

DECISION NOTICE
KALSTA SPRING CREEK SPAWNING CHANNEL ENHANCEMENT
PROJECT

Prepared by
Montana Fish, Wildlife and Parks
March 24, 2009

I. Proposal

Montana Fish, Wildlife and Parks (FWP) proposes to provide partial funding through the Future Fisheries Improvement Program for a spawning channel enhancement project on Kalsta Spring Creek, a tributary to the Big Hole River.

II. Montana Environmental Policy Act (MEPA)

MEPA required FWP to assess the potential consequences of the proposed action for the human and natural environment. The proposal was detailed in an Environmental Assessment (EA) released by FWP on February 20, 2009. The 30-day comment period for this EA ended March 23, 2009.

Issues raised during the public comment period for this EA are addressed in the Comments section of this Decision Notice. The draft EA and Decision Notice will serve as the final document.

III. Summary of Public Comment

One written e-mail comment was received in response to the draft EA. No other comments were received. The commenter offered opposition to the proposed project based on **“We would prefer to support this proposal but must point out that the absence of a more thorough EA with greater attention to critical project details prevents us from doing so.”** Issues brought forward from this written comment included:

- 1. The document asserts that cooler water flows from the creek could “moderate temperatures in the lower Big Hole River during the summer.” Based on the volumes of Kalsta and the Big Hole this seems unlikely. Perhaps, if the spring water were delivered to the river at the temperatures at the creek’s origin, some area of thermal refuge might be created. A more detailed analysis of temperatures and volumes would be appropriate to justify this assertion.**

Response: Temperature and flow data were collected in Kalsta Spring Creek by FWP during 2006/2007. Water temperatures at the head of the springs remained a cool 45 to 52 F through the monitoring period and flows ranged between 4 and 10 cubic feet per second (cfs) during the irrigation season. Montana Department of

Environmental Quality (DEQ) assessed thermal conditions in the Big Hole River using the Heat Source v7.0 model based on flow and temperature data collected in July 2006. This DEQ study identified the lower 20-mile reach of the Big Hole River as an area of concern with respect to thermal loading. Near the confluence of the spring, summer flows in the Big Hole River have been documented to reach as low as 100 cfs. Adding 10 cfs of cool water to the lower Big Hole during these low flow periods has the potential for reducing thermal loading to the river. Certainly, the spring's ample flow and cool water source would provide an opportunity for creating a thermal refuge for fish residing in this reach of the Big Hole River.

- 2. The EA states that the project could “create much needed spawning and rearing habitat for trout residing in this reach of the river.” What evidence exists to suggest that the number of juveniles presently available for recruitment is inadequate? If there are no data supporting this assertion, it should be withdrawn. If there are supporting data, they should have been presented here.**

Response: Fisheries surveys have been conducted by FWP in a nearby reach of the Big Hole River since 1987. Although the data have not been presented in any FWP reports, the local FWP fisheries biologist has indicated that rainbow trout densities in this reach of the lower Big Hole River are about one tenth the densities of brown trout, and the rainbow trout population appears to be recruitment limited. The raw survey data can be found in FWP Region 3 files. Additionally, the local biologist has identified Willow Creek as the only tributary downstream of the community of Glen that is used by spawning rainbow trout. The biologist also has indicated that the use of the main stem for rainbow trout spawning is minimal. The draft EA, Item II, Paragraph 2 will be modified to “create much needed spawning and rearing habitat for *rainbow* trout residing in this reach of the river.”

- 3. It is stated that the stream has been manipulated and impounded “to sub-irrigate an adjacent pasture.” How large is the area of sub-irrigation? Is there a water right associated with this use? What is the water right status of the surface flow of the creek system?**

Response: The water right associated with this spring appears to be 41D 195616 00 and involves 32 acres. This water right is currently undergoing adjudication, and the water right owner has objected to flow rates and acreages. The disposition of this water right would have no affect on this proposed project since the project doesn't involve a change of use or new appropriation, and the landowner is also the water-right owner.

- 4. The document describes proposed manipulation of the water course but offers no information regarding current water rights nor potential**

impacts on downstream water rights holders. These need to be addressed in detail.

Response: The landowner and the water-rights owner on Kalsta Spring Creek are one in the same. This proposed project would not affect any downstream water user.

