



MONTANA FISH, WILDLIFE & PARKS

Camp Baker Bank Stabilization Draft Environmental Assessment

Region 4
4600 Giant Springs Road
Great Falls, Mt., 59405

Location: Lat/Long 46.80386/ 111.18312	County: Meagher
Section 13 Township 12N Range 04 E	
Property Ownership: Federal___ State_X__ Private_X___	
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EA Date: 10/12/2022	

COMPLIANCE WITH THE MONTANA ENVIRONMENTAL POLICY ACT

Montana Fish Wildlife and Parks prepared this Environmental Assessment (EA) in accordance with requirements of the Montana Environmental Policy Act (MEPA). An EA functions to determine the need to prepare an EIS through an initial evaluation and determination of the significance of impacts associated with the proposed action. However, an agency is required to prepare an EA whenever statutory requirements do not allow sufficient time for the agency to prepare an EIS. This document may disclose impacts over which FWP has no regulatory authority.

SUMMARY OF PROPOSED ACTION (Alternative A): Montana Fish, Wildlife, and Parks proposes to stabilize a 250-foot section of the streambank (labeled with red line in Figure 1) of the Smith River at Camp Baker, Smith River State Park and on adjacent private property. The relevant portion of the bank has seen substantial erosion downstream of the “lower boat ramp,” amounting to the loss of 5 to 6 feet of streambank since 2011 and the degradation of a precontact cultural site confirmed eligible for the National Register of Historic Places.



Figure 1 Camp Baker, Smith River State Park, Meagher County.



Figure 2 Looking upstream in the proposed project area along the cutbank toward the lower boat ramp (on right) and Sheep Creek (upper left). Image taken June 4, 2021 by Dr. Rachel Reckin.

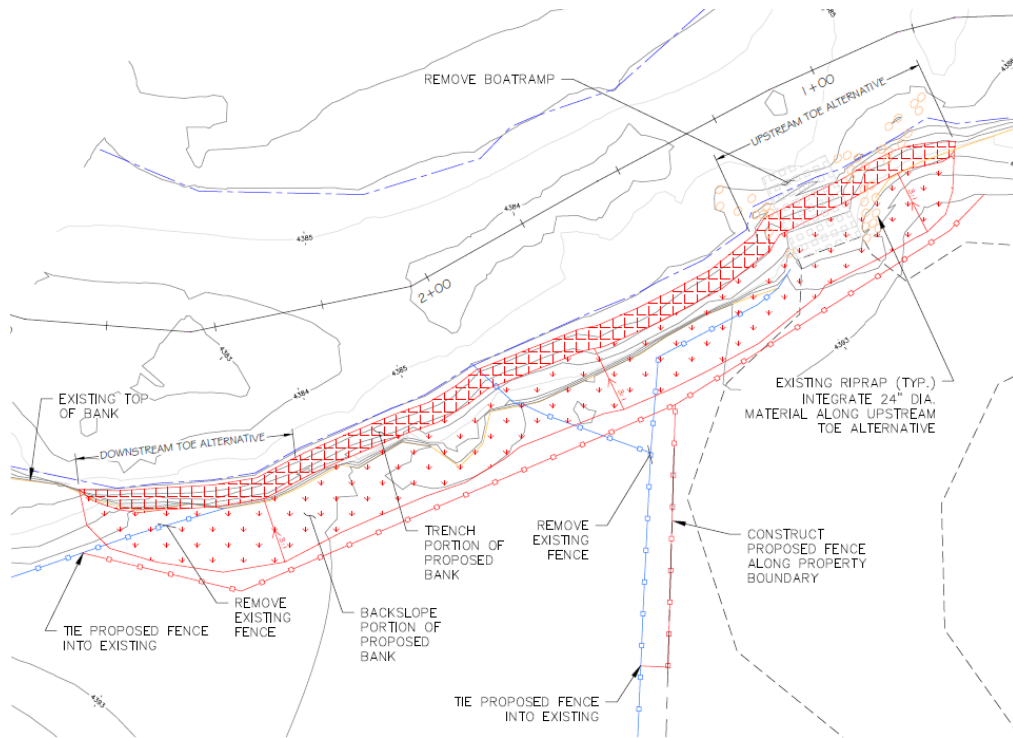


Figure 4 Proposed Streambank Stabilization Treatment, Alternative A.

