling into the stream as the bank continues to erode in future years, creating debris plugs which could cause further lateral erosion or down cutting, and sedimentation.

Ruby Creek has a base flow of about 10 cubic-feet-per-second (cfs). The proposed project site was observed during the ongoing WCT reintroduction project. The drainage is entirely on public land except for a very short length of stream on property owned by Imerys Talc, Inc (Figure 1). Historic structures along the stream include the McAtee Homestead, which was inventoried and assessed for historic and cultural values in 2013 (Appendix B).

2. Agency authority for the proposed action:

The Montana Code Annotated (MCA) 87-1-201 requires that FWP supervise fish management and gives authority to spend collected resources for the purpose of their management, of which habitat restoration is a part. MCA 87-1-257 directs FWP to administer a river restoration program that implements physical projects to improve rivers and their associated lands in order to conserve and enhance fish habitat in cooperation with individuals and conservation districts, and MCA 75-7-101 provides protection to natural rivers and streambeds to keep sedimentation to a minimum.

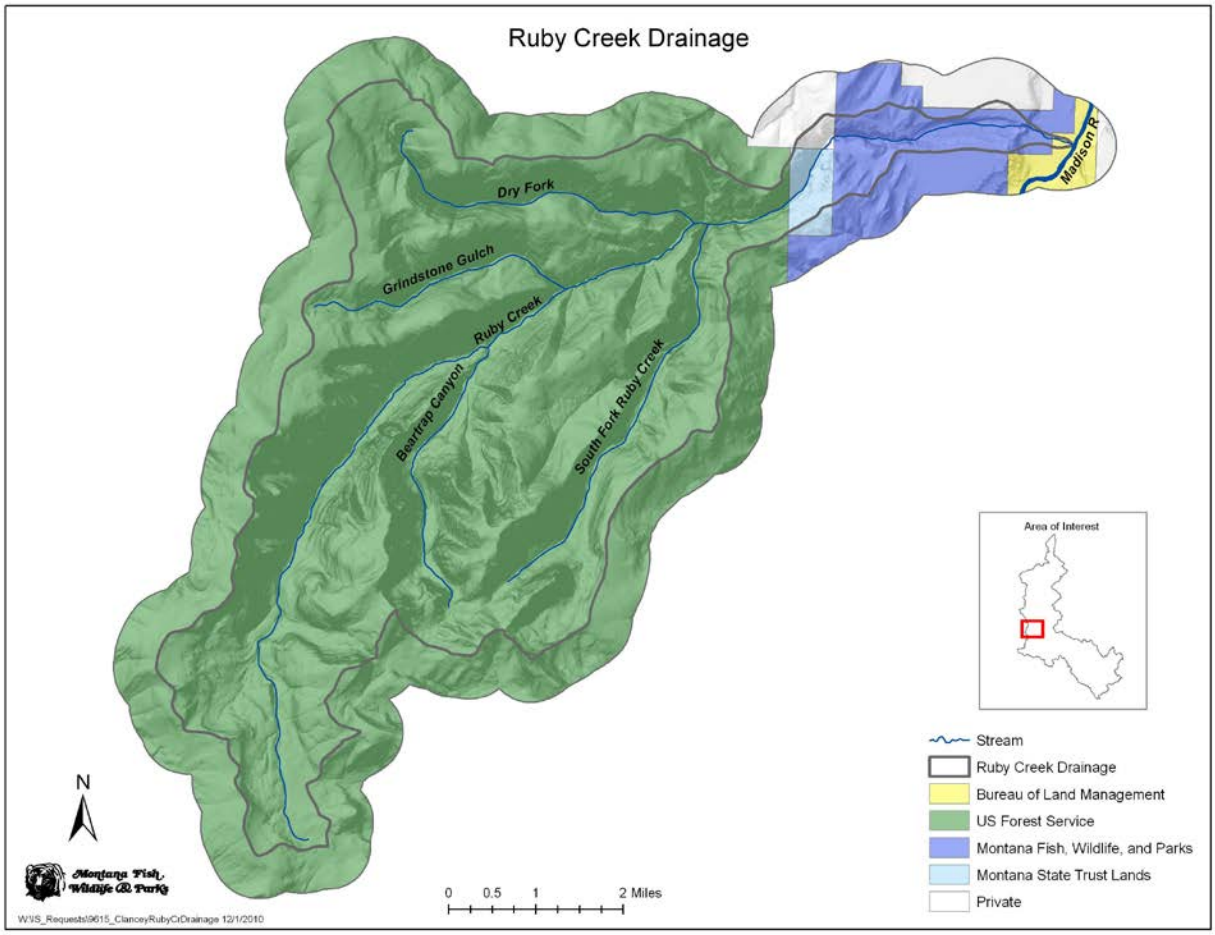


Figure 1. Map depicting the land ownership within the Ruby Creek Drainage and the location of Ruby Creek within the Madison River drainage.

3. Name, address and phone number of project sponsor (if other than the agency):

4. Anticipated Schedule:
Estimated Construction Commencement Date: October or November 2014
Estimated Completion Date: October or November 2014
Current Status of Project Design (% complete): 100% (see Appendix A)

5. Location affected by proposed action (county, range and township – included map): The McAtee Homestead is located at Township 9 South, Range 1 West, Section 10, on the Montana Fish, Wildlife & Parks Wall Creek Game Range, approximately 25 miles south of Ennis, along Ruby Creek, which is wholly within Madison County. See Figure 1.

6. Project size -- estimate the number of acres that would be directly affected that are currently:

	Acres		Acres
(a) Developed:		(d) Floodplain	0
Residential	0		
Industrial	0	(e) Productive:	
(existing shop area)		Irrigated cropland	0
(b) Open Space/	0.08	Dry cropland	0
Woodlands/Recreation		Forestry	0
(c) Wetlands/Riparian	0.10	Rangeland	0
Areas		Other	0

8. Permits, Funding & Overlapping Jurisdiction.

(a) Permits: permit applications are in preparation

Agency Name	Permits
Army Corps of Engineers	404
Montana Department of Environmental Quality	318
Montana Fish, Wildlife & Parks	124

(b) Funding:

Agency Name	Funding Amount
PPL Montana, Madison Fisheries Committee	$6,300
Greater Yellowstone Coalition	$6,300

(c) Other Overlapping or Additional Jurisdictional Responsibilities:

Agency Name	Type of Responsibility
Montana Department of Natural Resources & Conservation	Water rights
Montana FWP Wildlife Division	wildlife & land management

9. Narrative summary of the proposed action

Ruby Creek is an approximately 15-mile long stream in the Gravelly Mountain Range with four named tributaries (Figure 1). Of these four, only the South Fork of Ruby Creek is perennially flowing. The site of the proposed action is on the mainstem of Ruby Creek downstream of all tributaries, but upstream of the only irrigation headgate on the stream. The irrigation headgate is approximately ½ mile downstream of the proposed project site, at the mouth of a small canyon. The canyon walls constrict in the area of the headgate, which could be a potential site for debris to accumulate if the historic McAtee homestead were to crumble into the stream and be carried downstream. The structure is being actively undercut (Figure 2). When first observed in 2011, a strip of ground wide enough to walk across remained between the porch of the cabin and the streambank, but that strip

Figure 2. Photos illustrating streambank erosion at the historic McAtee homestead, November 2013 (top) vs July 2014 (bottom).

has collapsed into the stream over the past 3 years, and most notably since Fall 2013. The cabin is constructed of materials such as timbers (Figure 3), boards, bricks and chicken wire that could potentially cause the active stream channel to become plugged, causing further lateral erosion or down cutting of the channel. The homestead is one of several structures at the site (Figure 4).

To prevent these potential and likely impacts, we propose to construct a new stream channel in the floodplain to the south of the existing active channel (Appendix A), using the excavated materials to modify the existing active channel along the vertical bank into floodplain. It is anticipated the work will require one or two days, and will occur in October or November, after the willows have gone dormant for the year.

Figure 3. Photos of the interior of the McAtee homestead, showing original timbers used in construction of the walls and other construction materials.

Figure 4. The historic McAtee Homestead site.

10. Description and analysis of reasonable alternatives:

<u>Alternative A:</u> No Action
The No Action alternative would result in no change to the existing situation. The existing vertical bank will continue to erode, undercutting the homestead structure, causing continued sedimentation of the stream channel and eventual collapse of the structure into the active channel, likely over a period of years.

<u>Alternative B:</u> Proposed Action
The Proposed Action would result in construction of a new stream channel within the floodplain, re-routing the active streamflow to a location where it is not a threat to continued erosion of the vertical bank, and will prevent entrainment of the structure into the stream.

<u>Alternative C:</u> Use rip-rap to harden the existing vertical stream bank without re-routing the active stream channel.
This alternative would reduce or eliminate the erosion of the vertical stream bank and the undercutting of the historic structure, but would result in poor fish habitat along its length and may simply transfer erosive forces downstream.

<u>Alternative D:</u> Demolition of the homestead structure and re-contouring of the stream bank.
This alternative would accomplish the objective of the project, but is not feasible due to the historic nature of the homestead structure and the requirements of state agencies under 22-3-4 MCA.

11. Evaluation and listing of mitigation, stipulation, or other control measures enforceable by the agency or another government agency: The entire project area is on FWP's Wall Creek Game Range. Agencies that will review permit applications are:

- Montana FWP, 124 permit for any agency conducting an activity that may affect the natural existing shape and form of any stream or its banks or tributaries.
- Montana DEQ, 318 permit for short term exemption from turbidity standards
- U.S Army Corps of Engineers, 404 permit to restore and maintain chemical, physical and biological integrity of the nation's waterways.

PART II. ENVIRONMENTAL REVIEW CHECKLIST

Evaluation of the impacts of the Proposed Action including secondary and cumulative impacts on the Physical and Human Environment.

A. PHYSICAL ENVIRONMENT

1. LAND RESOURCES Will the proposed action result in:	IMPACT					
	Unknown	None	Minor	Potentially Significant	Can Impact Be Mitigated	Comment Index
a. Soil instability or changes in geologic substructure?		X				
b. Disruption, displacement, erosion, compaction, moisture loss, or over-covering of soil, which would reduce productivity or fertility?			X		Yes	1b.
c. Destruction, covering or modification of any unique geologic or physical features?		X				
d. Changes in siltation, deposition or erosion patterns that may modify the channel of a river or stream or the bed or shore of a lake?			X		Yes	1d.
e. Exposure of people or property to earthquakes, landslides, ground failure, or other natural hazard?		X				

1b. Floodplain vegetation and soil excavated during construction of the new stream channel will be used to build floodplain adjacent to the vertical bank.

1d. The specific purpose of this project is to modify a stream channel to reduce erosion and floodplain abandonment. After completion of the project, chronic erosion at the site and the threat of the homestead structure collapsing into the stream will be remediated, eliminating the potential of the building materials from becoming in-channel debris that could cause channel blockage and additional lateral erosion.

2. **AIR** **Will the proposed action result in:**	**IMPACT ∗**					
	Unknown	**None**	**Minor**	**Potentially Significant**	**Can Impact Be Mitigated**	**Comment Index**
a. Emission of air pollutants or deterioration of ambient air quality? (Also see 13 (c).)		X				
b. Creation of objectionable odors?		X				
c. Alteration of air movement, moisture, or temperature patterns or any change in climate, either locally or regionally?		X				
d. Adverse effects on vegetation, including crops, due to increased emissions of pollutants?		X				
e. For P-R/D-J projects, will the project result in any discharge, which will conflict with federal or state air quality regulations? (Also see 2a.)		X				

3. **WATER** **Will the proposed action result in:**	**IMPACT**					
	Unknown	**None**	**Minor**	**Potentially Significant**	**Can Impact Be Mitigated**	**Comment Index**
a. Discharge into surface water or any alteration of surface water quality including but not limited to temperature, dissolved oxygen or turbidity?			X		Yes	3a.
b. Changes in drainage patterns or the rate and amount of surface runoff?		X				
c. Alteration of the course or magnitude of floodwater or other flows?			X		Yes	3c.
d. Changes in the amount of surface water in any water body or creation of a new water body?		X				
e. Exposure of people or property to water related hazards such as flooding?		X				

f. Changes in the quality of groundwater?		X				
g. Changes in the quantity of groundwater?		X				
h. Increase in risk of contamination of surface or groundwater?		X				
i. Effects on any existing water right or reservation?		X			NA	3i.
j. Effects on other water users as a result of any alteration in surface or groundwater quality?		X				
k. Effects on other users as a result of any alteration in surface or groundwater quantity?		X				
l. For P-R/D-J, will the project affect a designated floodplain? (Also see 3c.)		NA				
m. For P-R/D-J, will the project result in any discharge that will affect federal or state water quality regulations? (Also see 3a.)		NA				

3a. A short term increase in turbidity will occur during stream channel construction and floodplain construction. A 318 Authorization from Montana Department of Environmental Quality will be obtained and all turbidity requirements specified therein will be followed such that the Short Term Water Quality Standard for Turbidity Related to Construction Activity is met.

