September 29, 2010
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 Bureau
Endangered Species Coordinator
Glasgow Office
Montana State Library, Helena
Montana Department of Natural Resources and Conservation
MT Environmental Information Center
Montana Audubon Council
Montana Wildlife Federation
Wayne Hadley, 1016 Eastside Road, Deer Lodge, MT 59722
Montana River Action, 304 N 18th Avenue, Bozeman, MT 59715
Blaine County Conservation District
Bureau of Land Management, Havre Field Office, 3990 Highway 2 West, Havre, MT 59501
U.S. Army Corp of Engineers, Helena
U.S. Fish and Wildlife Service, Helena
State Historic Preservation Office, Helena
Willie Doll (FWP Commissioner)
Sand Creek Ranch, LLC, P.O. Box 1280, Havre, MT 59501

Ladies and Gentlemen:

Please find enclosed an Environmental Assessment prepared for the Future Fisheries Improvement Program. The Program tentatively plans to provide partial funding for a project calling for the restoration of the existing dam on Cow Creek Reservoir by replacing embankment material on the upstream face of the dam followed by the placement of rock rip-rap over a layer of geotextile fabric. In turn, the landowner would agree to manage water levels in the reservoir to optimize fisheries benefits, not divert water from Cow Creek for consumptive use for a minimum period of 20 years, enter into a water lease with Montana Fish, Wildlife and Parks for in-stream flow purposes and allow reasonable public access to the stream and reservoir for the purpose of recreational fishing for a minimum period of 20 years. The project site is located on Cow Creek Reservoir approximately 40 miles south of the town of Chinook in Blaine County.

Please submit any comments that you have by 5:00 P.M., November 1 to the Department of Fish, Wildlife and Parks in Helena at the address listed above. Funding for this project through the Future Fisheries Improvement Program has been reviewed and approved by the public review panel of the Future Fisheries Improvement Program and 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 Bureau
Montana Fish, Wildlife & Parks
Cow Creek Reservoir Restoration and Stream Flow Protection Project

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.

Section 85-2-436, MCA authorizes FWP to lease water rights and temporarily change water rights to in-stream flow purposes to benefit of the fishery.

The Future Fisheries Improvement Program is proposing to provide partial funding to a project calling for the repair of Cow Creek Reservoir Dam. The project would involve restoring the crest width of the exiting dam by replacing embankment materials on the upstream face of the dam that have eroded over time, followed by the placement of rock rip-rap over a layer of geotextile fabric. In turn, the Sand Creek Ranch (Landowner) would agree to 1) manage water levels in Cow Creek Reservoir to optimize fisheries benefits for a minimum of 20 years; 2) not divert water from Cow Creek Reservoir and Cow Creek for consumptive use for a minimum period of 20 years, except reasonable use for livestock water; 3) enter into a water lease with FWP for in-stream flow purpose and 4) allow reasonable public access to both Cow Creek Reservoir and Cow Creek for the purposes of recreational fishing for a minimum period of 20 years.

I. Location of Project: This reservoir and stream reach is located in Sections 17, 18, 20 & 21, Township 27 North, Range 19 East, Blaine County. This project is located approximately 40 miles south of Chinook. A project area map and general location map are presented as Figures 1 and 2, respectively.

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.

Cow Creek Reservoir currently supports a mixed assemblage of fish, including yellow perch, channel catfish, walleye, tiger muskellunge, black crappie and brook trout, as well as number of minnow and sucker species. Since 2005, FWP has periodically stocked channel catfish, tiger muskellunge and walleye into the reservoir. Cow Creek currently supports a brook trout fishery upstream of the reservoir. Numerous minnow and sucker species also are found in the stream. The public has had access to these two bodies of water for recreational fishing, supporting between 200 and 450 angler days per year.

When Sand Creek Ranch purchased the property surrounding Cow Creek Reservoir and a portion of Cow Creek, irrigation was discontinued due to the high cost of pumping and the lack of soil suitability for irrigated crop production. Water levels remained at or above full pool in Cow Creek Reservoir when this irrigation was discontinued. While full pool levels benefitted the reservoir fishery, it resulted in extensive

wave and ice-caused erosion to the dam face. This condition has persisted to the point that failure of the dam is of concern. Currently and until the dam is restored, water levels must be reduced to avoid further damage to the dam and to prevent a possible breach during times of high inflow. This reduction in pool level has harmed the reservoir fishery by reducing the amount of highly productive shallow water (littoral) near-shore habitat. In addition, rapid drawdown of the reservoir undertaken periodically to accommodate expected high inflows has resulted in fish loss from the reservoir. This rapid drawdown also creates a highly modified flow regime downstream of dam, causing unwanted impacts to the downstream prairie fishery.

Historically, Cow Creek was seasonally dewatered due to extensive irrigation withdrawals; up to 35 cfs was diverted to irrigate about 583 acres. This water was primarily diverted by the ditch tapping Cow Creek in the NW SE section 18, T27N, R19E. In 1972 Cow Creek Reservoir was constructed and the irrigated acreage was expanded to approximately 2066 acres. The reservoir was drawn down to supply irrigation water later in the summer. Since the discontinuation of this irrigation, however, Cow Creek has not been dewatered in the reach downstream of the Section 18 diversion, as well as downstream of the reservoir.

