



Region 2
3201 Spurgin Road
Missoula, MT 59804

January 9, 2020

Dear Interested Citizen:

Thank you for your thoughtful reviews and comments on the proposed remediation of the lower Rattlesnake Creek Dam site near Missoula. This proposal was developed through a collaboration among Montana Fish, Wildlife & Parks (FWP), Trout Unlimited (TU), and the City of Missoula (City), which now owns the associated property, infrastructure and water rights. Through the design and review process, project partners evaluated the current condition of the dam and associated facilities, then developed a range of conceptual alternatives for managing site infrastructure while incorporating ecological restoration of the Rattlesnake stream corridor and affected areas.

In November 2019, FWP issued a Draft Environmental Assessment (EA) for the Rattlesnake Creek Dam Removal Project. The EA described the process the City, TU and FWP followed in developing the proposed action (Alternative 3) presented in the Draft EA. Alternative 3 is an active restoration option that would include: full dam infrastructure removal, reconstruction of the Rattlesnake Creek and floodplain to tie in 200-feet downstream of the dam, raising the channel profile to improve floodplain connection, construction of off-channel habitat features, and revegetation of the constructed streambanks, floodplain and disturbed areas.

Enclosed is a decision notice in which FWP reviews public comments and explains its rationale for choosing the proposed action (Alternative 3) as described and explained in the Draft EA. Upon completion of the public involvement process, FWP accepts the draft environmental assessment (EA) as final. The decision document includes all comments received during the public comment period on the proposed acquisition.

Please feel free to contact me at 406-542-5500 with any questions you may have. Thank you for your interest and participation.

Sincerely,

Randy Arnold
Regional Supervisor

RA:sr

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DECISION NOTICE for Rattlesnake Creek Dam Removal Project Draft EA

*Montana Fish, Wildlife & Parks; Region 2
3201 Spurgin Road, Missoula MT 59804
Phone 406-542-5500
January 9, 2020*

INTRODUCTION AND PROPOSED ACTION

The City of Missoula (City) acquired the approximately 45-acre lower Rattlesnake Creek Dam property and associated infrastructure and water rights in 2017. Montana Fish, Wildlife & Parks (FWP), the City, and Trout Unlimited (TU) then developed a partnership to evaluate and implement mitigation options for the deteriorating dam structure on Rattlesnake Creek, located in Missoula on the lower mainstem, approximately 3.5 miles upstream from the confluence with the Clark Fork River.

Morrison Maierle, Inc. and River Design Group, Inc. were retained by TU to evaluate the current condition of the dam and associated facilities, then develop a range of conceptual alternatives for managing site infrastructure and incorporating ecological restoration of the stream corridor and affected areas. The City, FWP and TU reviewed the alternatives and selected Alternative 3 as the proposed action for this project in a draft environmental assessment (EA) released for public review in mid-November 2019. Alternative 3 is an active restoration option that would include full dam-infrastructure removal, reconstruction of the creek and floodplain to tie in 200-feet downstream of the dam, raising the channel profile to improve floodplain connection, construction of off-channel habitat features, and revegetation of the constructed streambanks, floodplain and disturbed areas.

This decision notice follows the draft EA that evaluated FWP's proposal to remove the lower Rattlesnake Creek dam and incorporate ecological restoration of the stream corridor and affected areas. (Please refer to the draft EA for full details of the proposal and its alternatives, including the proposed action.)

PROPOSED ACTION ALTERNATIVE

Alternative 3. Alternative 3 includes the following actions:

- Full infrastructure removal;
- reconstruct the creek and floodplain to tie in 200-feet downstream of the dam;
- raise the channel profile to improve floodplain connection;
- construct off-channel habitat features; and
- revegetate the constructed streambanks, floodplain and disturbed areas.