3c. The intent of this project is to slightly modify the course of runoff to prevent further erosion of the vertical stream bank. Existing stream channel length and slope will effectively be maintained with the newly constructed stream channel. Streamflow timing and magnitude will remain unchanged from natural after completion of the project.

3i. Implementation of this project will not affect existing Ruby Creek water rights.

4. VEGETATION Will the proposed action result in?	IMPACT					
	Unknown	None	Minor	Potentially Significant	Can Impact Be Mitigated	Comment Index
a. Changes in the diversity, productivity or abundance of plant species (including trees, shrubs, grass, crops, and aquatic plants)?			X		Yes	4a.
b. Alteration of a plant community?			X		Yes	See 4a.
c. Adverse effects on any unique, rare, threatened, or endangered species?		X				
d. Reduction in acreage or productivity of any agricultural land?		X				
e. Establishment or spread of noxious weeds?		X			Yes	4e.
f. For P-R/D-J, will the project affect wetlands, or prime and unique farmland?		X				
g. Other:		X				

4a. Because the material excavated for the new stream channel will be used to construct the floodplain, a change in diversity is not expected and a net change in abundance will not occur during or as a result of construction.

4b. See 4a.

4e. Vegetation and soil used to construct the new floodplain will be excavated from the site of the new stream channel. Both sites will be monitored and maintained to prevent establishments of noxious weeds.

5. **FISH/WILDLIFE** **Will the proposed action result in:**	**IMPACT**					
	Unknown	**None**	**Minor**	**Potentially Significant**	**Can Impact Be Mitigated**	**Comment Index**
a. Deterioration of critical fish or wildlife habitat?		X			NA	5a.
b. Changes in the diversity or abundance of game animals or bird species?		X				
c. Changes in the diversity or abundance of nongame species?		X				
d. Introduction of new species into an area?		X				
e. Creation of a barrier to the migration or movement of animals?		X				
f. Adverse effects on any unique, rare, threatened, or endangered species?		X				
g. Increase in conditions that stress wildlife populations or limit abundance (including harassment, legal or illegal harvest or other human activity)?		X				
h. For P-R/D-J, will the project be performed in any area in which T&E species are present, and will the project affect any T&E species or their habitat? (Also see 5f.)		NA				
i. For P-R/D-J, will the project introduce or export any species not presently or historically occurring in the receiving location? (Also see 5d.)		NA				

5a. Improvements to fish habitat will result from this project by reducing erosion of the vertical stream bank and the resultant sedimentation of riffles and pools, and by eliminating the likelihood of building materials from entering the active stream channel and causing future lateral or vertical erosion.

B. HUMAN ENVIRONMENT

6. NOISE/ELECTRICAL EFFECTS Will the proposed action result in:	IMPACT					
	Unknown	None	Minor	Potentially Significant	Can Impact Be Mitigated	Comment Index
a. Increases in existing noise levels?			X		Yes	6a.
b. Exposure of people to serve or nuisance noise levels?		X				
c. Creation of electrostatic or electromagnetic effects that could be detrimental to human health or property?		X				
d. Interference with radio or television reception and operation?		X				

6a. A minor and short-term increase in noise caused by the operation of normal construction equipment (i.e., tracked excavators, etc.) is expected. Construction will occur in a remote area, far away from any populated area or utilities, and will be limited to daylight hours.

7. LAND USE Will the proposed action result in:	IMPACT					
	Unknown	None	Minor	Potentially Significant	Can Impact Be Mitigated	Comment Index
a. Alteration of or interference with the productivity or profitability of the existing land use of an area?		X			NA	7a.
b. Conflicted with a designated natural area or area of unusual scientific or educational importance?		X				
c. Conflict with any existing land use whose presence would constrain or potentially prohibit the proposed action?		X				
d. Adverse effects on or relocation of residences?		X				

7a. Irrigation and stockwater may still be withdrawn from the stream during construction. There will be no affect on withdrawal timing, water quantity or water quality. There may be a slight increase in turbidity of the water at the point of diversion

approximately ½ mile below the construction site, but any turbidity will be settled out before the water is accessible to its end-users.

8. RISK/HEALTH HAZARDS **Will the proposed action result in:**	**IMPACT**					
	Unknown	**None**	**Minor**	**Potentially Significant**	**Can Impact Be Mitigated**	**Comment Index**
a. Risk of an explosion or release of hazardous substances (including, but not limited to oil, pesticides, chemicals, or radiation) in the event of an accident or other forms of disruption?		X			NA	8a.
b. Affect an existing emergency response or emergency evacuation plan, or create a need for a new plan?		X				
c. Creation of any human health hazard or potential hazard?		X				
d. For P-R/D-J, will any chemical toxicants be used? (Also see 8a)		X				

8a. All machinery and equipment operated near flowing waters will be required to be inspected daily for leaks of any fluids and power washed before be mobilized to the construction site. FWP would continue to monitor for and control the noxious weeds within the area through the use of herbicides and mechanical means per the methods described in FWP's Statewide Integrated Weed Management Plan. Application of herbicides would be in compliance with application guidelines and applied by trained applicators to reduce the risk of chemical spills or water contamination.

9. COMMUNITY IMPACT **Will the proposed action result in:**	**IMPACT**					
	Unknown	**None**	**Minor**	**Potentially Significant**	**Can Impact Be Mitigated**	**Comment Index**
a. Alteration of the location, distribution, density, or growth rate of the human population of an area?		X				
b. Alteration of the social structure of a community?		X				
c. Alteration of the level or distribution of employment or community or personal income?		X				
d. Changes in industrial or commercial		X				

activity?						
e. Increased traffic hazards or effects on existing transportation facilities or patterns of movement of people and goods?		X				

10. <u>PUBLIC SERVICES/TAXES/UTILITIES</u> **Will the proposed action result in:**	**IMPACT**					
	Unknown	**None**	**Minor**	**Potentially Significant**	**Can Impact Be Mitigated**	**Comment Index**
a. Will the proposed action have an effect upon or result in a need for new or altered governmental services in any of the following areas: fire or police protection, schools, parks/recreational facilities, roads or other public maintenance, water supply, sewer or septic systems, solid waste disposal, health, or other governmental services? If any, specify:		X				
b. Will the proposed action have an effect upon the local or state tax base and revenues?		X				
c. Will the proposed action result in a need for new facilities or substantial alterations of any of the following utilities: electric power, natural gas, other fuel supply or distribution systems, or communications?		X				
d. Will the proposed action result in increased use of any energy source?		X				
e. Define projected revenue sources		X				
f. Define projected maintenance costs.		X			NA	10f

10f. The area is managed by Montana FWP as a wildlife game refuge and big game wintering area. The proposed project will have no impact on those uses and will not result in any additional maintenance costs. In fact, the completed project may reduce future maintenance costs by preventing incorporation of materials into the stream that could cause lateral migration or downcutting of the stream channel, or interfere with or damage the irrigation headgate and water withdrawal.

11. AESTHETICS/RECREATION **Will the proposed action result in:**	**IMPACT**					
	Unknown	**None**	**Minor**	**Potentially Significant**	**Can Impact Be Mitigated**	**Comment Index**
a. Alteration of any scenic vista or creation of an aesthetically offensive site or effect that is open to public view?		X				11a.
b. Alteration of the aesthetic character of a community or neighborhood?		X				
c. Alteration of the quality or quantity of recreational/tourism opportunities and settings? (Attach Tourism Report.)		X				
d. For P-R/D-J, will any designated or proposed wild or scenic rivers, trails or wilderness areas be impacted? (Also see 11a, 11c.)		NA				

11a. Remediation of the eroding stream bank will preserve the cultural and historic qualities of the McAtee Homestead and preserve the aesthetics and character of the area for the public.

12. CULTURAL/HISTORICAL RESOURCES **Will the proposed action result in:**	**IMPACT**					
	Unknown	**None**	**Minor**	**Potentially Significant**	**Can Impact Be Mitigated**	**Comment Index**
a. Destruction or alteration of any site, structure or object of prehistoric historic, or paleontological importance?	X				Yes	12a.
b. Physical change that would affect unique cultural values?	X				Yes	See 12a.
c. Effects on existing religious or sacred uses of a site or area?	X				Yes	See 12a.
d. For P-R/D-J, will the project affect historic or cultural resources? Attach SHPO letter of clearance. (Also see 12.a.)		NA				

12a. A cultural inventory was completed prior to this EA (Appendix B), and no impacts are anticipated.

SIGNIFICANCE CRITERIA

13. SUMMARY EVALUATION OF SIGNIFICANCE **Will the proposed action, considered as a whole:**	**IMPACT**					
	Unknown	**None**	**Minor**	**Potentially Significant**	**Can Impact Be Mitigated**	**Comment Index**
a. Have impacts that are individually limited, but cumulatively considerable? (A project or program may result in impacts on two or more separate resources that create a significant effect when considered together or in total.)		X				
b. Involve potential risks or adverse effects, which are uncertain but extremely hazardous if they were to occur?		X				
c. Potentially conflict with the substantive requirements of any local, state, or federal law, regulation, standard or formal plan?		X				
d. Establish a precedent or likelihood that future actions with significant environmental impacts will be proposed?		X				
e. Generate substantial debate or controversy about the nature of the impacts that would be created?		X				
f. For P-R/D-J, is the project expected to have organized opposition or generate substantial public controversy? (Also see 13e.)		NA				
g. For P-R/D-J, list any federal or state permits required.		NA				

PART III. NARRATIVE EVALUATION AND COMMENT

Most identified effects of the proposal were positive and minor, and an intended outcome of the proposed action. The primary effects of the project are 1) elimination of the threat that the homestead will collapse into the stream over a period of years, allowing

construction materials to disrupt and alter the course of streamflow and result in new lateral erosion or channel down cutting, and 2) elimination of erosion of the vertical stream bank at the McAtee Homestead site.

The scope of work and physical alterations associated with the proposed action are minor. Completion of the proposed action will result in no change to water rights or irrigation, nor will it have a notable effect on aquatic life other than the elimination of sediment recruitment into the stream from the eroding bank.

The proposed project will have only short-term and minor negative effects primarily related to excavation and construction. These include increases in turbidity not to exceed the Short Term Water Quality Standard for Turbidity Related to Construction Activity and transplanting of riparian vegetation from the new stream channel to the newly created floodplain at the vertical bank. These activities will be mitigated by obtaining and adhering to all relevant permits and monitoring and maintaining against establishment of noxious weeds.

PART IV. PUBLIC PARTICIPATION

1. Public involvement:

The public will be notified in the following manners to comment on this current EA, the proposed action and alternatives:

- Two public notices in the local newspaper, *The Madisonian* and *The Bozeman Daily Chronicle*
- One statewide press release;
- Public notice on the Fish, Wildlife & Parks web page: *http://fwp.mt.gov*.

Copies of this environmental assessment will be distributed to the neighboring landowners and interested parties to ensure their knowledge of the proposed project.

This level of public notice and participation is appropriate for a project of this scope having limited impacts, many of which can be mitigated.

2. Duration of comment period:

The public comment period will extend for (30) thirty days. Written comments will be accepted until 5:00 p.m., August 27, 2014 and can be mailed to the address below:

Pat Clancey
Montana Fish, Wildlife & Parks
100 Prairie Way, #6
P.O. Box 1336
Ennis, MT 59729
Phone: 406-682-7807
Email: pclancey@mt.gov

PART V. EA PREPARATION

1. Based on the significance criteria evaluated in this EA, is an EIS required? (YES/NO)?
If an EIS is not required, explain why the EA is the appropriate level of analysis for this proposed action.

No. Most identified effects were positive and minor, and an intended outcome of the proposed action. The scope of work and physical alterations associated with the proposed action are minor relative to the present condition. Re-routing of the stream channel will cause no fundamental changes to the stream course, water rights or irrigation. The proposed project will have only short-term and minor negative effects primarily related to construction, all of which can be mitigated as described.