Operational disturbance of this project would be less than 1 acre. Construction would occur in the fall/winter when use at the site is minimal and floaters are not present. Willows for the project would be cut on FWP property at Camp Baker and Fort Logan Fishing Access Site.

Involved construction equipment may include back or track-hoe, dump trucks, passenger trucks, trailers, generators, and various types of smaller equipment. Personnel onsite for the construction and operations crew are expected to be 3 to 5 people.

PURPOSE AND BENEFIT OF PROPOSED ACTION: Montana Fish, Wildlife, and Parks' purpose in conducting this environmental review is to provide disclosure of anticipated impacts to the human environment and the opportunity for public review and comment regarding the proposed action.

The purpose and benefits of the proposed action include the restoration of approximately 250 ft. of streambank located on FWP and private property and prevention of further degradation of a precontact cultural site confirmed eligible for the National Register of Historic Places. The streambank erosion and cultural site degradation are a result of a combination of impacts including trampling caused by Smith River floaters staging at the lower boat ramp located adjacent to the private section; cows accessing the area for a water source; the hydrological impacts of the hardened surface characteristics of the lower boat ramp compared to a natural

shoreline; and the combined hydrological impacts of Sheep Creek flowing into the Smith directly across from the affected area and the lower boat ramp.

A comparison of bank lines at the lower ramp from 1970 to 2011 done in 2013 found the bank had migrated 29 feet at the lower ramp site and over 60 feet downstream of the ramp. (Technical Memorandum, TerraGraphics Environmental Engineering, Inc., September 19, 2013, Project number 13061, p. 6)

The project is expected to improve aquatic habitat and water quality by decreasing sediment input and restoring vegetation in the riparian area. Bank stabilization would protect this area and known cultural resources from further erosion and bank failure, ensuring the site retains the features that make it eligible for the National Register of Historic Places with sufficient integrity.

This proposed action would also benefit and improve relations with the adjacent landowner and prevent further trespass on the landowner's property by floaters.

REGULATORY RESPONSIBILITIES: The following permits were applied for with a joint application and if applicable, were or are anticipated to be issued; Nationwide Permit 13 (NWP13) Bank Stabilization, SPA 124 Permit, County Floodplain permit, Clean Water Act (CWA) Section 404 Permit, and 318 Authorization, and CWA Section 401 Certification (pending project completion). If more than an acre of land is disturbed during construction, the Contractor will obtain a Montana DEQ Construction Stormwater Permit (SWPPP).

CUMULATIVE IMPACTS: To the Department's knowledge, there are no other past, present, or future actions related to the proposed action by location or generic type. There is a permitted gypsum mine northwest and downstream of the project area on land between Rock Creek and the Smith River, and there is a proposed copper mine east and upstream on Sheep Creek. The latter is not fully approved to proceed. Both are outside the regulatory authority of FWP. Even as proposed, it is unlikely that the cumulative impacts of this streambank stabilization project with either of those mines would change the impacts of the mines or be greater than the mines' impacts. The Department is unaware of any other actions under concurrent consideration by any state agency through pre-impact statement studies, separate impact statement evaluation, or permit processing procedures that would interact with the impacts of this project to create cumulative impacts. Therefore, most of the analysis in each section, below, finds that there will be no cumulative impacts with this project.

DEFINITIONS: The impact analysis will identify and evaluate direct, secondary, and cumulative impacts.

- **Direct impacts** are those that occur at the same time and place as the action that triggers the effect.
- **Secondary impacts** are further impacts to the human environment that may be stimulated or induced by or otherwise result from a direct impact of the action." ARM 12.2.429.