Alternative 3 is an active restoration option that differs from other Alternatives by the change in stream profile and downstream extent of channel reconstruction. The strategy for this alternative expands upon Alternative 2 by improving floodplain connection and access to off-channel habitat downstream of the dam. (Descriptions of Alternatives 1, 2, and 4, along with the No-action Alternative, are in the next section [Summary of Other Alternatives Considered] of this Decision Notice.) Restoration would begin approximately 300-feet upstream of

the reservoir intake and tie in 200-feet downstream of the dam on City property. Downstream of the dam, the constructed channel would meander into the floodplain located east of the existing channel. The channel profile would be gradually raised to improve floodplain connection in the stream corridor. The existing channel would be filled with material excavated from the new channel and converted to off-channel habitat features.

This project design would fully restore the stream, floodplain, and hillslope processes to mimic natural conditions at the site. The restoration would support all habitats for terrestrial and aquatic species, including native fisheries with particular focus on reconnection to important upstream habitat. The restored site with wetlands and floodplain would support protection of water quality and quantity in the watershed and groundwater aquifer, which is vital to the Missoula Valley. The restored site would be useable to the fullest extent possible for recreation and open space. The full removal of existing infrastructure would eliminate the City's and others' cost of annual maintenance and operations. The public safety concerns with the existing site infrastructure would be eliminated. (Please refer to the draft EA for full details of the Alternative 3, the proposed action.)

SUMMARY OF OTHER ALTERNATIVES CONSIDERED

(Please refer to the draft EA for full details of these other alternatives.)

No Action Alternative. This alternative represents the existing condition against which the other 3 alternatives are compared. Under the No-Action Alternative, no removal of the dam or site infrastructure and no restoration activity would occur. Maintenance of the site, including weed treatment, fence repair, landscaping and other activities by the City would continue. Public access would likely remain restricted due to safety concerns with the infrastructure.

Alternative 1. Alternative 1 includes the following actions:

- Partial infrastructure removal—caretaker (residential) cabin and west-bank infrastructure remain;
- allow the creek to adjust and establish a new channel and floodplain with minimal active restoration; and
- revegetate disturbed areas and adaptively manage floodplain revegetation.

Alternative 1 is a passive restoration option. The restoration strategy for this alternative is to minimize intervention and allow natural processes to reshape the creek and floodplain. In general, Alternative 1 satisfies project goals for reducing site maintenance and eliminating public hazards but raises questions regarding ability to satisfy habitat and revegetation goals.

Alternative 2. Alternative 2 includes the following actions:

- Partial or full infrastructure removal;
- partial or full excavation of earthen embankment;
- use excavated material to construct a floodplain in the reservoir;
- reconstruct the creek and floodplain to tie in at the former dam location; and
- revegetate the constructed floodplain and disturbed areas.

Alternative 2 includes more active restoration than Alternative 1. The strategy for this alternative is to accelerate the timeframe for recovery by reconstructing the creek and floodplain. In general, Alternative 2 satisfies project goals for reducing site maintenance, eliminating public hazards, rehabilitating stream and floodplain processes, promoting fish passage, and restoring aquatic and terrestrial habitat. Drawbacks include the risk of failure for restoration elements and potential maintenance costs. Alternative 2 is considered moderate relative to other alternatives.

Alternative 4. Alternative 4 includes the following actions:

- Partial or full infrastructure removal;

- partial or full excavation of the earthen embankment;
- use excavated material to construct a floodplain in the reservoir;
- reconstruct the creek and floodplain to tie in at the former dam location;
- revegetate the constructed floodplain and disturbed areas; and
- enhance aquatic habitat downstream of the dam for approximately 1,500-feet.

Alternative 4 is an active restoration option that expands upon Alternative 2 by enhancing aquatic habitat in the reach downstream of the dam on property owned by the City. Alternative 4 satisfies project goals for reducing site maintenance, eliminating public hazards, rehabilitating stream and floodplain processes, promoting fish passage, and restoring aquatic and terrestrial habitat. Drawbacks include the risk of failure for restoration elements and potential maintenance costs. Alternative 4 would maximize site restoration by addressing impacts downstream of the dam.