2. Person(s) responsible for preparing the EA:

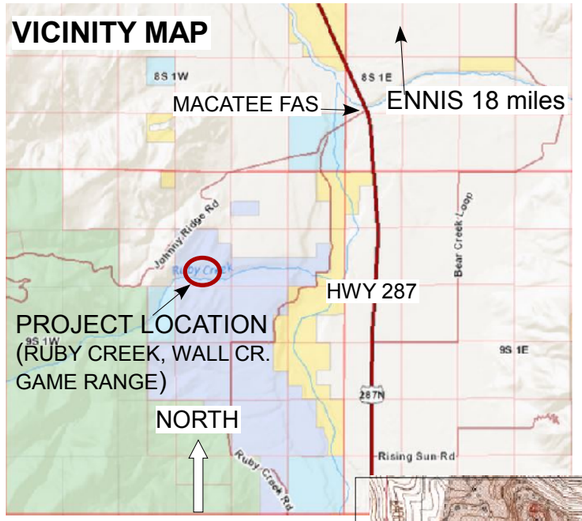
Pat Clancey
Montana Fish, Wildlife & Parks
100 Prairie Way, #6
P.O. Box 1336
Ennis, MT 59729
Phone: 406-682-7807
Email: pclancey@mt.gov

3. List of agencies or offices consulted during preparation of the EA:
Montana FWP Habitat Bureau, Helena, MT
Gillilan Associates, Inc., Bozeman MT
Madison County Floodplain Coordinator, Virginia City, MT
Montana DEQ, Helena MT
U.S. Army Corps of Engineers, Helena MT
Montana State Historic Preservation Office, Helena MT

Appendix A

Ruby Creek Stream Channel Relocation Permit Drawings

VICINITY MAP



PROJECT LOCATION

DRIVING DIRECTIONS

Hwy 287 South from Ennis approximately 18 miles to Macatee Bridge FAS. From FAS, south and west 4.25 miles on 2-track dirt road through Wall Creek Game Management Area.

PROJECT COORDINATES

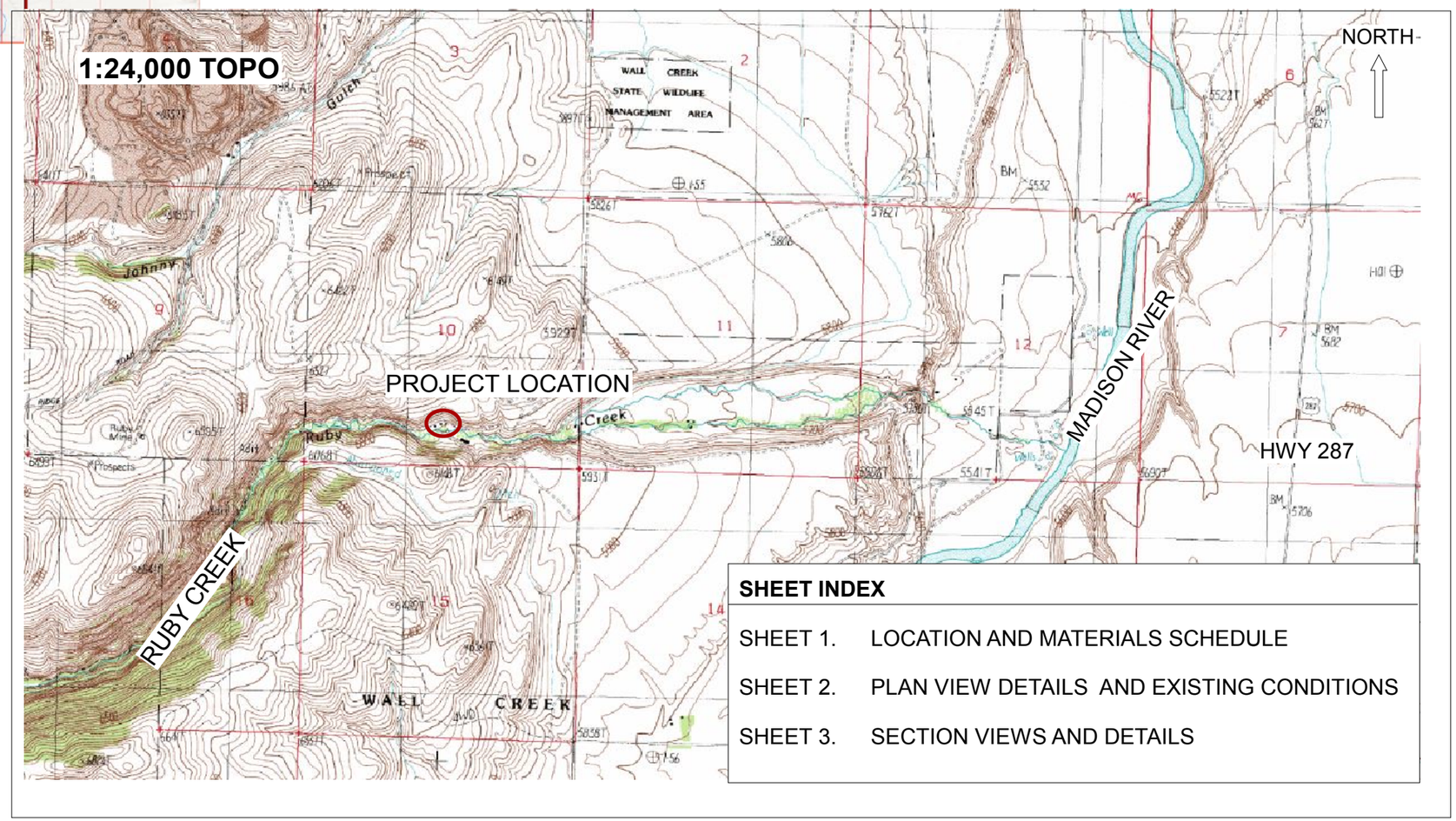
T9S R1W, NE 1/4, SW 1/4, NE 1/4 Section 10

LAT 45.059856 LON -111.709813

PROJECT MATERIALS SCHEDULE

6-12" Cobble	70 CY
Donor Wetland Sod	1,200 Sq. Ft
Salvaged Willow Clumps	30 Ea
Coir Mat 700	120' x 6'
Metal anchor stakes	200

1:24,000 TOPO



SHEET INDEX

SHEET 1. LOCATION AND MATERIALS SCHEDULE

SHEET 2. PLAN VIEW DETAILS AND EXISTING CONDITIONS

SHEET 3. SECTION VIEWS AND DETAILS

SHEET 1 OF 3

MILLER RECREATIONAL

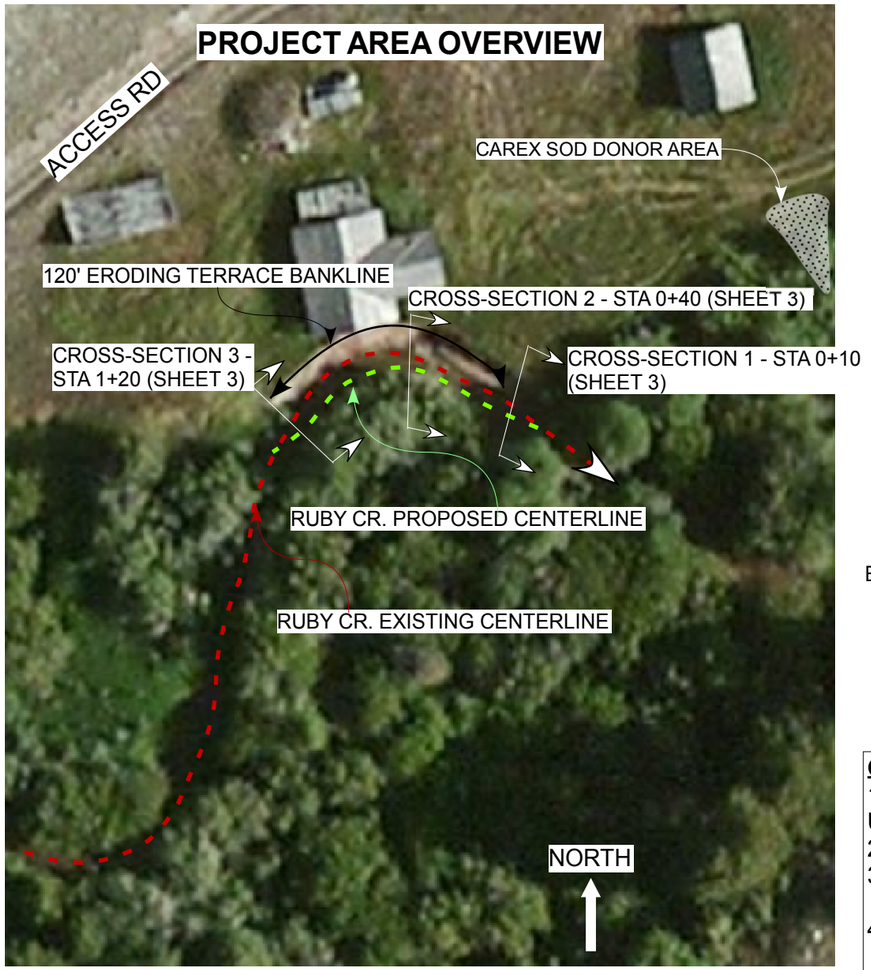
RUBY CREEK BANK STABILIZATION PROJECT

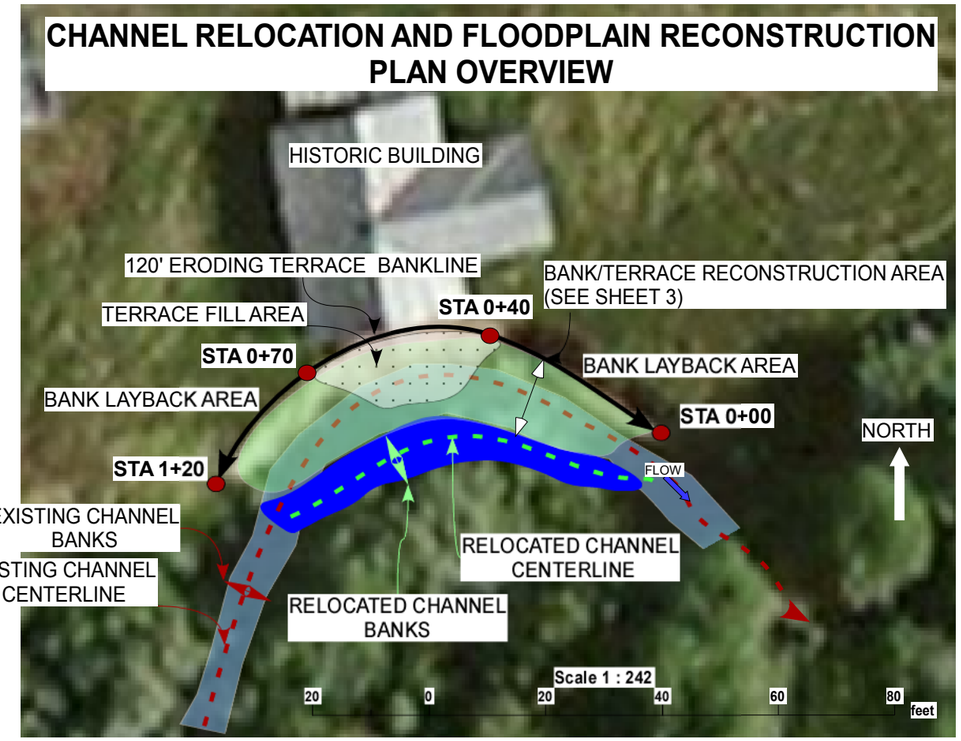
AUGUST 20, 2014

PREPARED BY: SCOTT GILLILAN, GILLILAN ASSOCIATES

IN ASSOCIATION WITH: MILLER RECREATIONAL DEVELOPMENT

FOR: MONTANA FISH, WILDLIFE AND PARKS AND GREATER YELLOWSTONE COALITION





GENERAL TREATMENT NOTES:

1. RELOCATE CENTERLINE CREEK APPROX. 15 FT SOUTH OF CURRENT POSITION WHERE IT IS UNDER-MINING HISTORIC STRUCTURE.
2. SALVAGE AND REPLANT 30 WILLOWS AND SOD IN NEW ALIGNMENT TO NEW LB FLOODPLAIN.
3. CONSTRUCT BIOENGINEERED LEFT BANK AND OVERBANK TERRACE. LAYBACK VERTICAL BANKS, TOPOSOIL AND INSTALL COIR BLANKET FOR EROSION PROTECTION..
4. EXISTING CHANNEL LENGTH = 120 FT; NEW CHANNEL LENGTH = 105 FT; MEANDER GEOMETRY AND SLOPE NOT SIGNIFICANTLY AFFECTED.
5. TOTAL DISTURBED AREA < 0.18 ACRES.