- **Cumulative impacts** “means the collective impacts on the human environment of the proposed action when considered in conjunction with other past and present actions related to the proposed action by location or generic type. Related future actions must also be considered when these actions are under concurrent consideration by any state agency through pre-impact statement studies, separate impact statement evaluation, or permit processing procedures.” ARM 12.2.429.

Where impacts are expected to occur, the impact analysis estimates the duration and intensity of the impact. The duration of an impact is quantified as follows:

- **Short-term:** Short-term impacts are defined as those impacts that would not last longer than the proposed action.
- **Long-term:** Long-term impacts are defined as impacts that would remain or occur following completion of the proposed action.

The severity of an impact is measured using the following:

- **No impact:** There would be no change from current conditions.
- **Negligible:** An adverse or beneficial effect would occur but would be at the lowest levels of detection.
- **Minor:** The effect would be noticeable but would be relatively small and would not affect the function or integrity of the resource.
- **Moderate:** The effect would be easily identifiable and would change the function or the integrity of the resource.
- **Major:** The effect would irretrievably alter the resource.

Some impacts may require mitigation. As defined in ARM 12.2.429, mitigation means:

- (a) avoiding an impact by not taking a certain action or parts of an action;
- (b) minimizing impacts by limiting the degree or magnitude of an action and its implementation;
- (c) rectifying an impact by repairing, rehabilitating, or restoring the affected environment; or
- (d) reducing or eliminating an impact over time by preservation and maintenance operations during the life of an action or the time period thereafter that an impact continues.

EVALUATION AND SUMMARY OF POTENTIAL IMPACTS TO THE PHYSICAL AND HUMAN ENVIRONMENT IN THE AREA AFFECTED BY THE PROPOSED ACTION (Alternative A):

1) TOPOGRAPHY, GEOLOGY AND SOIL QUALITY, STABILITY AND MOISTURE:

Direct Impacts: The project, as visually represented in Figure 3, would use live encapsulated lifts to rebuild the streambank and increase soil stability, reduce erosion, and restore the riparian area to a more natural, non-trampled state. Willow cuttings and plantings would be incorporated to anchor the bank and provide soil stability; visual evidence of the trampling and erosion would be gone. Due to the hydraulic features of Sheep Creek and the way that water from it enters the Smith River, the lower boat ramp would also be removed. This is necessary to ensure soil stability and preservation of the project over time, given the hydrology of that section of the river and historic use patterns by floaters staging adjacent to the boat ramp on the streambank. Removal of the lower boat ramp would also restore the riparian habitat to a more natural condition. The use of exclusion fencing would keep livestock and recreationists off the repaired site.

Secondary Impacts: Increased soil stability would reduce long-term erosion and thereby reduce a point source of sediment for the Smith River. Because erosion and sediment are reduced, water quality and aquatic habitat would be expected to improve.

Cumulative Impacts: None.

2) WATER QUALITY, QUANTITY, and DISTRIBUTION:

Direct Impacts: The project would result in increased soil stability and reduced long-term erosion, and thereby reduce a source of sediment for the Smith River.

Secondary Impacts: Decreased anthropogenic sediment input would likely result in decreased sedimentation and improved water quality downstream from the project. This sediment reduction could also result in benefit to the Smith River aquatic health and could be expected to benefit the fishery.

Cumulative impacts: None.

3) AIR QUALITY

Direct Impacts: During construction the project will utilize heavy equipment, which could emit fumes and objectionable odors. This would result in a minor short-term impacts like dust or exhaust that will cease with the completion of the project.

Secondary Impacts: None.

Cumulative Impacts: None.