PUBLIC REVIEW PROCESS

FWP is required by the Montana Environmental Policy Act (MEPA) to assess potential impacts of its proposed actions to the human and physical environments, evaluate those impacts through an interdisciplinary approach, including public input, and make a decision based on this information. FWP released a cover letter (summarizing proposal details) and draft environmental assessment (EA; “Rattlesnake Creek Dam Removal Project, Missoula, Montana”) for public review of this proposal on November 13, 2019 and accepted public comment for 30 days through December 12, 2019.

Legal notices of the proposed addition and the availability of its draft EA were published in the following newspapers (dates): *Independent Record* (Helena; November 8), *Missoulian* (November 8). FWP issued a statewide news release regarding this proposal on December 3, 2019.

FWP mailed 12 copies of the cover letter and draft EA, and emailed approximately 70 notifications of the EA’s availability, to adjacent landowners and interested individuals, groups and (non-FWP) agencies. The EA was available for public review and comment on FWP’s web site (<http://fwp.mt.gov/>, “News,” then “Recent Public Notices”) from November 13, 2019 through December 12, 2019, along with opportunity to comment online.

PUBLIC COMMENT

Summary of Public Comment

FWP received comments from 16 commenters, and all comments received are in the Appendix. The commenters represented:

- 10 people (5 from Missoula [including 1 adjacent landowner], 2 from Hamilton, 1 each from Alberton and Bozeman, and 1 unknown location); and
- 6 agencies, groups, businesses:
 - 1 agency: Missoula County Community and Planning Services
 - 4 groups: Five Valleys Audubon, Hellgate Hunters & Anglers, Montana Trout Unlimited, and WestSlope Chapter of Trout Unlimited (all from Missoula)
 - 1 business: NorthWestern Energy (Butte).

Fifteen of the 16 commenters (including all 6 agencies, groups, businesses) supported the acquisition, and 1 commenter (an adjacent landowner) did not indicate support or opposition.

Comments in Support of the Proposed Action Included:

Fisheries, Connectivity, Habitat

- *Restoring Rattlesnake Creeks full connectivity with the Clark Fork river is crucial for native fish recovery.*
- *Let the fish return to their native waters.*
- *Removal of the rattlesnake dam is necessary to restore historic spawning grounds for native cutthroat and bull trout.*
- *The health of the tributaries of the middle Clark Fork River are essential to fish populations for the high quality spawning habitat and recruitment they provide.*
- *The quality of spawning habitat for bull trout above the project area is significant and removing the Rattlesnake Dam will benefit bull trout by improving migratory connectivity. With monitoring showing that estimated bull trout populations in Rattlesnake Creek are reduced from historical levels, this project is important for the species.*
- *The creek's high quality spawning habitat is important for recruitment into the trout populations found in the Middle Clark Fork River.*
- *We want to be on record fully supporting the agency's proposed action on removing this antiquated and out of date structure for the benefit of wild and native trout conservation within the Clark Fork watershed.*

Wildlife, Habitat, Landscape

- *Wildlife diversity and use of the Rattlesnake Creek corridor is very high and the riparian area habitat supports numerous species, including hundreds of bird species. The Department's preferred action will enhance the riparian corridor and be beneficial to these species.*
- *The riparian corridor also supports habitat for many terrestrial and aquatic species. Removal of the dam and reconstruction of the floodplain will benefit this habitat and the species that rely on it.*
- *This alternative would provide the best bird and wildlife habitat, post-construction, because of the re-connection of the stream to improve floodplain connection.*
- *Please do what is right and restore this native landscape to what it used to be!*

Community, Recreation

- *The restored site with wetlands and floodplain would support protection of water quality and quantity in the watershed and groundwater aquifer, which is vital to the Missoula Valley and Missoula County.*
- *This project is a great benefit for native trout, for public access, and the community of Missoula*
- *I . . . recreate in the Rattlesnake watershed. I would like to see the dam removed, and restoration completed for fish passage.*
- *I have fished this stream for years and highly value it.*

Thanks, Collaboration

- *We appreciate the open public process used by the Department to make these changes.*
- *I appreciate the Department and other entities' commitment to removing the dam and improving the habitat within lower Rattlesnake Creek.*
- *Collaboration between the City, Trout Unlimited, and Fish, Wildlife & Parks is also a valuable component of this project.*

- *We are excited to see it move forward and we commend MTFWP, Trout Unlimited and the City of Missoula on an outstanding project.*

Response to Public Comment

Below are public comments, questions or suggestions, along with FWP responses. (Numbers in [brackets] correspond to the numbering of the individual commenters and paragraphs in the Appendix.)