View upstream from Cross-section #1 to #2

EXISTING CONDITIONS:

1. OTHERWISE VERY STABLE, THICKLY VEGETATED CHANNEL HAS MIGRATED INTO A TERRACE THREATENING TO UNDERMINE HISTORIC STRUCTURE.
2. CHANNEL SLOPE = 0.56%
3. SUBSTRATE: D50 = 4", D85 = 9", DMAX= 12"
4. BANKFULL TOPWIDTH = 12 FT; DEPTH 2.15 FT
5. BASEFLOW 11 CFS; BANKFULL Q APPROX. 50 CFS.
6. ERODING LEFT BANK IS 120 LF ; NEAR VERTICAL 6 - 8 FT FACE.

RUBY CREEK BANK STABILIZATION PROJECT

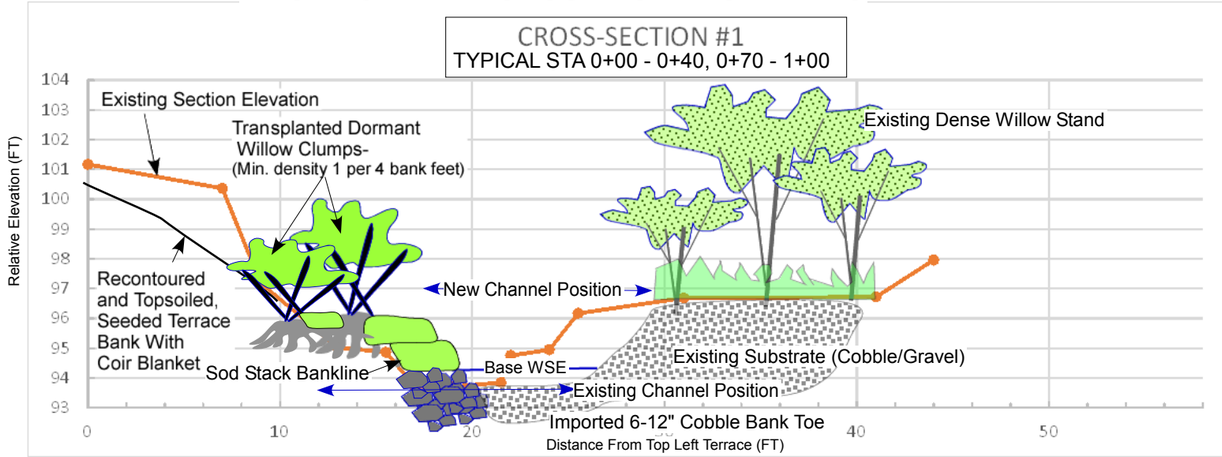
PREPARED BY: SCOTT GILLILAN, GILLILAN ASSOCIATES

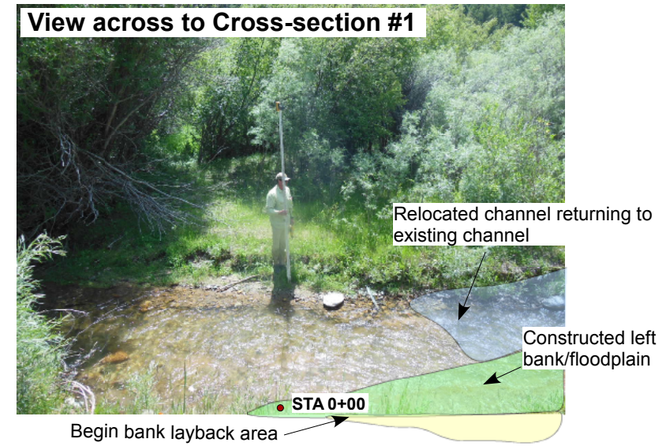
IN ASSOCIATION WITH: MILLER RECREATIONAL DEVELOPMENT

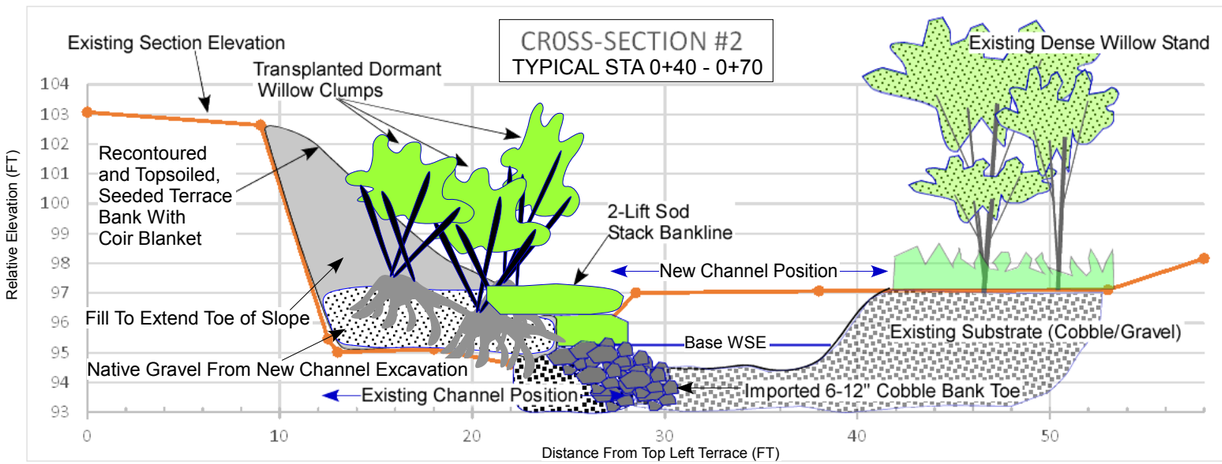
FOR: MONTANA FISH, WILDLIFE AND PARKS AND GREATER YELLOWSTONE COALITION

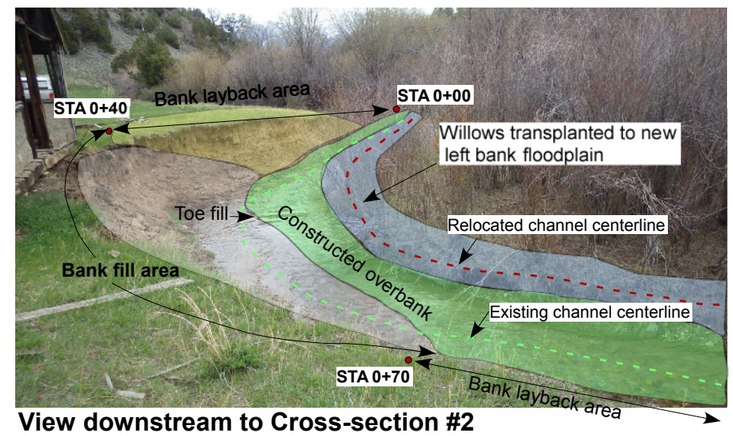
AUGUST 20, 2014

EXISTING AND PROPOSED SECTION VIEWS

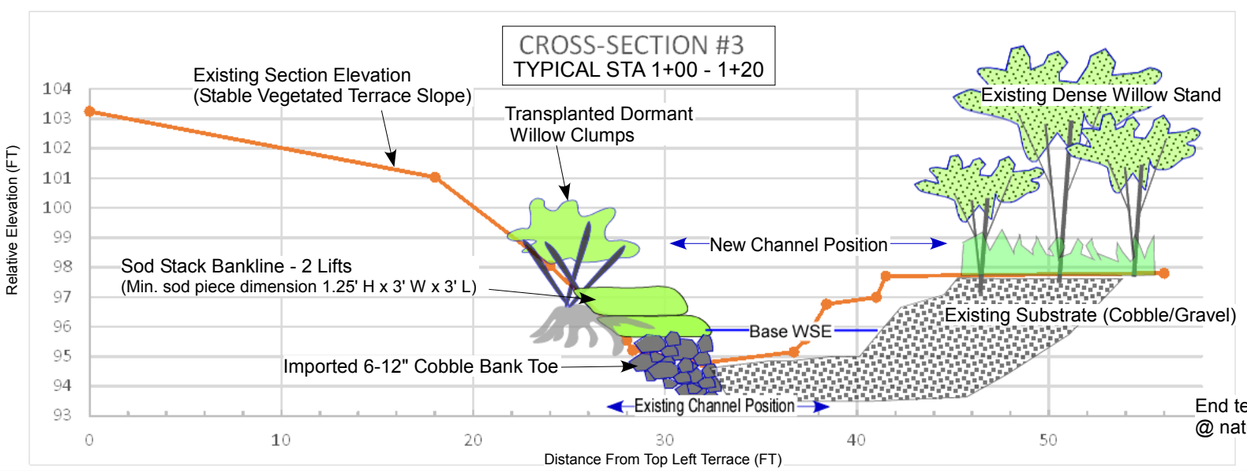


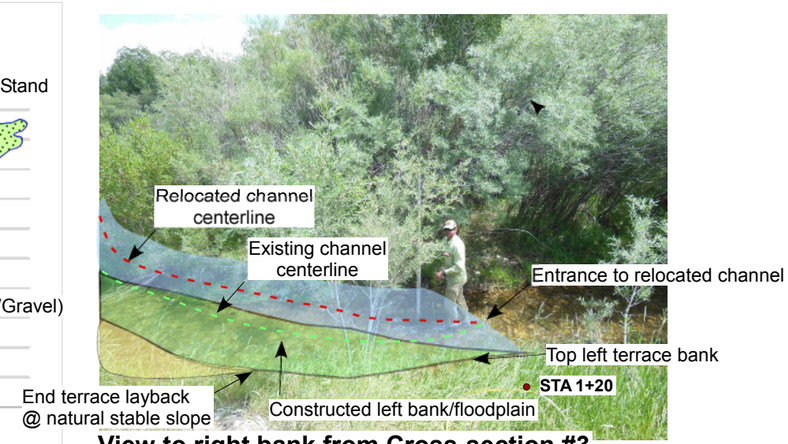






View downstream to Cross-section #2





View to right bank from Cross-section #3

RUBY CREEK BANK STABILIZATION PROJECT

PREPARED BY: SCOTT GILLILAN, GILLILAN ASSOCIATES AUGUST 20, 2014

IN ASSOCIATION WITH: MILLER RECREATIONAL DEVELOPMENT

FOR: MONTANA FISH, WILDLIFE AND PARKS AND GREATER YELLOWSTONE COALITION

SHEET 3 OF 3

Appendix B

McAtee Homestead Cultural Assessment

Montana
Cultural Resource Annotated Bibliography System
DATA ENTRY FORM

DOCUMENT NUMBER: MA | 06 | REPORT DATE: 12/16/2013
County Code | File code | Report No. (SHPO use only)

AUTHOR (Last, First, Middle Initial, et al): Ferguson, David

TITLE: A Cultural Resources Inventory and Assessment of Montana Fish, Wildlife and Parks Proposed Ruby Creek Stream Bank Rehabilitation, Madison County, Montana

AGENCY: 47 OTHER AGENCIES: (1) (2) OTHER COUNTIES: (1) (2)

AGENCY DOCUMENT/PROJECT NO: SURVEY ACRES: 5

DOCUMENT TYPE: X 1. Inventory/Evaluation 3. Overview
2. Mitigation/Excavation 4. Other

KEYWORDS: (SHPO use only) (1)_____(2)_____(3)_____

(4)_____(5)_____(6)_____(7)_____

INVENTORY LOCATION			PROPERTIES	
T	R	S	Site Number	Property/Site Name
9S	1W	10	24MA2327	McAtee Homestead

A Cultural Resources Inventory and Assessment of Montana Fish, Wildlife and Parks Proposed Ruby Creek Stream Bank Rehabilitation, Madison County, Montana

prepared for:

Montana Department of Fish, Wildlife and Parks
100 Prairie Way, #6
Ennis, Montana 59729

prepared by:

David Ferguson
GCM Services, Inc.
P. O. Box 3047
Butte, Montana 59702

December 30, 2013

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INTRODUCTION

Montana Department of Fish, Wildlife and Parks (FWP), Ennis, Montana, is developing a plan for stream bank stabilization and channel rehabilitation on Ruby Creek within the Wall Creek Wildlife Management Area (WMA). The proposed undertaking will involve excavating a new stream channel within the floodplain of Ruby Creek and using the fill from the excavation, along with willow plantings, to stabilize an eroding, vertical cut bank.

