July 12, 2012
1420 East 6th Ave.
P.O. Box 200701
Helena, MT 59620-0701

Environmental Quality Council
Montana Department of Environmental Quality
Montana Department of Fish, Wildlife and Parks
    Fisheries Division
    Endangered Species Coordinator
    Native Species Coordinator - Fisheries
    Missoula Office
Montana State Library, Helena
MT Environmental Information Center
Montana Audubon Council
Montana Wildlife Federation
Lewis and Clark Conservation District
Wayne Hadley, 1016 Eastside Road, Deer Lodge, MT 59722
Montana River Action, 304 N 18th Ave., Bozeman, MT 59715
U.S. Army Corp of Engineers, Helena
U.S. Fish and Wildlife Service, Helena
State Historic Preservation Office, Helena
Big Blackfoot Chapter Trout Unlimited, P.O. Box 1, Ovando, MT 59854
Stew and Delores Schwartz, 597 Upper Milligan Road, Great Falls, MT 59405

Ladies and Gentlemen:

Please find enclosed an Environmental Assessment (EA) prepared for the Future Fisheries Improvement Program. The Program tentatively plans to provide partial funding to a project calling for the consolidation of several points of water diversion on Sauerkraut Creek to a single point of diversion that would be retrofitted with a fish screen. The intent of the project is to enhance habitat for salmonids, primarily westslope cutthroat trout and bull trout. Sauerkraut Creek is a tributary to the Blackfoot River located about 5 miles southwest of the town of Lincoln in Lewis and Clark County.

Please submit any comments that you have by 5:00 P.M., August 10, 2012 to Montana Fish, Wildlife & Parks at the address listed above. The funding for this project through the Future Fisheries Improvement Program is contingent upon approval being granted by the Fish, Wildlife and Parks Commission. If you have any questions, feel free to contact me at (406) 444-2432. Please note that this draft EA will be considered as final if no substantive comments are received by the deadline listed above.

Sincerely,

Mark Lere, Program Officer
Habitat Section
Fisheries Bureau
e-mail: mlere@mt.gov

ENVIRONMENTAL ASSESSMENT
Fisheries Division
Montana Fish, Wildlife & Parks
Sauerkraut Creek In-stream Flow Enhancement

General Purpose: The 1995 Montana Legislature enacted sections 87-1-272 through 273, MCA that directs the Montana Fish, Wildlife and Parks (FWP) to administer a Future Fisheries Improvement Program. The program involves providing funding for physical projects to restore degraded fish habitat in rivers and lakes for the purpose of improving wild fisheries. The legislature established an earmarked funding account to help accomplish this goal. Additionally, the 1999 Montana Legislature amended statute sections 87-1-273, 15-38-202 and Section 5, Chapter 463, Laws of 1995 to create a bull trout and cutthroat trout enhancement program. The program calls for the enhancement of bull trout and cutthroat trout through habitat restoration, natural reproduction and reductions in species competition by way of the Future Fisheries Program.

The Future Fisheries Improvement Program is proposing to provide partial funding to a project calling for consolidating several existing ditches on Sauerkraut Creek into a single diversion point retrofitted with a fish screen. The upgraded diversion structure would eliminate entrainment of fish into the irrigation system, substantially reduce irrigation impacts on the stream channel and secure in-stream flow though a water management agreement. The intent of the project is to enhance aquatic habitat in the lower 2 miles of the stream and to improve fish passage and recruitment to seven miles of the stream. The diversions and water rights associated with this project are owned by the Sunny Slope Grazing Association. Sauerkraut Creek is a tributary to the Blackfoot River located about 5 miles southwest of the town of Lincoln in Lewis and Clark County.

I. Location of Project: The project site is located on Sauerkraut Creek, a tributary to the Blackfoot River, within Township 13 North, Range 9 West, Sections 29 and 32 in Lewis and Clark County (Attachment 1)

II. Need for the Project: One goal within Montana Fish, Wildlife and Parks six-year operations plan for the fisheries program is to "restore and enhance degraded fisheries habitats" by implementing habitat restoration projects and administering the Future Fisheries Improvement Program to restore important habitats on private and public lands. This proposed project would help meet this goal.