Comment: *Get as many local students involved as possible too, in the restoration end of it, planting trees, putting in baby bull trout, doing animal counts before and after, etc... learning sciences while getting invested in this. [#6]*

FWP Response: Thank you for your suggestion. Project partners also believe that public outreach and education is an important component of the project. For instance, partners already plan to work with the University of Montana and the Watershed Education Network to provide onsite learning opportunities for students over a range of ages. Additional “hands-on” learning opportunities will be provided through volunteer efforts (e.g., revegetation and planting aspects of project).

Comment: *NorthWestern [Energy] land, electric substation and overhead powerlines are in close proximity to or part of the proposed construction access. Because of the critical nature of our system and the need for us to respond immediately if there is an outage or operational issue, we request that at all times during the project, the access route to the substation and the substation gates be kept clear, including from parking. Also, construction equipment may need to cross under or near the existing transmission lines that connect to the substation. Please ensure that construction activity avoids contact with the structures, conductors and guy wires. [#13.1]*

FWP Response: Thank you for sharing these concerns with FWP. Language will be included within the construction contract to ensure the access route to the substation and the substation gates be kept clear, including from parking, at all times during the project. Additional construction contract language will be included to ensure that construction activity avoids contact with the structures, conductors and guy wires.

DECISION

Based upon the Draft Environmental Assessment and the applicable laws, regulations, and policies, I have determined that the proposed action will not have significant negative effects on the human and physical environments associated with this project. Therefore, I conclude that the EA is the appropriate level of analysis, and preparation of an Environmental Impact Statement is unnecessary.

No concerns were raised during the public comment period that would bring the environmental analysis into question. Nearly all commenters supported the proposed action, and no comments were received in opposition. Based on the analysis in the Draft EA and including the lack of public comment opposing or suggesting changes to the Draft EA or the proposal, I have selected the “Proposed Action” (Alternative B). FWP will work with its project partners--the City of Missoula and Trout Unlimited—to remove the lower Rattlesnake Creek dam and reconstruct the creek and floodplain to tie in 200-feet downstream of the dam

By notification of this Decision Notice, the draft EA is hereby made the final EA. The finding of selection for the “Proposed Action” Alternative 3 for the Rattlesnake Creek Dam Removal Project is the product of this Decision Notice.



 Randy Arnold
 Region 2 Supervisor
 Montana Fish, Wildlife & Parks

1/9/2020

 Date

APPENDIX

All comments on the proposed Rattlesnake Creek Dam Removal project and Draft EA received by FWP during the comment period November 13 through December 12, 2019. Comments received via E = email, Ph = Phone.