4) VEGETATION COVER, QUANTITY AND QUALITY:

Direct Impacts: The existing bank is largely vertical resulting in minimal riparian vegetation. The bioengineered treatment to the bank would likely result in an increase in riparian vegetation. The proposed action would be taken in the late Fall, early Winter to ensure willow cuttings have the best chance of rooting and survival. Mature willow cuttings would be taken from two nearby habitats, including Smith River and Fort Logan Fishing Access Site (FAS), where they are abundant, to avoid impacting the viability of their sources and provide the best chance of survival.

Secondary Impacts: Increased soil stability provided by the vegetation transplant is expected to reduce sediment in the Smith River. The willow and other vegetative growth in the riparian area would be expected to improve the aquatic habitat. Restoring the riparian area could also provide beneficial terrestrial habitat. There is potential with any ground disturbance to introduce noxious weeds to the area and/or allow existing weeds to spread in disturbed areas. FWP would mitigate this by requiring construction equipment to be cleaned prior to accessing the site, promptly revegetating any disturbed area with native seed mix, and conducting monitoring and weed control of the construction area following the completion of project.

The source areas for the willow cuttings have not been used before and are well established to sustain themselves through this process. FWP would not cut additional willows from these areas until there has been sufficient time for recovery to avoid an adverse secondary effect on the source sites.

At the project site, restoration of the riparian area would be expected to provide some level of shading for the Smith River. The shading could be beneficial because if riparian restoration and accompanied shading was cumulative in multiple areas, it could provide benefit to water temperatures.

Cumulative impacts: None.

5) TERRESTRIAL, AVIAN, AND AQUATIC LIFE AND HABITATS:

Direct Impacts: The existing bank is largely vertical resulting in minimal riparian vegetation and, therefore, minimal habitat. Restoration of the riparian area to a more natural condition using willows and other vegetation as part of the proposed action is expected to provide immediate beneficial impacts for terrestrial, avian, and aquatic life as the work would reestablish a 250-foot stretch of streamside habitat, including reclamation of the lower boat ramp, and provide a more diverse structural habitat for all aquatic life and food, shelter, and potential breeding sites for birds, mammals, amphibians, and reptiles.

Secondary Impacts: Increased soil stability provided by the vegetation transplant is expected to reduce a source of sediment in the Smith River. This would likely result in decreased sedimentation and long-term improvement to water quality downstream from the project, which would be expected to benefit the fishery. Too much fine sediment can damage fish by clogging their gills and smothering spawning sites, which can also impact aquatic insects. Riparian areas also help supply organic material, such as leaves and woody debris, which provides food for aquatic invertebrates. Riparian areas also provide habitat for insects.

Restoration of the riparian area would also be expected to provide some level of shading for the Smith River. See Section 4 for discussion of shading benefits.

Cumulative Impacts: None.

6) UNIQUE, ENDANGERED, FRAGILE, OR LIMITED ENVIRONMENTAL RESOURCES

Direct Impacts: Westslope Cutthroat Trout (*Oncorhynchus clarkii lewisi*) are a state species of special concern that are present within the Smith River drainage. While Westslope Cutthroat Trout are largely limited to headwater streams in the drainage, individuals have been sampled in the Smith River mainstem and could potentially be present in the project area at low abundance. Western Pearshell (*Margaritifera falcata*) are a mussel that are a state species of concern that have also been documented within the Smith River drainage. Potential for negative impact to these species by the proposed action is from sedimentation that could occur during project work. To mitigate this potential, sediment control materials would be placed in front of the construction area at the toe of the project to prevent sediment from the project entering the Smith River. Contractors would also be required to have an emergency spill kit on hand. Any direct impacts to the above listed species during the project would be expected to be short-term and minor.

Restoration of the riparian area to a more natural condition using willows and other vegetation as part of the proposed action is expected to provide immediate beneficial impacts to the above listed species as the work would reestablish a 250-foot stretch of streamside habitat, including

reclamation of the lower boat ramp, and provide a more diverse structural habitat for all aquatic life.