FWP contracted with GCM Services, Inc., to conduct the recordation and assessment of historic ranch structures that are located on the rapidly eroding terrace and to conduct a Class III inventory of the proposed project area. The inventory area is located in SWNWSWSW and SWNWSWSE 10, Township 9 South, Range 1 West. The Class III inventory covered about 5 acres.

The project area includes a vertical cut bank about 60 feet (18 m) long by up to 7 feet (2 m) high, as well as an adjacent segment of the flood plain roughly 350 feet long by the width of the drainage bottom (75-200 feet), where the new meandering creek channel will be created. The area of proposed disturbance will be less than 2.5 acres within the drainage bottom south of the site boundary. The purpose of the project is to improve fisheries by creating meanders and reducing siltation, while stabilizing the terrace margin to preserve the cultural property.

David Ferguson conducted a pedestrian inventory of the project area on November 27, 2013. The objective of the inventory was to record and assess the ranch complex and to determine if the proposed undertaking would affect any other cultural sites or artifacts.

This report provides a management summary and a brief description of the physical setting of the area of inventory. Figure 1 shows the location of the project area on the USGS 1:24,000-scale topographic map, *Bucks Nest, MT* (provisional, 1988) and the USDA Gallatin National Forest 1:126,720-scale map (1984).

MANAGEMENT SUMMARY

A review of cultural records revealed that no historical or archaeological sites had been previously recorded within the study area (Murdo 2013). The pedestrian inventory recorded the McAtee homestead complex as well as a prehistoric archaeological component that underlies the ranch complex. This site, 24MA2327, is recommended as eligible to the NRHP under multiple criteria. The site is under imminent threat from erosion by Ruby Creek. The proposed stream bed stabilization project would prevent the loss of this multi-component site. Any impacts to the site caused by the stabilization of the stream bank would be negligible compared to the damage being caused by erosion. It is recommended that the proposed work be carried out at the earliest opportunity. Avoidance of the buildings and minimizing impact to the terrace during reconstruction is also recommended.

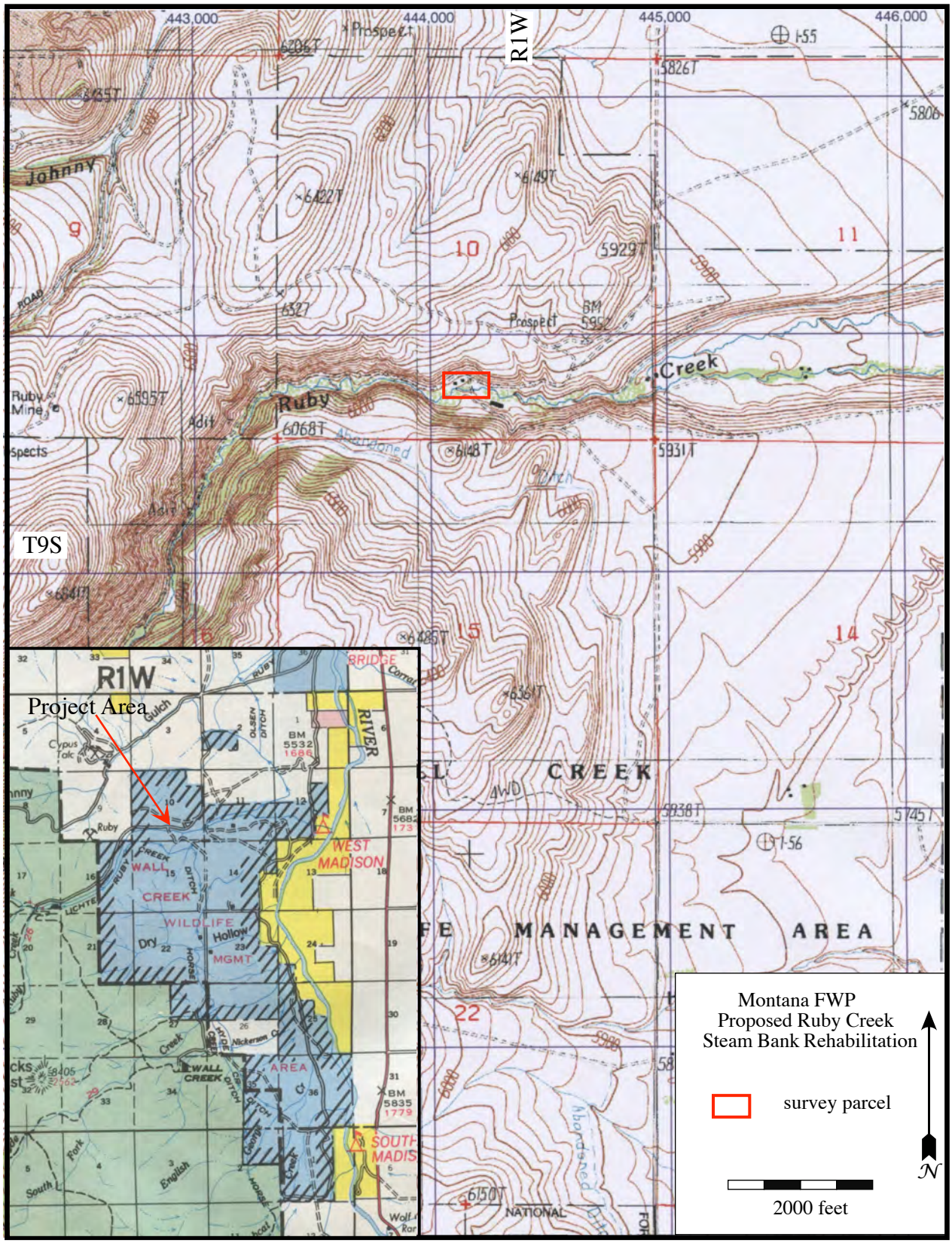

Figure 1. The project area and McAtee Site on the USGS 1:24,000-scale topographic map, *Bucks Nest, MT* (provisional, 1988).

PHYSICAL SETTING

The project area lies on the west side of the Madison Valley about 20 miles south of Ennis, Montana. The site is situated on a small terrace within deeply incised stream drainage. Ruby Creek is a perennial, spring fed tributary of the Madison River. The site is at approximately 5,800 feet elevation. Vegetation at the site consists of rabbitbrush, bluebunch wheatgrass and sparse juniper stands on south facing slopes, thickets of Douglas fir on north facing slopes and a riparian community of willow and dogwood along the creek drainage. The soil in the terrace is pale reddish-brown brown silt. Colluvium from adjacent slopes consists of glacially worn cobbles of a wide variety of mineral types. The proposed channel excavation area is within streambed gravel. Figures 2-5 are photographs showing the project area.

HISTORIC CONTEXT

The nearest place name to the study area is the small community of Cameron, located on Highway 287 about 10 miles due north of the site. In "Montana Place Names from Alzada to Zortman" (Aarstad, et al. 2009), Cameron is named for the Cameron Brothers, who filed for land ownership at Bear Creek under the Desert Land Act in 1886 and opened a general store and post office there in the 1890s. In 1919, the new owner of the store, Frank Falbaum, moved the business six miles west to the newly developed Highway 287 to take advantage of tourist travel to Yellowstone Park. The new location became known as Cameron. In 1938, the McAtee family purchased the store and added a café, rental cabins and a gas station. The McAtee Family sold the business in 1981.

The McAtte homestead, patent no. 867445, was issued to Edward Leonard McAtee Jr. on June 10, 1922 for a 320-acre property under the 1862 Homestead Original Entry act (GLO records). Additional acreage was added under other acts to form the basis for the McAtee ranch. Edwards' uncle, Walter, had previously taken up a homestead south of Ennis and his stories had inspired Edward to move west. Edward L. McAtee Jr. was born in Missouri in 1894 and is listed in the 1920 Federal Census for Cameron, Montana. He was 26 at that time, and had married to Dorothy Doyle McAtee since 1914. They had two small children, Leonard and Alice. His parents were both from Missouri, as were Dorothy's. His listed occupation was "rancher." In the 1930 Census, Edward and Dorothy have five children, adding Mary, James and Thomas. A sixth child, Marjean was born in 1935. In 1930 they are still listed as residents of Cameron, Montana. Edward and Dorothy McAtee operated the "Cameron store and cabins" in addition to ranching. Edward McAtee served as postmaster at Cameron from June 18, 1938 to 1959, when his son Leonard took over. The McAtee family operated a café, bar, cabins and a gas station in Cameron until 1981 (Aarstad, et al. 2009). The McAtee family sold their Ruby Creek ranch to Virgil Lichte in 1941 and moved closer to Cameron. The last known occupant of the property was Norm Dixon, who rented from Lichte in the 1940s (Tony Tezak, personal communication). Edward McAtee died in 1965 and Dorothy died in 1973. Two sons preceded them in death. James (Jim) was killed in Germany in World War II and Thomas died in 1964 (Madison County Historical Association 1976). The property has been abandoned at least since the state acquired the property as part of the Wall Creek Wildlife Management Area (WMA) in 1959-60. There is no indication that the property ever had electrical service.

Figure 2. Overview of the project area and the McAtee Place looking west (Ferguson 11/27/13).

Figure 3. Overview of the site looking east (Ferguson 11/27/13).

Figure 4. View of the cut bank area at the edge of the McAtee house, facing west. Dark soil horizons represent cultural strata at about 40 and 80 cm below surface (Ferguson 11/27/13).

Figure 5. Photo of the cut bank to be stabilized, with Feature 1, (house) of the McAtee Place facing west-northwest (Photo by Pat Clancey, Montana FWP).

METHODS

The cultural resource database at the Montana SHPO (Murdo, December 6, 2013) yielded no records of previous inventory or site documentation in the project area.

The pedestrian survey was equivalent to a Bureau of Land Management Class III Cultural Resource Inventory. The purpose of the inventory was to locate any cultural sites over 50 years old, and to evaluate such sites in terms of the National Register of Historic Places. The area of the proposed work and a surrounding buffer area of about 5 acres was walked. Subsurface exposure was limited due to heavy grass cover. Snow cover and dense willows precluded inspection of the actual floodplain but it was clear from visible areas that this area is meandering stream channels and gravel beds and could not physically contain archaeological deposits.

The McAtee homestead site occupies the majority of the project area. The site was described and photographed in digital format. It was recorded as a multi-component site and assigned Smithsonian site trinomial 24MA2327.

National Register of Historic Places Evaluations

The site was evaluated within the framework of the National Register of Historic Places (NRHP). Factors included are the site's integrity of location, design, setting, materials, workmanship, feeling and association, and whether it meets any of the following criteria:

Criterion A: The site is associated with events that have made a significant contribution to the broad patterns of our history.

Criterion B: The site is associated with the lives of persons significant in our past.

Criterion C: The site embodies the distinctive characteristics of a type, period, or method of construction, or that represented the work of a master, or that possesses high artistic values, or that represented a significant and distinguishable entity whose components may lack individual distinction.

Criterion D: The site has yielded or may be likely to yield information important in prehistory or history.

Prehistoric site eligibility was generally based on Criterion D. The factors considered as to whether a prehistoric site meets Criterion D requirements are: 1) can a temporal context be established by either C14 dating or temporally diagnostic tools; 2) does the site possess good integrity, i.e., the cultural remains are not on an eroded or deflated surface, and any subsurface remains are in an intact cultural level; 3) does it include a variety of cultural remains and not just flakes; 4) does it have any unique or unusual feature types or tools; 5) does it contain intact activity areas; 6) does it contain stratified deposits; and 7) does it contain information that is similar to other nearby sites that may be severely deflated?

RESULTS OF FIELD INVENTORY

FWP originally requested recordation of the homestead complex and its evaluation for the NRHP. The pedestrian inventory resulted in the identification of a prehistoric component within the terrace under the homestead. This was added to the site form, 24MA2327 as a second component. No other cultural resources were found.

Both components appear to be eligible for the NRHP. The historic component is in at least fair condition with all major structures still standing. The complex is a good example of vernacular design of 1920s era homesteads in the region. All major components of the complex are readily identifiable; house, barn, root cellar, chicken coop and storage shed. The historic component is recommended eligible under Criterion C. It may also meet the eligibility requirements under Criterion A for its association and representation of the 1920s settlement and development of Madison County. The McAtee family, although influential in the local history of the community of Cameron, Montana, do not reach the level of historic significance required of Criteria B.