Sauerkraut Creek is a 2nd order tributary to the upper Blackfoot River that supports fluvial, genetically pure westslope cutthroat trout and limited bull trout rearing. Sauerkraut Creek is the site of two recent restoration projects involving: 1) the restoration of over one mile of channel impacted by historic placer mining; and 2) the replacement of three undersized culverts with full-span bridges to improve fish passage. Presently, uncontrolled flooding occurs on the irrigation system due the lack of head gate structures and fish are readily entrained into the multiple ditches. Under current operations, the irrigator frequently diverts all of the available stream flow for irrigation. Consolidation of these ditches into a single diversion retrofitted with a fish screen would eliminate entrainment of fish into the irrigation system, reduce impacts to the stream

channel from annual work needed to divert water and secure minimum in-stream flows with a water management agreement.

III. Scope of the Project:

This project would involve retiring six existing irrigation ditches. The consolidated single point of diversion would involve piping about 4.4 cubic feet per second of water through a gravity fed ditch system to irrigate fields within the historically irrigated footprint (Attachment 2 and 3). Currently, when the water is available, at least 15 cfs is diverted at the multiple diversion points to irrigate about 75 acres.The diversion would be retrofitted with a prefabricated steel head gate and coanda-style fish screen would be installed into the upper ditch. Water falling through the screen would be sent down the ditch, while water, fish and debris entrained into the head gate would be by-passed back to the creek. The place of water use and the point of diversion would not change. A water management agreement would be perfected to ensure a minimum of 3 cubic feet per second would remain in-stream. The total estimated cost for this project is estimated at $72,030. Of this total, the Future Fisheries Improvement Program would be contributing up to $11,630. The remaining funds will come from other sources and from in-kind services:

Contributor	In-kind services	In-kind cash
NRCS	$14,000	$25,388
Landowner	$6,250	
USFWS		$11,000
Big Blackfoot TU	$3,000	$762

IV. Environmental Impact Checklist:

Please see attached checklist.

V. Explanation of Impacts to the Physical Environment

1. Terrestrial and aquatic life habitats.

Consolidating a series of existing ditches into a single point of diversion retro-fitted with a fish screen would eliminate the entrainment of fish into the irrigation system, reduce the need for annual stream channel work to divert water into the ditch headings, and enhance in-stream flow through a water management agreement. This effort is expected to improve the overall aquatic and riparian habitat in Sauerkraut Creek, benefiting westslope cutthroat trout, bull trout and brown trout.

2. Water quantity, quality and distribution.

No changes in drainage pattern or natural surface run-off would occur in Sauerkraut Creek as a result of the proposed project. However, in-stream flow would be ensured to never fall below 3 cfs downstream of the single point of diversion through the use of a water management agreement. Short-term increases in turbidity will occur during project construction. To minimize turbidity, operation of equipment in the stream

channel will be minimized to the extent practicable. The Department of Environmental Quality will be contacted to determine narrative conditions required to meet short-term water quality standards and protect aquatic biota (318 authorization). A 310 permit (Montana Natural Streambed and Land Preservation Act) will be obtained from the local conservation district and the U.S. Army Corp of Engineers will be contacted for requirements to meet the federal Clean Water Act (404 permit).

5. Aesthetics.

In the short term, aesthetics would be adversely impacted during construction due to ground disturbance and the presence of heavy equipment. In the long term, the proposed project would enhance aesthetics in Sauerkraut Creek by ensuring a minimum flow remains in-stream and by significantly reducing the irrigator's need to manipulate the active channel to obtain irrigation water.

7. Unique, endangered, fragile, or limited environmental resources.

Westslope cutthroat trout utilize Sauerkraut Creek for spawning, rearing and adult habitat. These fish, known to be genetically pure, are native to Montana and are classified as a "Species of Special Concern" because of their shrinking distribution and declining numbers. Additionally, bull trout, a species listed as threatened under the Endangered Species Act, are known to use Sauerkraut Creek for rearing on a limited basis. The intent of this project is to eliminate entrainment of fish into the irrigation system, reduce the need for channel manipulations by the irrigator and improve in-stream flow in the lower portion of the stream. The project is expected to benefit westslope cutthroat trout and bull trout utilizing the stream. Because Sauerkraut Creek supports bull trout, the project will be included in Montana Fish, Wildlife and Parks Section 6 conservation plan with the U.S. Fish and Wildlife Service.

8. Historic and archeological sites.

The project area recently was disturbed by the irrigator in cleaning and activating some of the existing irrigation ditches. Consolidation of the ditches would involve only filling portions of the abandoned ditches with earthwork. As a result, there is a very low likelihood that cultural properties will be impacted by the proposed project. Should cultural materials be inadvertently discovered during the project, the State Historic Preservation Office will be contacted and the site will be investigated.