Secondary Impacts: Increased soil stability provided by the vegetation transplant is expected to reduce sediment in the Smith River. This would likely result in decreased sedimentation and long-term improvement to water quality downstream from the project, which would be expected to benefit the above listed species. Too much fine sediment can damage fish by clogging their gills and smothering spawning sites. Restoration of the riparian area would also be expected to provide some level of shading for the Smith River. See Section 4 for discussion of shading benefits. The higher the stream system's overall quality the better habitat it provides to native and sensitive species such as Westslope Cutthroat Trout.

Cumulative Impacts: None

7) HISTORICAL AND ARCHEOLOGICAL SITES:

Direct Impacts: Limited damage to the archaeological resource may occur associated with the ground disturbance needed to stabilize the bank and remove the lower boat ramp. However, previous archaeological investigations in the vicinity and current repeated surveys of the bank indicate that the most significant stratified deposits associated with the site would not be disturbed. Archaeological monitoring would be required.

Secondary Impacts: Bank stabilization would protect the main body of 24ME0075, a confirmed cultural resource, from further erosion and bank failure, ensuring the precontact campsite retains the features that make it eligible for the National Register of Historic Places with sufficient integrity. Under the existing condition, erosion is causing continuous degradation of this precontact site.

The State Historic Preservation Office has concurred that this approach would have no adverse effect on 24ME0075 or any other cultural resources.

Cumulative Impacts: None.

8) ACCESS TO AND QUALITY OF RECREATIONAL ACTIVITIES

Direct Impacts: Floaters and outfitters would no longer be able to use the streambank and lower boat ramp for staging and launch onto the Smith River. It is estimated that approximately 25% of the total number of launches occur at the lower boat ramp. The numbers below are an average total using the four years of 2016 to 2019. These years represent more normal (typical) floating conditions (pre-COVID 19 and non-drought). They only include private and outfitted groups and don't include administrative or landowner floats.

(2016-2019)	Average Total	25% using lower ramp
Groups	707	177
Floaters	5,559	1,390
Boats	2,592	648

These statistics above represent the “whole” season, April through the Fall. Peak season (maxing out all daily launches) usually begins the second to third week of May and extends through the first to second week of July, which amounts to approximately seven weeks or 50 days. Peak season represents approximately 80% of total season use.

Using 80% of total use occurring in the peak season and 25% using the lower ramp, below are the estimated number of groups, floaters and boats using the lower ramp in the peak season (Mid-May to early July):

# Groups:	142
# Floaters:	1,112
# Boats:	518

Approximately 90% of commercial outfitter launches occur beginning the second week in May through June. The remaining 10% occur in early July.

Secondary Impacts: The removal of the lower boat ramp would have a moderate impact by increasing use of the upper boat ramp for staging and launch onto the Smith River. FWP would take a multi-prong, adaptive approach to mitigating the impact to manage traffic and achieve safe and orderly launching at the upper boat ramp, including the following: floaters would be asked to prepare their watercraft as much as possible before entering the ramp area to minimize time on the ramp. The upper boat ramp is sufficiently large to be divided into three lanes to maximize the capacity of launches. Currently, use at the upper boat ramp is not controlled to the degree it could be and floaters are left to use at their discretion. Dividing the ramp into three lanes with cones would significantly increase the efficiency and capability of the ramp. During the phone registration process, groups may also be asked to arrive at a scheduled time to minimize crowding, depending on location of their first boat camp choice; the closer the first boat camp, the later the launch time. Pre-staging areas would be established to allow groups to assemble boats and prepare as much as possible before utilizing the ramp. FWP would actively recruit a

site host(s) and/or other assistants (e.g., intern(s)) to act as a boat ramp steward and assist with traffic control at the ramp. A public education campaign about new protocols and etiquette at the site and encouraging respectful recreation and consideration of fellow site users would be used throughout the season to help manage user expectations. Condition monitoring and adaptive management would be used to maximize efficiency of launches and traffic control and adjust administrative actions accordingly.