Com- men- ter #	Via	Para- graph	Comment
1	E		sounds great, do it
2	E		I strongly support the proposal to remove the Rattlesnake Dam. I live in Missoula, and recreate in the Rattlesnake watershed. I would like to see the dam removed, and restoration completed for fish passage.
3	E		I support removing the Rattlesnake Dam. I have fished this stream for years and highly value it.
4	E		I support the full damn infrastructure removal of the rattlesnake dam and approve of the full remediation of the riparian zone affected by its existence. Restoring rattlesnake creeks full connectivity with the Clark Fork river is crucial for native fish recovery.
5	E		Please do what is right and restore this native landscape to what it used to be!
6	E		What's to debate? It's not doing anything anyway. Take it out. Restore the stream as much as possible. Get as many local students involved as possible too in the restoration end of it, planting trees, putting in baby bull trout, doing animal counts before and after, etc... learning sciences while getting invested in this...
7	E		I support the removal of the dam, let the fish return to their native waters.
8	E		I believe the removal of the rattlesnake dam is necessary to restore historic spawning grounds for native cutthroat and bull trout.
9	E		As an angler who fishes in the greater Missoula area, I understand that the health of the tributaries of the middle Clark Fork River are essential to fish populations for the high quality spawning habitat and recruitment they provide. I fully support the Department's proposed action (Alternative 3) that involves full removal of the dam infrastructure with an emphasis on active restoration. The removal/restoration will benefit Rattlesnake Creek and it's fisheries, including fluvial adult fish that are affected by the dam being a partial migration barrier. I appreciate the Department and other entities' commitment to removing the dam and improving the habitat within lower Rattlesnake Creek. Thank you for the opportunity to comment.
10	E	1	Hellgate Hunters & Anglers (HHA) is a local sportsmen's conservation group dedicated to conserving Montana's wildlife, wild places, and fair-chase hunting and fishing heritage. Our organization represents over 300 members who hunt and fish throughout Western Montana. HHA would like to offer the following comments in support of the Rattlesnake Creek Dam Removal.
		2	Rattlesnake Creek is a vital tributary for the middle Clark Fork River as it provides cold, clean water and quality fish and wildlife habitat. Many anglers in the Missoula area, including many of HHA's members, understand the importance of this habitat. The quality of spawning habitat for bull trout above the project area is significant and removing the Rattlesnake Dam will benefit bull trout by improving migratory connectivity. With monitoring showing that estimated bull trout populations in Rattlesnake Creek are reduced from historical levels, this project is important for the species.
		3	Similarly, Rattlesnake Creek provides high quality spawning and rearing habitat for westslope cutthroat trout, a native species of concern in Montana. It was determined that fluvial cutthroat spawning in Rattlesnake Creek utilize a large portion of the Clark Fork both above and below Missoula. Removing the dam will also improve connectivity for these important game fish.
		4	Wildlife diversity and use of the Rattlesnake Creek corridor is very high and the riparian area habitat supports numerous species, including hundreds of bird species. The Department's preferred action will enhance the riparian corridor and be beneficial to these species.
		5	Hellgate Hunters and Anglers applauds the Department and partners on this project, and fully supports the preferred Alternative 3 which involves full removal of infrastructure and restoration of the affected habitat. Thank you for the opportunity to comment.