VI. Explanation of Impacts on the Human Environment.

4. Agricultural or industrial production.

The proposed consolidation of ditches will not change the acreage under irrigation and the project will not adversely affect agricultural production.

7. Access to & quality of recreational activities.

Eliminating entrainment of fish into the irrigation system and augmenting in-stream flow in lower Sauerkraut Creek is expected to improve overall aquatic habitat and, as a result, would improve recruitment of fish to the stream and to the Blackfoot River.

13. Locally adopted environmental plans and goals.

This proposed project is linked to a larger habitat conservation program that entails a conservation easement that directly ties the easement to the restoration of native trout streams. This project fits into the direction of the conservation easement.

VII. Discussion and Evaluation of Reasonable Alternatives.

1. No Action Alternative

If no funding is provided through the Future Fisheries Improvement Program, the applicant would have to either seek additional sources of funding to complete the project or the existing irrigation system on Sauerkraut Creek would remain unscreened and water use would remain inefficient. Aquatic habitat in the lower reaches of the stream would remain degraded and fish populations in Sauerkraut Creek would remain diminished.

2. The Proposed Alternative

The proposed alternative intends to provide partial funding through the Future Fisheries Improvement Program to consolidate several points of diversion into a single diversion that would be retrofitted with a fish screen. The project would eliminate entrainment of fish into the irrigation system, improve irrigation efficiencies, maintain a base in-stream flow of 3 cfs and reduce the need for channel manipulations by the irrigator in order to divert water. The project is expected to benefit westslope cutthroat trout, bull trout and other fish species that utilize the stream.

VIII. Environmental Assessment Conclusion Section

1. Is an EIS required? No.

We conclude from this review that the proposed activities will have a positive impact on the physical and human environment.

2. Level of public involvement.

The project application to the Future fisheries Improvement Program has been posted on the Montana Fish, Wildlife and Parks webpage for public comment. No comments have been received to date. The proposed project was reviewed and supported by the public review panel of the Future Fisheries Improvement Program. The proposed project also will be reviewed by the Fish, Wildlife and Parks Commission and funding will be contingent upon their approval. The

Environmental Assessment (EA) is being distributed to all individuals and groups listed on the cover letter. The EA also will be published on Montana Fish, Wildlife and Parks webpage: **www.fwp.mt.gov**

3. Duration of comment period?

   Public comment will be accepted through 5:00 PM on August 10, 2012.

4. Person responsible for preparing the EA.

   Mark Lere, Program Officer
   Habitat Section
   Fisheries Bureau
   Montana Fish, Wildlife and Parks
   PO Box 200701
   Helena, MT 59620
   Telephone: (406) 444-2432
   e-mail: mlere@mt.gov

MONTANA DEPARTMENT OF FISH, WILDLIFE AND PARKS
1420 E 6th Ave, PO BOX 200701, Helena, MT 59620-0701
(406) 444-2535

ENVIRONMENTAL ASSESSMENT

Project Title: Sauerkraut Creek In-stream Flow Enhancement
Division/Bureau: Fisheries Bureau -Future Fisheries Improvement
Description of Project: The Future Fisheries Improvement Program tentatively plans to provide partial funding to a project calling for consolidation of several existing ditches on Sauerkraut Creek into a single diversion point retrofitted with a fish screen. The intent of the project is to enhance habitat for salmonids, primarily westslope cutthroat trout and bull trout, by eliminating entrainment and enhancing in-stream flow. Sauerkraut Creek is a tributary to the Blackfoot River located about 5 miles southwest of the town of Lincoln in Lewis and Clark County.