Cumulative impacts: Overnight camping was discontinued at Camp Baker in the spring of 2020 over concerns from COVID-19. Floaters were asked to register by phone and receive boat camp assignments two days prior to their float date. The management decision was made to continue these protocols throughout the 2021 season due to positive feedback from staff, floaters, neighboring landowners, and the local community, which saw increased business as a result according to anecdotal reports from Meagher County commissioners. In March 2022, the State Parks and Recreation Board adopted an administrative rule change to formally limit Camp Baker to day-use only, with exception of the time-period from September 1 to November 30, to address natural and cultural resource impacts and congestion at Camp Baker. The change to day-use and removal of campsites has provided floaters with additional space to stage and prepare for their trip. Therefore, combining these prior changes with the additional staff and traffic management anticipated with this project would continue to increase access to the Smith River at the upper boat ramp.

9) SOCIAL, ECONOMIC, AND COMMUNITY IMPACTS

Direct Impacts: The removal of the lower boat ramp and closure of the affected streambank area to staging by floaters would change launch patterns at Camp Baker, which could disrupt established social interactions and use patterns among outfitted and non-outfitted floaters. It would be necessary for floaters to adjust to the new protocols described under Section 8 for launching at the upper boat ramp. The magnitude of the impact is expected to be perceived differently by different user groups but will ultimately be insignificant. FWP would mitigate what limited impacts may exist by using the protocols and adaptive management described under Section 8. FWP does not expect economic impacts from the proposed action because the number of launches, permittees, and floaters would not be reduced by the proposed action.

Secondary Impacts: The decrease in boat, human, and vehicle traffic at the lower boat ramp would be expected to preserve the bank stabilization in the future, which in turn will be beneficial to the habitat, fish, and wildlife. Stopping the loss of bank would also mitigate the degradation of the known precontact cultural site and the neighboring private landowner's concerns over loss of land into the river at this location. The bank stabilization would ultimately preserve the Smith River and return it to more natural conditions, which would benefit current and future generations of recreators and landowners as well as the local economy.

Cumulative Impacts: See cumulative impact analysis from Section 8.

10) PRIVATE PROPERTY

Direct Impacts: This proposed action would repair damage caused in part by floaters to the landowner's streambank and involve removing the water gap currently used by the private landowner to provide access to the river for livestock, which also contributes to the erosion of the streambank. The water gap would be replaced by a well and stock tank drilled by the landowner on their property and separated from the project area by new fencing to prevent trampling of the project area and prevent trespass by floaters. A gate in the fence would be included to allow for emergency water access by livestock if the well and stock tank are rendered inoperable or wildfire or other emergent conditions require until they can be resolved. FWP expects prevention of trespass and loss of additional streambank by the private landowner would improve relations with the landowner.

Secondary Impacts: Improved relations with the landowner may lead to other opportunities to improve operations and use patterns at Camp Baker.

11) FUNDING AND/OR PROJECT MAINTENANCE COSTS

Direct Impacts: Appropriation for this project by the 2019 Legislature is \$200,000.00 from the Smith River Corridor Enhancement Account. Executed use of this funding prevents it from being used for other purposes.

Secondary Impacts: Maintenance may be required depending on such consequences or need for prevention based on changing conditions. The results of condition monitoring and adaptive management under Section 8 could result in the need for additional staffing and resources to be dedicated to launch operations and management at Camp Baker. Increased expenses and need for resources at one site could impact operational decision making and funding availability for other sites and resources.

Cumulative impacts: None.

12) RISK AND/OR HEALTH HAZARDS

There are no associated health hazards or risks associated with this project.

ADDITIONAL ALTERNATIVES CONSIDERED

Alternative B (No action)

The no action alternative would mitigate the social and recreational opportunity impacts identified in the analysis of the proposed action but would result in the continued erosion of the riverbank. Observed erosion has resulted in the loss of 5 to 6 feet of streambank since 2011. A precise annual rate of erosion is difficult to calculate since weather conditions, including severity of winter and ice conditions, fluctuate. Depending on ice pack, erosion caused in a single winter can vary from six to 12 inches to multiple feet given the severity of the season.