11	E	1	The WestSlope Chapter Trout Unlimited is a local non-profit conservation group focused on conserving, protecting, and restoring cold water fisheries in the Missoula area. Our 900+ members are passionate anglers who fish the Missoula area, including Rattlesnake Creek and the middle Clark Fork River. We'd like to offer this letter of support for the Draft Environmental Assessment for the Rattlesnake Dam Removal Project.
		2	Rattlesnake Creek supports populations of both native bull trout, an ESA listed species, and westslope cutthroat trout, a species of concern in Montana. The creek's high quality spawning habitat is important for recruitment into the trout populations found in the Middle Clark Fork River. Removal of Rattlesnake Dam will benefit these fisheries by improving migratory connectivity for adult fluvial fish using Rattlesnake Creek to spawn. The riparian corridor also supports habitat for many terrestrial and aquatic species. Removal of the dam and reconstruction of the floodplain will benefit this habitat and the species that rely on it.
		3	Given the broad benefits this project will have for cold water trout species, the WestSlope Chapter supports the agency's preferred alternative to remove the dam and provide active restoration measures. The WestSlope Chapter has been very involved in this project in support, both nominally and financially. We are excited to see it move forward and we commend MTFWP, Trout Unlimited and the City of Missoula on an outstanding project.
12	E		Five Valleys Audubon of Missoula, Montana supports the Preferred Alternative (#3), which is an active restoration option that would include full dam infrastructure removal, reconstruction of the creek and floodplain to tie in 200-feet downstream of the dam, raising the channel profile to improve floodplain connection, construction of off-channel habitat features, and revegetation of the constructed streambanks, floodplain and disturbed areas. In our assessment, this alternative would provide the best bird and wildlife habitat, post-construction, because of the re-connection of the stream to improve floodplain connection. Thank you for the opportunity to comment on this proposal.
13	E	1	NorthWestern Energy supports the Rattlesnake Creek Dam Removal Project and its associated mitigation. NorthWestern land, electric substation and overhead powerlines are in close proximity to or part of the proposed construction access. Because of the critical nature of our system and the need for us to respond immediately if there is an outage or operational issue, we request that at all times during the project, the access route to the substation and the substation gates be kept clear, including from parking. Also, construction equipment may need to cross under or near the existing transmission lines that connect to the substation. Please ensure that construction activity avoids contact with the structures, conductors and guy wires.
		2	Thank you for this opportunity to provide input.
14	Ph	1	<i>He left voicemail wondering about the high cost of FWP mailing the packet [cover letter and draft EA] to Rattlesnake residents.</i>
		2	<i>FWP called him back and found that he thought FWP had mailed the packets to everyone in the Rattlesnake area. FWP explained that we just mailed the packets to those landowners--like himself--who owned property that was immediately adjacent to or touching the proposed project's land parcel. We wanted adjacent landowners to know what action was being considered, so if the project goes forward, they know what's going on. He had no other comments.</i>
15	E	1	Thank you for the opportunity [for Missoula County Community & Planning Services] to comment on the draft EA for the Rattlesnake Creek Dam Removal Project.
		2	The Rattlesnake Creek watershed and creek itself are very important to residents of Missoula County and we appreciate ongoing conservation and restoration efforts. I am writing to express support for proposed Alternative 3, which would fully restore the stream, floodplain, and hillslope processes to mimic natural conditions. The restoration would support all habitats for terrestrial and aquatic species, including native fisheries with particular focus on reconnection to important upstream habitat. The restored site with wetlands and floodplain would support protection of water quality and quantity in the watershed and groundwater aquifer, which is vital to the Missoula Valley and Missoula County. The collaboration between the City, Trout Unlimited, and Fish, Wildlife & Parks is also a valuable component of this project.
		3	Again, thank you for the opportunity to comment on this project and for your continued work to enhance natural resource values that are important to Missoula County residents

16	E	1	<p>Thank you for the opportunity to provide comments on the <i>Draft Environmental Assessment on the Rattlesnake Creek Dam Removal Project</i>. As we have reviewed the document, it is evident that a great deal of work and deliberative consideration went into the development of this draft environmental assessment. We appreciate to have had the opportunity to be involved in the process of developing and funding the project, and we wanted to be sure to continue our participation by offering formal written feedback on this proposed project. We greatly appreciate that effort and commitment to a robust public process.</p>
		2	<p>Founded in 1964, Montana Trout Unlimited (MTU) is the only statewide grassroots organization dedicated solely to conserving, protecting, and restoring Montana's coldwater fisheries. Montana Trout Unlimited is comprised of 13 chapters across the state and represents approximately 4,500 Trout Unlimited members. A number of our chapters and local members helped inform the comments on the proposed activity in this case.</p>
		3	<p>Montana Trout Unlimited has great interest in the proposed action on Rattlesnake Creek, particularly in regard to the proposed removal of the existing dam infrastructure. We want to be on record fully supporting the agency's proposed action on removing this antiquated and out of date structure for the benefit of wild and native trout conservation within the Clark Fork watershed. MTU believes that this project is a great benefit for native trout, for public access, and the community of Missoula. We will stand by the agency in whatever way is needed to ensure the timely and effective completion of this project.</p>
		4	<p>Please do not hesitate to contact us with any questions, or if you need additional information regarding the comments that we have submitted (via email at [email] or by Montana Trout Unlimited Comments – 2 phone at [#]). Again, we thank you for the opportunity to comment, and we appreciate the open public process used by the Department to make these changes.</p>