POTENTIAL IMPACT ON PHYSICAL ENVIRONMENT

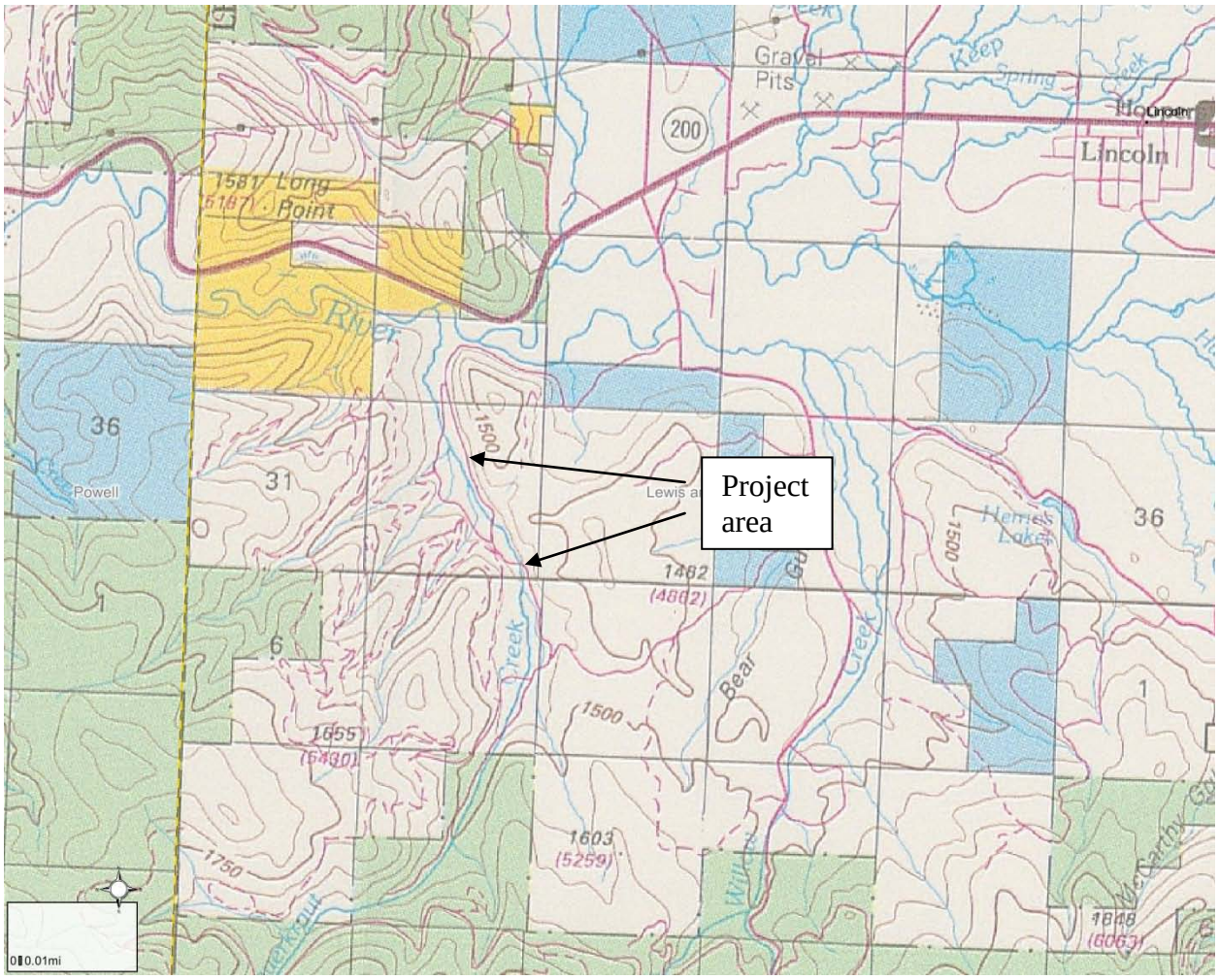
	MAJOR	MODERATE	MINOR	NONE	UNKNOWN	COMMENTS ON ATTACHED PAGES
1. Terrestrial & aquatic life and habitats			X			X
2. Water quality, quantity & distribution			X			X
3. Geology & soil quality, stability & moisture			X			X
4. Vegetation cover, quantity & quality			X			X
5. Aesthetics			X			X
6. Air quality				X		
7. Unique, endangered, fragile, or limited environmental resources			X			X
8. Demands on environmental resources of land, water, air & energy				X		
9. Historical & archaeological sites				X		X