Further erosion would cause the continued loss of additional bank, including adjacent landowner property, sedimentation that diminishes water quality, and would continue to adversely affect the archaeological resources of precontact campsite 24ME0075, which is confirmed eligible for the National Register of Historic Places. Artifacts are currently eroding into the river, and will continue to do so without intervention, causing damage to the integrity of the site's archaeological stratigraphy, loss of artifacts, and possibly loss of or damage to features like fire hearths. These effects would impact the site's eligibility for the National Register of Historic Places.

Alternative C: Hardened approach to streambank stabilization with lower boat ramp remaining in place.

This alternative relies on large rocks and/or concrete (aka riprap) to 'harden' or 'armor' 178 feet of bank to a height of approximately 7 or 8 feet. Alternative C would allow the lower boat ramp to remain in place, negating the social and recreational opportunity impacts identified in the analysis of the proposed action. The former Parks Division at FWP previously considered this approach, but in consultation with Fisheries Division staff it was determined Alternative C would result in unnatural habitat conditions, contrary to best practices employed by the agency to improve habitat and would prevent lateral migration of the Smith River at this location. It could result in further erosion and decreased water quality downstream. A third-party assessment conducted in 2013 predicted this alternative would likely result in "some channel narrowing, and an increase in flow velocities on the left bank against and downstream of the ramp with continued deposition of sediment on the opposite point bar at the mouth of Sheep Creek." (Technical Memorandum, TerraGraphics Environmental Engineering, Inc., September 19, 2013, Project number 13061, p. 12) Constraining the stream channel also could result in increased scour of the streambed.

Limited damage to the archaeological resources may occur due to the ground disturbance associated with Alternative C, but it would be expected upon completion to protect the main body of the precontact cultural site from further erosion and bank failure, ensuring the site retains the features that make it eligible for the National Register of Historic Places with sufficient integrity.

However, Alternative C would prevent returning the lower boat ramp to a more natural river bank condition and the direct and secondary impacts described in Alternative A associated with that, e.g. improved water quality and habitat, shading, etc., would not occur, therefore continuing the current negative human influence on the river.

Alternative D: Soft approach to streambank stabilization with lower boat ramp removal and expansion of upper boat ramp to account for removal of lower boat ramp.

The impacts of this alternative would be similar to the proposed action but include expansion of the upper boat ramp to negate the social and recreational opportunity impacts identified in analysis of the proposed action under Section 8. A third-party evaluation conducted in 2013 identified that expansion of the upper boat ramp by 800 square feet would allow short-term migration of an eroding bank, which may result in long-term reconfiguration of other park facilities. The evaluation also identified the expansion may create congestion and reduce boat launching capacity with the single enlarged upper boat ramp. (Technical Memorandum, TerraGraphics Environmental Engineering, Inc., September 19, 2013, Project number 13061, p. 15)

Additional funding would have to be identified and legislative authority secured for the design, permitting, cultural assessment, and construction of Alternative D. Additional archaeological investigation would be required to assess the expansion of the upper boat ramp under the Montana Antiquities Act and related regulations. This work would occur in consultation with the State Historic Preservation Office and the relevant Tribal Historic Preservation Offices. Such consultation and resulting design criteria would seek to ensure that the expansion of the upper boat ramp would have no adverse effect on any cultural resources.

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 each of these papers: Helena Independent Record/ Great Falls Tribune
- 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.

Duration of comment period: 30 Days

The public comment period will extend for (30) thirty days following the publication of legal notice in area newspapers. Written or e-mailed comments will be accepted until 5:00 p.m., November 12 ,2022 and can be mailed to the addresses below:

jtaillie@mt.gov

Regional Recreation Manager
4600 Giants Springs Road
Great Falls, Mt., 59405