The prehistoric component has not been formerly tested but appears to meet Criterion D, based upon the appearance of three stratified cultural horizons, dateable organics (at least AMS dateable faunal material and soil horizons) and the likelihood of thermal features based upon the presence of fire-cracked rock.

The Cultural Resource Information System (CRIS) site form for the McAtee Site, 24MA2327, is attached as Appendix A. The site form contains additional photographs and other information about the site. A site narrative, below, provides a summary of the site.

SITE NARRATIVE

24MA2327 McAtee Site

Legal Location: WSWNWSWSW and SENESESW 10, T9S R1W
Site Type: multi-component: historic homestead complex and prehistoric occupation
UTM: NAD 83, Zone 12, 444104.6 E 4989803.3 N
Map: Figure 6

Description: The site consists of the remains of the McAtee ranch complex. A cut bank exposure also reveals that an apparent stratified prehistoric archaeological component is underlies the historic site.

The historic component consists of four largely intact structures and a minor outbuilding (shed or chicken coop) that has collapsed. The site covers an area about 70 meters east-west by 25 meters north-south.

Feature 1 is the house or residence, a single story structure with an intersecting gable roof, a shed roofed porch and a shed addition. The house was originally a log structure to which framed additions were added. The interior log walls are exposed where plaster has fallen

away. The logs were caulked with mortar but the corner joint type is not visible. The house has a concrete foundation, at least on the newer additions. It has framed exterior walls covered with concrete stucco applied over a woven wire foundation. The roofing is wood shakes. The rafters are covered at the eves. The shed-roofed, screened-in porch is found on the south side and is 22 ft long by 7 ft wide. A 20 ft by 9 ft shed roof addition is found on the north side. Interior dividing walls are of frame construction. The original log structure was about 24 ft by 24 ft and forms the central part of the structure. The logs are only exposed in small areas so the original log construction technique is not apparent. The interior has a pine wood floor. Window openings consist of a pair of 2 ft by 2 ft (2 light) on the west side, a pair of 2 ft by 4 ft openings on the east side, a pair of 4 ft by 5 ft openings on the south side (opening into the porch), and 2 ft by 2 ft openings on the north and west sides of the shed addition. Entrances are found on the south side porch and on the east side of the shed addition. A wood stove body lies in the structure. The structure appears to be of 1920s-era construction with additions possibly as late as the 1940s.

Feature 2 is a gable-roofed barn / shop building, measuring 20 ft by 20 ft. It has wood shake roofing and vertical board siding. It is a frame structure sitting on rock footings. It has pole rafters with exposed eves. On the south side are four large, hinged doors as well as a hayloft opening in the gable. On the west side is an entrance door and both the west and east sides have screen covered window openings. A tin stovepipe indicates that a wood stove was present at one time.

Feature 3 is a dug out root cellar located about 12 feet north of the house. The structure has a framed entranceway about 3 ½ feet wide by 10 ft long leading to a subterranean room roughly 8 ft by 8 ft. The roof is made of boards over pole rafters and covered with earth. Feature 3a is a collapsed shed structure adjacent to the root cellar. It was a frame structure with rough cut lumber and a wood shake roof, and sat on rock footings. Feature 4 is a shed roofed chicken coop, 32 ft by 12 ft. The framed structure is made of rough cut lumber resting on rock footings. It is divided into three interior rooms. The south-facing wall has nine screen covered window openings, each 2 ft by 2 ft. The structure has horizontal board siding, milled rafters and wood shake roofing. The roof is partially collapsed. Feature 4 is about 160 feet west of Feature 2.

A patent, accession no. 867445, was issued to Edward Leonard McAtee Jr., of Missouri, on June 10, 1922 for this 320-acre property under the 1862 Homestead Original Entry act (GLO records). Additional acreage was added under other acts to form the basis for the McAtee ranch. Edwards' uncle, Walter, had previously taken up a homestead south of Ennis and his stories inspired Edward to move west. Edward L. McAtee Jr. was born in Missouri in 1894 and is listed in the 1920 Federal Census for Cameron, Montana. He was 26 at that time, and had married to Dorothy Doyle McAtee since 1914. They had two small children, Leonard and Alice. His parents were both from Missouri, as were Dorothy's. His listed occupation was "rancher." In the 1930 Census, Edward and Dorothy have five children, adding Mary, James and Thomas. A sixth child, Marjean was born in 1935. In 1930 they are still listed as residents of Cameron, Montana. Edward and Dorothy McAtee operated the "Cameron store and cabins" in addition to ranching. Edward McAtee served as postmaster at Cameron from June 18, 1938 to 1959, when his son Leonard took over. The McAtee family operated a café,

bar, cabins and a gas station in Cameron until 1981 (Aarstad, et al. 2009). The McAtee family sold their Ruby Creek ranch in 1941 and moved closer to Cameron. Edward died in 1965 and Dorothy died in 1973. Two sons preceded them in death. James (Jim) was killed in Germany in World War II and Thomas died in 1964 (Madison County Historical Association 1976).

The property has been abandoned at least since the state acquired the property as part of the Wall Creek Wildlife Management Area (WMA) in 1959-60. There is no indication that the property ever had electrical service.

The prehistoric component was observed in a 1.5 meter high by 20-meter long cut bank on Ruby Creek. Exposed in the vertical cut bank are three distinct bands of organic or charcoal laden soil. The upper of these putative cultural horizons is from 5 to 10 cm thick and consists of a dark gray to very dark gray soil from 10 to 20 cm below the present surface of the terrace. Within this horizon was observed two pieces of rapidly cooled white quartzite. Within the sod roots immediately above this dark soil horizon are pieces of tin and glass, likely associated with the McAtee occupation. A second dark gray soil horizon is seen at about 40 cm below surface. Heat-altered white quartzite was observed in this stratum. A third dark gray soil horizon is seen at about 80 cm below surface. A large bone fragment (probably a bison left calcaneum) is exposed in this stratum, along with white quartzite fire-cracked rock and a couple large rocks that may well be culturally introduced. The fire-cracked rock (FCR) indicates the presence of thermal features in association with these strata. No collections or formal soil profile was made of the cut bank and no testing was performed to try to determine the horizontal extent of the prehistoric cultural deposits. The apparent stratified deposit should be considered potentially significant however, as stratified sites are particularly useful in establishing cultural chronology.

The prehistoric component was not tested. Its maximum horizontal area is limited to the size of the terrace. Its actual extent is unknown.

The vertical cut bank has eroded to the edge of the porch of the McAtee house and it is the intention of Montana FWP to stabilize this bank. Stabilization would be done by digging a new channel within the flood zone of the creek to the south of the present channel and using the removed stream bed material as fill to develop a sloping grade in front of the vertical cut bank. Willows would be planted on the re-contoured slope for long-term stabilization.

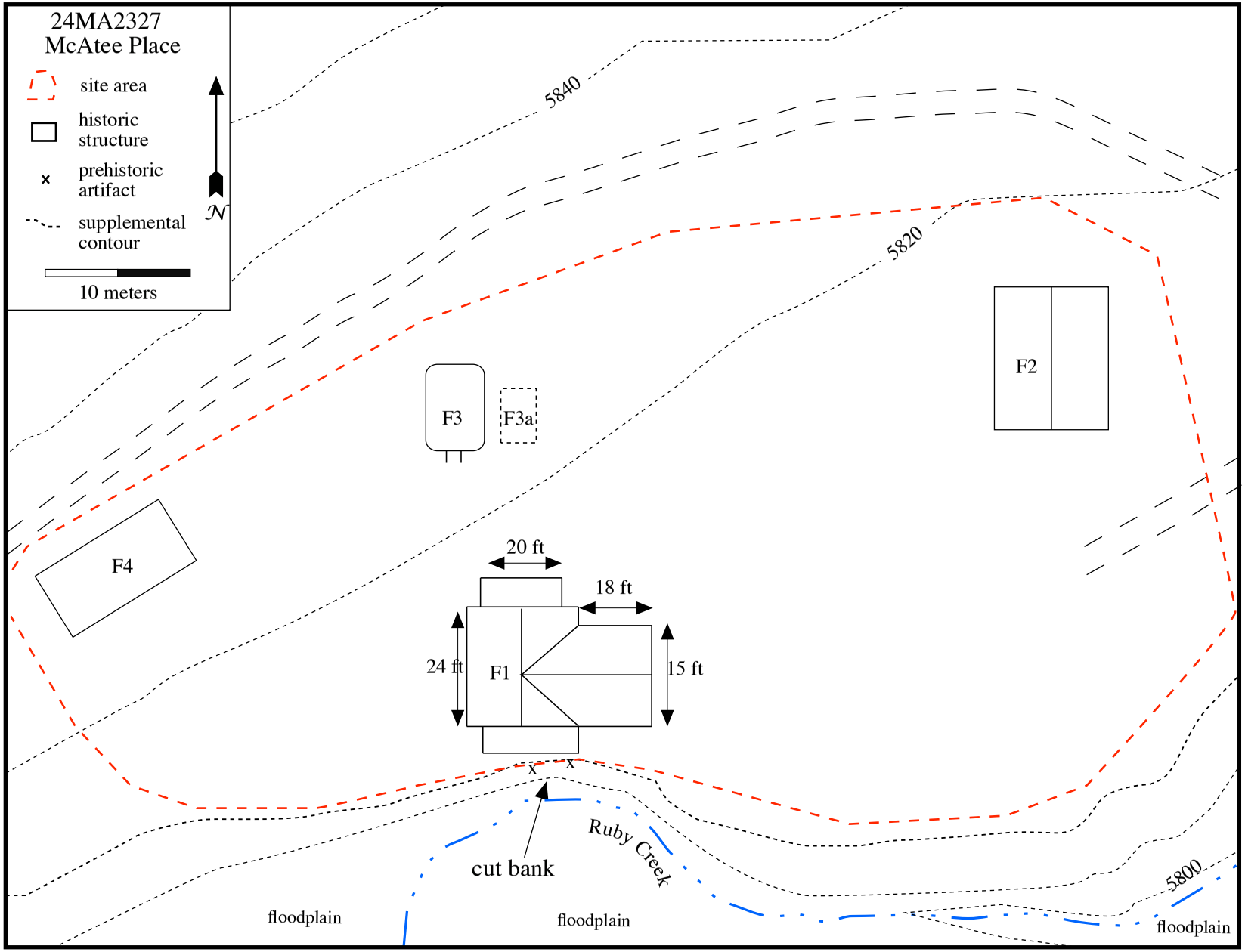

Figure 6. Sketch map of site 24MA2327, the McAtee Site.

CONCLUSIONS AND RECOMMENDATIONS

Site 24MA2327 appears to meet several NRHP criteria of eligibility. The site is clearly threatened by active stream bank erosion. The proposed stream bed rehabilitation project would stabilize the rapidly eroding terrace margin and preserve the historic homestead and whatever is left of the prehistoric component. Taking no action will like result in the loss of a primary structure (the house, Feature 1) and continuing erosion of the terrace margin would perhaps destroy the prehistoric archaeological deposits completely within a few years. The project as proposed will have no adverse effect to the site. Any minor impacts to the cut bank would be clearly offset by the stabilization and preservation of the site.

Avoidance of adverse effects to the site is recommended. It is recommended that the proposed work be conducted while avoiding impacts to historic structures and minimizing impacts to the terrace. In other words, the proposed actions should not jeopardize the sites ability to meet NRHP criteria of eligibility. Burying and re-contouring the face of the cut bank with fill material should be carried out without digging into the cut bank to the extent possible.

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Tony Tezak [grandson of Edward and Mary McAtee]
2013 Personal communication with David Ferguson December 21, 2013.