POTENTIAL IMPACTS ON THE HUMAN ENVIRONMENT

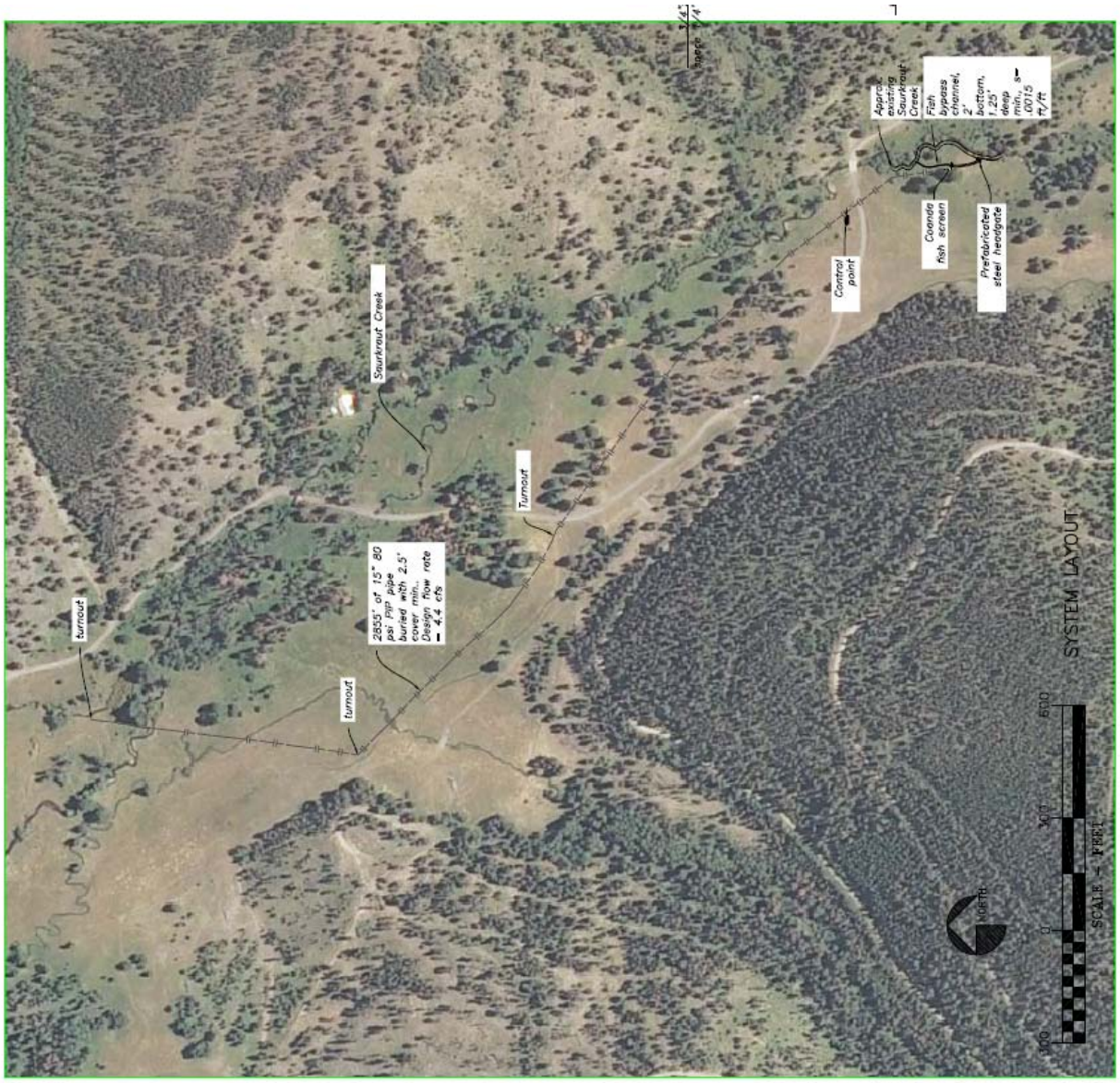
	MAJOR	MODERATE	MINOR	NONE	UNKNOWN	COMMENTS ON ATTACHED PAGES
1. Social structures & mores				X		
2. Cultural uniqueness & diversity				X		
3. Local & state tax base & tax revenue				X		
4. Agricultural or industrial production				X		X
5. Human health				X		
6. Quantity & distribution of community & personal income				X		
7. Access to & quality of recreational and wilderness activities			X			X
8. Quantity & distribution of employment				X		
9. Distribution & density of population & housing				X		
10. Demands for government services				X		
11. Industrial & commercial activity				X		
12. Demands for energy				X		
13. Locally adopted environmental plans & goals			X			X
14. Transportation networks & traffic flows				X		