- 5. Reference is made to a newly constructed riparian fence and the planned development of a grazing management plan. How will these affect the function of the proposed habitat enhancement? Does the riparian fence exclude grazing within the project area? How long will that exclusion be in effect? The absence of details on these issues makes evaluation of the project difficult or impossible.**

Response: The landowner and the Undaunted Stewardship Program currently are developing a grazing management plan for the project. This plan has yet to be completed. Additionally, the landowner will need to enter into a project agreement with FWP for the Future Fisheries funding to ensure the investment in restoration for a minimum of 20 years. As part of this project agreement, FWP will need to approve the proposed grazing management plan. FWP would expect that the riparian area would be treated as a grazing enclosure for a minimum of three years. Personnel from NRCS will conduct semi-annual, post-project wetland and riparian vegetation monitoring. FWP will periodically monitor compliance for the life of the project.

- 6. It is stated here that the total cost of the project is anticipated to be \$190,000 with a Future Fisheries contribution of \$83,000. Where will the remainder of the costs be found?**

Response: The total cost of the project has been estimated to be \$190,300, with a Future Fisheries contribution of up to \$83,030. The matching funding sources include \$97,400 from the Renewable Resource Grant and Loan Program (Montana Department of Natural Resources and Conservation), \$5,000 from the Big Hole Watershed Committee and \$7,000 in in-kind labor and materials from the landowner. The Renewable Resource Grant for this project has not yet been confirmed.

- 7. “Recreational fisheries within nearby reaches of the river are expected to improve.” In the absence of data showing the calculated decrease in river water temperatures, extent of any thermal refugium created, and the dearth of available juvenile recruitment, the statement is purely speculative.**

Response: The response of fish populations to any habitat enhancement or restoration project is speculative. Based on our responses to Comments 1 and 2, however, we think there is a good chance that this proposed project would benefit

the fisheries in the lower Big Hole River. Additionally, the local FWP fisheries biologist, the independent citizen review panel of the Future Fisheries Improvement Program and the FWP Commission have determined that this proposed project would be beneficial to the fisheries.

8. While the statement that the no action alternative will result in no change in the circumstances is likely correct, asserting that benefits will occur as a result of the proposed action remains unjustified. The question of what factor or factors is depressing the river's trout population in the area has not been defined.

Response: The proposed action alternative did not assert that fisheries benefits would occur; rather fisheries benefits are expected to occur. Again, the response of fish populations to any habitat modification is somewhat speculative. Based on a review of the proposal by the local FWP fisheries biologist, the Future Fisheries citizen panel and the FWP Commission, this project is expected to help ameliorate thermal loading in the lower Big Hole River, create a thermal refuge for fish residing in the river, and provide additional recruitment of juvenile rainbow trout to the river. Although this project is expected to increase the recruitment of juvenile brown trout to the lower Big Hole River, population surveys conducted since 1987 by FWP indicate that the brown trout population is not recruitment limited.

9. Page 4. Paragraph 1. None of the benefits of the project asserted here are justified. See comments above.

Response: Please see response to comments above.

10. No discussion of public access is included.

Response: Public access is not a part of this proposed project. The expected public benefits are associated with downstream waters (lower Big Hole River).

11. Attachment 2 map is too dark, blurred and unusable.

Response: We apologize for the quality of Attachment 2. The quality of documents received from Future Fisheries applications can vary greatly and poor quality becomes compounded when we attempt to photocopy a document for inclusion in an EA. Although occasionally these documents are poor in quality, we feel that the information they provide is better than not including them at all. We will send out another copy of Attachment 2 should we be requested to do so, although the quality may continue to be unacceptable to the reader.

IV. Modifications to the Environmental Assessment

Modifications to the draft EA are deemed to be unnecessary.

V. Decision

After review of the proposal, it is my decision to proceed with funding through the Future Fisheries Improvement Program for the Kalsta Spring Creek Spawning Habitat Enhancement Project. The action will benefit the fishery in Kalsta Spring Creek and the lower Big Hole River.

I find there to be no significant impacts associated with this action and conclude that an Environmental Impact Statement is not needed. The completed EA and the Decision Notice provide an adequate level of analysis.

Jim Darling, Habitat Bureau Chief
Fisheries Division