APPENDIX A:

Montana Cultural Resources Form:
24MA2327, McAtee Place

MONTANA CULTURAL RESOURCES INFORMATION SYSTEM (CRIS) FORM

1. IDENTIFICATION

***required to receive Smithsonian number**

1.1 Smithsonian Number: 24MA2327 **1.2 Field Designation:** Edward McAtee Homestead

1.3 Project Name: Montana FWP: Proposed Ruby Creek Stream Bank Rehabilitation, Madison County, Montana

1.4 Agency Project Number: **1.5 Consultant Project Number:**

2. LOCATION

2.1 Township: 9S **Range:** 1W **Section:** WSWNWSWSW and SENESESW 10 ***2.2 County:** Madison

***2.3 UTM Coordinates:** Zone 12 444104.6 E 4989803.3 N @ northeast corner of house (Feature 1) ***Datum used:** ☐NAD 27 ☒NAD 83

***2.4 Administrative/Surface Ownership:** (Agency/Region/District/Office) Montana Fish, Wildlife and Parks

***2.5 7.5' USGS Map Name, Date:** *Bucks Nest, Montana* (provisional 1988)

2.6 Narrative of access: The site is situated on state land within the Wall Creek Wildlife Management Area, administered by Montana Fish, Wildlife and Parks

2.7 City/Town: about 20 miles south of Ennis, MT **Vicinity of:** Cameron, MT

3. DESCRIPTION

***3.1 Site Category** (choose one)**:** ☒ Prehistoric ☒ Historic ☐Paleontological ☒Combination ☐ Other

***3.2 Site Type** (see recommended site type list, choose all that apply)**:** homestead / ranch complex remains located on a terrace remnant that also contains a subsurface prehistoric archaeological deposit

3.3 Narrative Description of Site: The site consists of the remains of the McAtee ranch complex. A cut bank exposure also reveals that a possibly stratified prehistoric archaeological component underlies the historic structures.

The historic component consists of four largely intact structures and a minor outbuilding (shed or chicken coop) that has collapsed. The site covers an area about 70 meters east-west by 25 meters north-south.

Feature 1 is the house or residence, a single story structure with an intersecting gable roof, a shed roofed porch and a shed addition. The house was originally a log structure to which framed additions were added. The interior log walls are exposed where plaster has fallen away. The logs were caulked with mortar but the corner joint type is not visible. The house has a concrete foundation, at least on the newer additions. It has framed exterior walls covered with concrete stucco applied over a woven wire foundation. The roofing is wood shakes. The rafters are covered at the eves. The shed-roofed, screened-in porch is found on the south side and is 22 ft long by 7 ft wide. A 20 ft by 9 ft shed roof addition is found on the north side. Interior dividing walls are of frame construction. The original log structure was about 24 ft by 24 ft and forms the central part of the structure. The logs are only exposed in small areas so the original log construction technique is not apparent. The interior has a pine wood floor. Window openings consist of a pair of 2 ft by 2 ft (2 light) on the west side, a pair of 2 ft by 4 ft openings on the east side, a pair of 4 ft by 5 ft openings on the south side (opening into the porch), and 2 ft by 2 ft openings on the north and west sides of the shed addition. Entrances are found on the south side porch and on the east side of the shed addition. A wood stove body lies in the structure. The structure appears to be of 1920s-era construction with additions possibly as late as the 1940s.

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Feature 3 is a dug out root cellar located about 12 feet north of the house. The structure has a framed entranceway

about 3 ½ feet wide by 10 ft long leading to a subterranean room roughly 8 ft by 8 ft. The roof is made of boards over pole rafters and is covered with earth. Feature 3a is a collapsed shed structure adjacent to the root cellar. It was a frame structure with rough cut lumber and a wood shake roof, and sat on rock footings. Feature 4 is a shed roofed chicken coop, 32 ft by 12 ft. The framed structure is made of rough cut lumber resting on rock footings. It is divided into three interior rooms. The south-facing wall has nine screen covered window openings, each 2 ft by 2 ft. The structure has horizontal board siding, milled rafters and wood shake roofing. The roof is partially collapsed. Feature 4 is about 160 feet west of Feature 2.

A patent, accession no. 867445, was issued to Edward Leonard McAtee Jr., of Missouri, on June 10, 1922 for this 320-acre property under the 1862 Homestead Original Entry act (GLO records). Additional acreage was added under other acts to form the basis for the McAtee ranch. Edwards' uncle, Walter, had previously taken up a homestead south of Ennis and his stories inspired Edward to move west. Edward L. McAtee Jr. was born in Missouri in 1894 and is listed in the 1920 Federal Census for Cameron, Montana. He was 26 at that time, and had married to Dorothy Doyle McAtee since 1914. They had two small children, Leonard and Alice. His parents were both from Missouri, as were Dorothy's. His listed occupation was "rancher." In the 1930 Census, Edward and Dorothy have five children, adding Mary, James and Thomas. A sixth child, Marjean was born in 1935. In 1930 they are still listed as residents of Cameron, Montana. Edward and Dorothy McAtee operated the "Cameron store and cabins" in addition to ranching. Edward McAtee served as postmaster at Cameron from June 18, 1938 to 1959, when his son Leonard took over. The McAtee family operated a café, bar, cabins and a gas station in Cameron until 1981 (Aarstad, et al. 2009). The McAtee family sold their Ruby Creek ranch to Virgil Lichte in 1941 and moved closer to Cameron. The last known occupant of the property was Norm Dixon, who rented from Lichte in the 1940s. Edward McAtee died in 1965 and Dorothy died in 1973. Two sons preceded them in death. James (Jim) was killed in Germany in World War II and Thomas died in 1964 (Madison County Historical Association 1976). The property has been abandoned at least since the state acquired the property as part of the Wall Creek Wildlife Management Area (WMA) in 1959-60. There is no indication that the property ever had electrical service.

References

Aarstad, Rich, Ellie Arguimbau, Ellen Baumler, Charlene Porsild and Brian Shovers
2009 *Montana Place Names from Alzada to Zortman*. Montana Historical Society Press.

Ancestry.com
1920 US Federal Census
1930 US Federal Census

Madison County Historical Association
1976 "Pioneer Trails and Trials." Artcraft Printers, Butte.

BLM-GLO website, records of the General Land Office (GLO)
1922 Homestead Patent No. 867445.

Tony Tezak, personal communication

The prehistoric component was observed in a 1.5 meter high by 20-meter long cut bank on Ruby Creek. The soil in the cut bank is pale reddish-brown brown silt. Exposed in the vertical cut bank are three distinct bands of organic or charcoal laden soil. The upper of these putative cultural horizons is from 5 to 10 cm thick and consists of a dark gray to very dark gray soil from 10 to 20 cm below the present surface of the terrace. Within this horizon was observed two pieces of rapidly cooled white quartzite. Within the sod roots immediately above this dark soil horizon are pieces of tin and glass, likely associated with the McAtee occupation. A second dark gray soil horizon is seen at about 40 cm below surface. Heat-altered white quartzite was observed in this stratum. A third dark gray soil horizon is seen at about 80 cm below surface. A large bone fragment (probably a bison left calcaneum) is exposed in this stratum, along with white quartzite fire-cracked rock and a couple large rocks that may well be culturally introduced. The fire-cracked rock (FCR) indicates the presence of thermal features in association with these strata. No collections or formal soil profile was made of the cut bank and no testing was performed to try to determine the horizontal extent of the prehistoric cultural deposits. The apparent stratified deposit should be considered potentially significant however, as stratified sites are particularly useful in establishing cultural

chronology.

The vertical cut bank has eroded to the edge of the porch of the McAtee house and it is the intention of Montana FWP to stabilize this bank. Stabilization would be done by digging a new channel within the flood zone of the creek to the south of the present channel and using the removed stream bed material as fill to develop a sloping grade in front of the vertical cut bank. Willows would be planted on the re-contoured slope for long-term stabilization.

3.4 Site Dimensions: 70 m east-west by 25 m north-south
Surface visibility: 50%

3.5 Feature Descriptions: Feature 1 is the house or residence, a single story structure with an intersecting gable roof, a shed roofed porch and a shed addition. The house was originally a log structure to which framed additions were added. The interior log walls are exposed where plaster ahs fallen away. The logs were caulked with mortar but the corner joint type is not visible. The house has a concrete foundation, at least on the newer additions. It has framed exterior walls covered with concrete stucco applied over a woven wire foundation. The roofing is wood shakes. The rafters are covered at the eves. The shed-roofed, screened-in porch is found on the south side and is 22 feet long by 7 feet wide. A 20 by 9 ft shed roof addition is found on the north side. Interior dividing walls are of frame construction. The original log structure was about 24 ft by 24 ft and forms the central part of the structure. The logs are only exposed in small areas so the original log construction technique is not apparent. The interior has a pine wood floor. Window openings consist of a pair of 2 ft by 2 ft (2 light) on the west side, a pair of 2 ft by 4 ft openings on the east side, a pair of 4 ft by 5 ft openings on the south side (opening into the porch), and 2 ft by 2 ft openings on the north and west sides of the shed addition. Entrances are found on the south side porch and on the east side of the shed addition. A wood stove body lies in the structure. The structure appears to be of 1920s-era construction with additions possibly as late as the 1940s.

Feature 2 is a gable-roofed barn / shop building, measuring 20 ft by 20 ft. It has wood shake roofing and vertical board siding. It is a frame structure sitting on rock footings. It has pole rafters with exposed eves. On the south side are four large, hinged doors as well as a hayloft opening in the gable. On the west side is an entrance door and both the west and east sides have screen covered window openings. A tin stovepipe indicates that a wood stove was present at one time.

Feature 3 is a dug out root cellar located about 12 feet north of the house. The structure has a framed entranceway about 3 ½ feet wide by 10 ft long leading to a subterranean room roughly 8 ft by 8 ft. The roof is made of boards over pole rafters and is covered with earth. Feature 3a is a collapsed shed structure adjacent to the root cellar. It was a frame structure with rough cut lumber and a wood shake roof, and sat on rock footings. Feature 4 is a shed roofed chicken coop, 32 ft by 12 ft. The framed structure is made of rough-cut lumber resting on rock footings. It is divided into three interior rooms. The south-facing wall has nine screen covered window openings, each 2 ft by 2 ft. The structure has horizontal board siding, milled rafters and wood shake roofing. The roof is partially collapsed. Feature 4 is about 160 feet west of Feature 2.

3.6 Artifacts: (✔ all that apply) ☐ Chipped Stone ☐ Wood ☐ Ground Stone ☐ Ceramics ☒ Bone
☐ Trade ☒ Other: historic 20th century vehicle part; fire cracked rock in prehistoric component

Description: Few historic artifacts were found in association with this site, suggesting the site was cleaned up probably after Montana FWP took possession. A 1940s vehicle rear axle is near the structures. Modern garbage from campers has been tossed into Feature 3, the root cellar. A wood stove was observed within the house, Feature 1. Prehistoric artifacts consist of a bison bone, 3 pieces of white quartzite FCR and possibly manuported stone.

3.7 Diagnostic Artifacts: None

3.8 Subsurface Testing: No testing was conducted. The cut bank profile clearly shows the presence of subsurface cultural deposits.

3.9 Site function/interpretation: 1920s-era ranch / homestead, overlying stratified prehistoric cultural deposits of undetermined temporal affiliation.

MONTANA CULTURAL RESOURCES INFORMATION SYSTEM (CRIS) FORM

4. PERIOD

4.1 Apparent Time Period of Site (use dropdowns)**:**
☒ Unknown Prehistoric ☒ Historic (1920s-1940s) ☐ Paleontological

5. ENVIRONMENTAL SETTING

5.1 Geographic Setting: The site is situated on a terrace in the Ruby Creek drainage. Ruby Creek is a tributary of the Madison River

5.2 Contour: ☐ Known ☒ Approximate ☐ Unknown **5.3 Elevation:** 5,810 ft

5.4 View/Aspect (estimated direction and distance): visibility from the site is limited by topography in the narrow Ruby Creek drainage.

5.5 Sediments: sandy loams.

Deposition: ☐ Surface Only ☐ Buried Only ☒ Surface and Buried ☐ Redeposited ☐ Other- unknown

5.6 Available Water Sources: Ruby Creek is a perennial, spring fed stream.

5.7 Major River Drainage (name, distance, elevation): Madison River- 3 km, 5,620 ft elev.

5.8 Minor Drainage (name, distance, elevation): Ruby Creek- on site, 5,800 ft elev.

5.9 Local Vegetation: juniper, Douglas fir, willow, dogwood, mixed grasses. **Regional Vegetation:** Southwestern Montana River Valley (Payne 1973)

6. ASSESSMENT, RECORDING & MANAGEMENT

6.1 Significance: This multi-component site is recommended as eligible under multiple criteria. The historic component is in at least fair condition with all major structures still standing. The complex is a good example of vernacular design of 1920s era homesteads in the region. All major components of the complex are readily identifiable; house, barn, root cellar, chicken coop and storage shed. The historic component is recommended eligible under Criterion C. It may also meet the eligibility requirements under Criterion A for its association and representation of the 1920s homesteading settlement of Madison County. The McAtee family, although influential in the local history of the community of Cameron, Montana, do not reach the level of historic significance required of Criteria B. The prehistoric component has not been formerly evaluated but appears to meet Criterion D, based upon the appearance of three stratified cultural horizons.