Other groups or agencies contacted or which may have overlapping jurisdiction: Lewis and Clark Conservation District, Montana Department of Natural Resources and Conservation, US Fish and Wildlife Service, US Army Corp of Engineers, Montana Department of Environmental Quality, State Historic Preservation Office

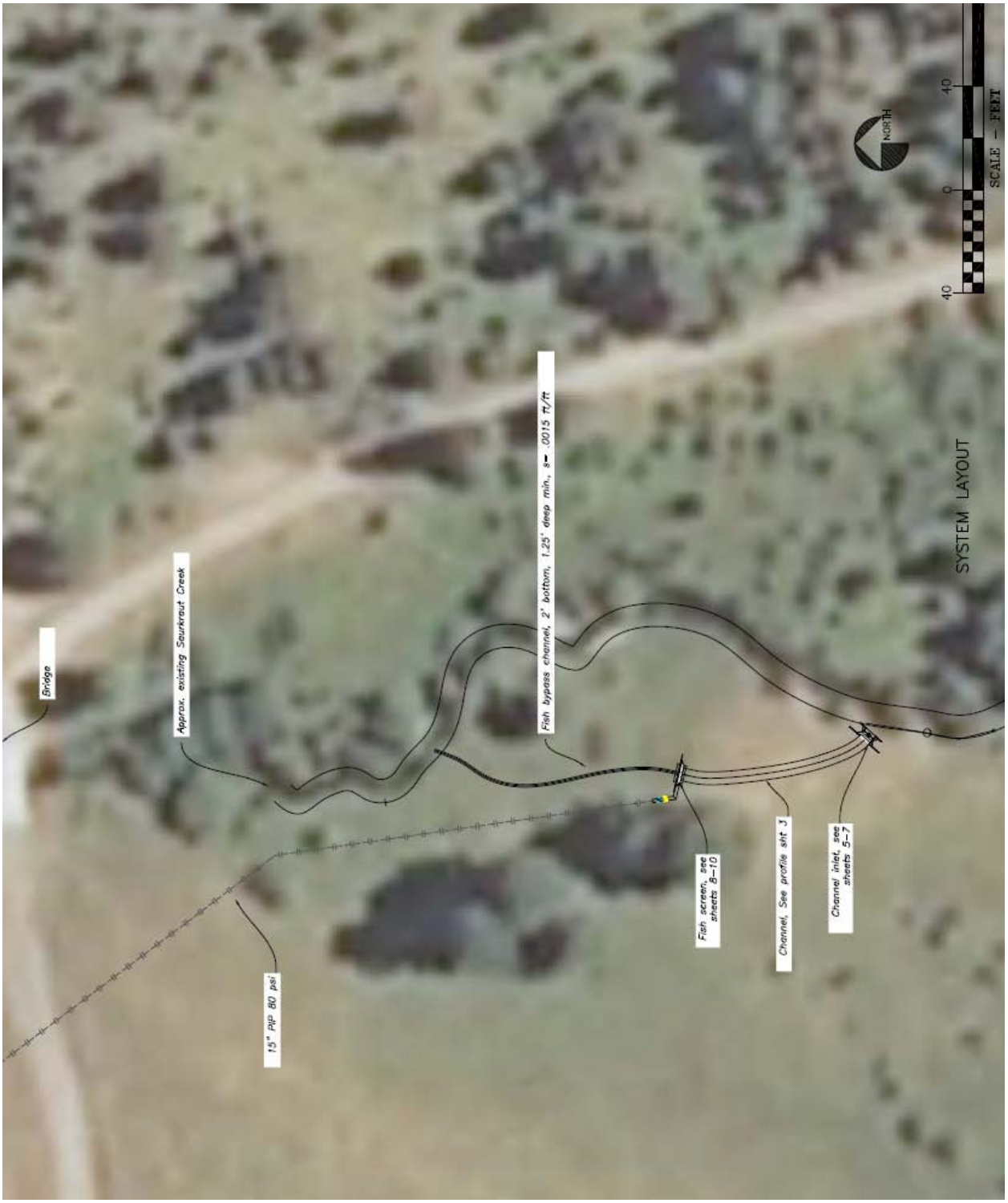
Individuals or groups contributing to this EA Ryen Neudecker, Big Blackfoot Chapter Trout Unlimited
Recommendation concerning preparation of EIS No EIS required.
EA prepared by: Mark Lere
Date: July 10, 2012



ATTACHMENT 1



ATTACHMENT 2



ATTACHMENT 3