6.2 Condition/Integrity: The site has good physical integrity. All primary structures and building remain. The prehistoric component has obviously been eroding for some time, but retains an unknown amount of intact, stratified deposits.

6.3 Possible impacts to site: The site is located on a terrace that is in imminent danger of being destroyed by stream bank erosion.

6.4 Evaluation: Does this property meet National Register criteria for eligibility? ☒ **Yes** ☐ **No**
☐ **Unevaluated**
Evaluation Procedures/Justification:

6.5 Recording status: ☒ surface examination ☒ photo ☒ map ☐ subsurface tested

6.6 Recommendations (use dropdown)**:**
Comments: It is recommended that the stream rechanneling and stream bank stabilization proposed by Montana Fish, Wildlife and Parks will benefit both the historic and prehistoric components by protecting the site from imminent destruction. It is recommended that this effort be taken as soon as possible.

6.7 Site located by: unknown **Date located**: unknown

6.8 Site recorded by: David Ferguson **Dates recorded:** November 27, 2013

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6.9 Site form update and revisions by: none **Date updated:** n/a

6.10 Federal/State Permit No:

6.11 Publication(s)/Report(s) where site is described: A Cultural Resources Inventory and Assessment of Montana Fish, Wildlife and Parks Proposed Ruby Creek Stream Bank Rehabilitation, Madison County, Montana by GCM Services, Inc., Butte, Montana.

6.12 Artifact Repository: NA

6.13 Field notes/maps/photos repository: GCM Services, Inc. 1003 S. Montana, Butte, Montana 59701

6.14 Photographs
Digital photos on record at GCM Services, Inc. 1003 S. Montana, Butte, Montana 59701

***6.15 Map: Attach a sketch map (if applicable) and photocopy of 7.5' quad showing site location.**

MONTANA CULTURAL RESOURCES INFORMATION SYSTEM (CRIS) FORM

Historic Property Attachment
7.1 Property boundaries and justification: legal description: WSWNWSWSW and SENESESW 10, T9S R1W

A patent, accession no. 867445, was issued to Edward Leonard McAtee Jr. on June 10, 1922 for this 320-acre property under the 1862 Homestead Original Entry act (GLO records). The site covers an area about 70 meters east-west by 25 meters north-south. The site area is based on the distribution of features and artifacts in this location.
: estimated **:measured**

7.2 Physical description of buildings/ structures/ features; dates of construction and major alterations; contribution of building/ structure to property significance: see above (Section 3.3).

7.3 Artifacts observed, collected: see above (Section 3.3). No artifacts were collected.

7.4 Subsurface Testing Methods and Results: none

7.5 Historical Information and Context (footnote sources): see above (Section 3.3)

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Site overview facing west-southwest. (PB260171.JPG, Ferguson 11/27/13).

Feature 1, viewing west-northwest showing erosion near structure (PB260146.JPG, Ferguson 11/27/13).

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Feature 1, viewing east-northeast (PB260125.JPG, Ferguson 11/27/13).

Feature 1, viewing west-southwest (PB260122.JPG, Ferguson 11/27/13).

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Feature 1, viewing east-southeast (PB260123.JPG, Ferguson 11/27/13).

Feature 1, viewing east (PB260147.JPG, Ferguson 11/27/13).

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Feature 1, porch detail, viewing east (PB260138.JPG, Ferguson 11/27/13).

Feature 1, interior detail showing log component, viewing south into north side shed addition (PB260140.JPG, Ferguson 11/27/13).

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Feature 1, interior detail, viewing west through east side window opening (PB260144.JPG, Ferguson 11/27/13).

Feature 1, interior detail showing log component, viewing northwest (PB260139.JPG, Ferguson 11/27/13).

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Feature 2, viewing northwest (PB260119.JPG, Ferguson 11/27/13).

Feature 2, viewing northeast (PB260118.JPG, Ferguson 11/27/13).

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Feature 3, viewing north (PB260131.JPG, Ferguson 11/27/13).

Feature 3, viewing east with collapsed shed (Feature 3a) in foreground (PB260154.JPG, Ferguson 11/27/13).

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Feature 4, viewing north (PB260126.JPG, Ferguson 11/27/13).

Feature 4, viewing north (PB260129.JPG, Ferguson 11/27/13).

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Cut bank viewing east showing dark soil horizons (PB260168.JPG, Ferguson 11/27/13).

Bison calcaneous in lowest cultural horizon (+/- 80 cmbs) (PB260165.JPG, Ferguson 11/27/13).

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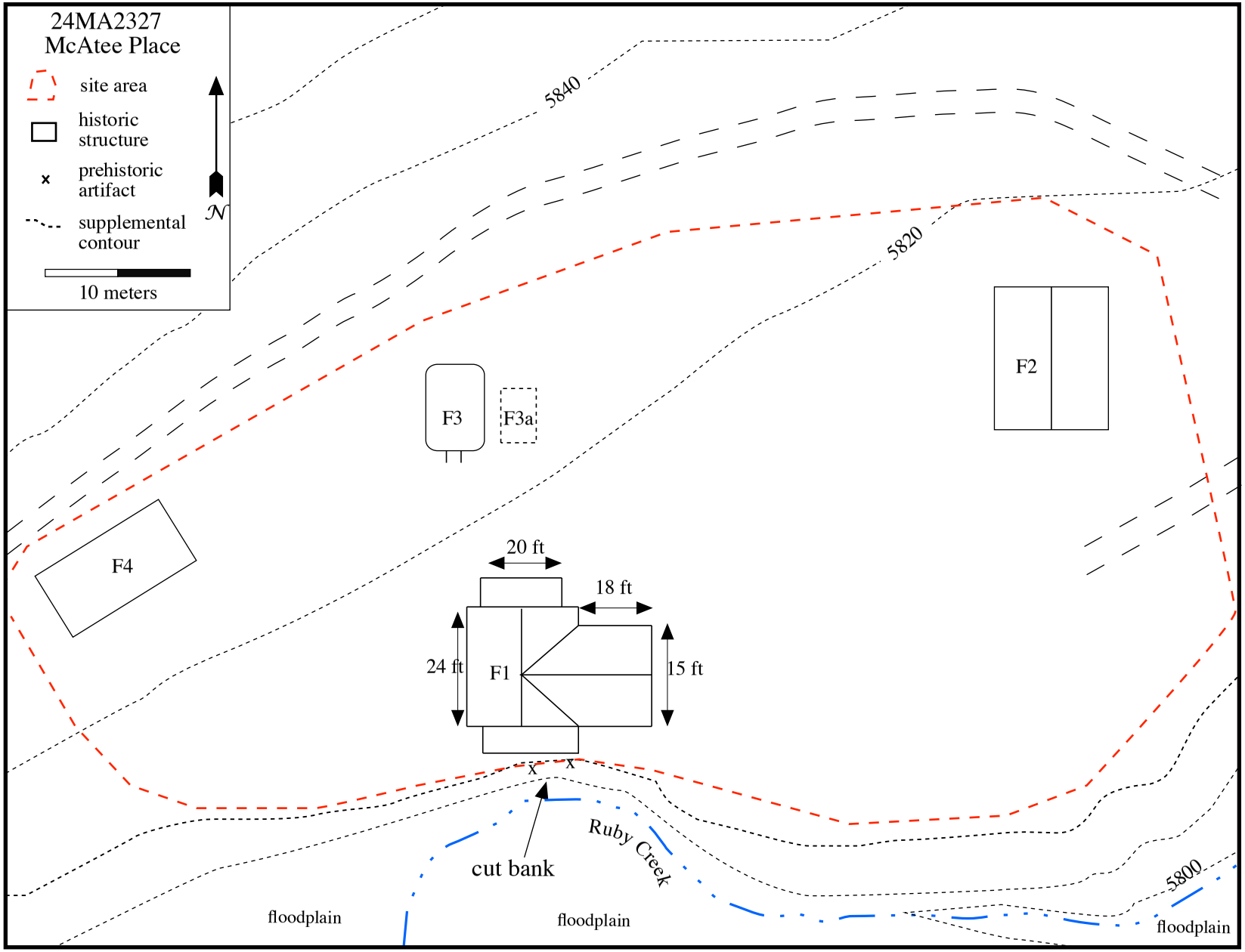
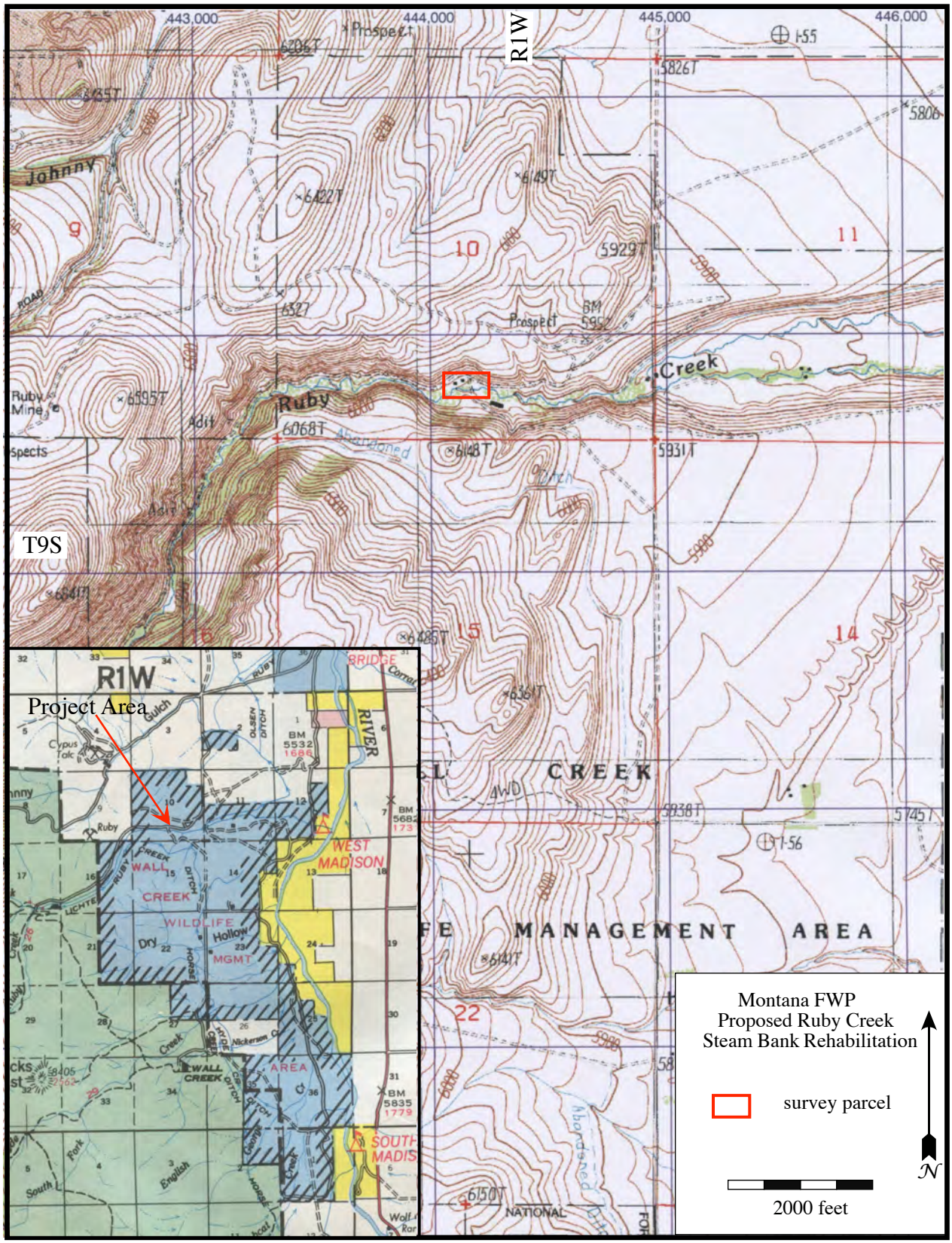
Dark soil horizons in cut bank profile (PB260166.JPG, Ferguson 11/27/13). The upper cultural level (just below the sod layer), and the middle horizon (+/- 40 cmbs), contain white quartzite fire-cracked rock. The lowest level contains a bison calcaneous and probable manuported cobbles.



Sketch map of site 24MA2327, the McAtee Site.



The project area and McAtee Site on the USGS 1:24,000-scale topographic map, *Bucks Nest, MT* (provisional, 1988).