III. Scope of the Project:

The project proposes to repair the upstream face of Cow Creek Reservoir Dam by adding embankment material to the exiting eroded areas and then placing 12 inch minus sized rock riprap over a geotextile erosion barrier on the face of the dam to prevent further erosion (Figure 3). Approximately 2,320 cubic yards of new fill for the embankment and 1,180 cubic yards of rock riprap would be used for the repair. Approximately 2,900 square yards of geotextile fabric would be placed on the face of the dam prior to the addition of the riprap. Sources for the embankment material will not be determined until a contract is let. The rock riprap would come from a quarry located on private property located about 2 miles southwest of the reservoir. In turn, the Sand Creek Ranch will enter into a water management and fishing access agreement for a 20-year period. Incorporated in this agreement are stipulations that the ranch would agree to not divert water for irrigation from Cow Creek and Cow Creek Reservoir and would manage the reservoir in a manner that would maximize the benefits to the fishery. This agreement also would allow for continued public access for the purpose of recreational fishing on both Cow Creek and Cow Creek reservoir for the 20-year term of the agreement. Both the water management and fishing access components could be renewed after 20 years if Sand Creek Ranch and FWP so desire.

FWP would file an application to temporarily change water rights from Cow Creek to in-stream fishery use and to temporarily or permanently change the reservoir water rights to a fishery use. This change in use would involve Claim Nos. 40EJ 175817 00, 40 EJ 175819 00 and 40EJ 175820 00, less the stored water component.

This proposed repair project is expected to cost $169,510. Of this total, the Future Fisheries Improvement Program is proposing to contribute $73,705, with the remainder being provided by the Landowner.
This project would restore Cow Creek Dam to ensure maximum water capacity can be maintained in the reservoir during key periods to maximize benefits to the fishery. In addition, the project would preserve in-stream flows in Cow Creek upstream of the reservoir where FWP has a 4.5 cubic foot per second in-stream flow reservation.

IV. Environmental Impact Checklist:

Please see attached checklist.

V. Explanation of Impacts to the Physical Environment

1. Terrestrial and aquatic life and habitats.

Aquatic habitat in Cow Creek Reservoir and Cow Creek would moderately improve as a result of the project. The reservoir level would be managed to provide for optimal fish habitat and in-stream flow in Cow Creek would be protected from dewatering for a period of 20 years. Minor impacts to terrestrial habitat would be associated with the repair of the face of the dam. Most of these minor impacts would be short-term in nature corresponding to the construction phase of the project. The time frame for construction is expected to be between 30 and 45 days.

2. Water quantity, quality and distribution.

Water levels in Cow Creek Reservoir would be managed in a manner to optimize benefits to the fishery. In general, pool levels in the reservoir would be maintained at higher levels than that of current management. The present practice of rapid drawdowns of the reservoir to accommodate high inflows would be discontinued. This would result in more consistent water levels in the reservoir and eliminate rapid, unnatural rises in the stream below the reservoir. Approval of a change in use from irrigation purposes to in-stream flow purposes would protect and maintain flow in 1.2 miles of Cow Creek and would provide for pool level management to the benefit of fish and wildlife on Cow Creek Reservoir. This project is not expected to impact water quality since the repair to the dam would be conducted in the dry.

3. Geology and soil quality, stability and moisture.

Minor decreases in soil stability may occur in borrow and quarry areas. However, the borrow area location(s) are unknown until a construction contract is let. Also, it remains unknown if the existing quarry site would need to be expanded. The project would stabilize and repair the current erosion occurring on the upstream face of Cow Creek Dam.

4. Vegetation cover, quantity and quality.

Borrow areas may result in temporary loss of vegetation. Re-vegetation of disturbed areas would be the responsibility of the landowner or contractor.

5. Aesthetics.

Short-term minor impacts to aesthetics of the area around the dam and around borrow and quarry

areas would occur due to construction activities. If the existing quarry needed to be expanded, long-term but minor aesthetic impacts may occur in that area. Again, the location for borrow area(s) is unknown at this time and would be determined by the Landowner and selected contractor.

6. Air quality

Short-term declines in air quality may occur in and nearby the dam site due to dust created by the excavation, movement and placement of material to repair the dam face. However, impacts would be minor as no homes or buildings are located in this very remote area. Short-term declines in air quality from dust may also occur along roads used to transport borrow materials and riprap to the construction site. These impacts would be limited in duration and would occur only intermittently during the construction phase of the project. Impacts to air quality would be similar to those currently occurring in the area associated with oil and gas development and ranching activities.

8. Demands on environmental resources of land, water, air & energy

The project would reduce the potential demand on water resources as irrigation would not be reinstated during the 20-year life of the project agreement.

9. Historical & archaeological sites

The potential to impact historical or archaeological sites is unknown as the landowner and contractor will be responsible for selecting a borrow site for material to repair the face of the dam. This will likely occur in close proximity to the dam where significant disturbance already occurred during the original construction of the dam. Additionally, the need to expand the existing rock quarry also is unknown at this time. As a result, potential impacts to cultural resources associated with obtaining borrow material and rock cannot be addressed in this EA. Cow Creek Dam was constructed in 1972. There is a very low likelihood that cultural properties could be impacted associated with work on the dam face. 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.

Some minor and mostly short-term negative impacts to the human environment will result from the construction aspect of the project. Long-term positive impacts will also result from the project.

3. Local & state tax base & tax revenue.

While the project calls for the change of irrigation water rights to in-stream and in-lake uses, these water rights have not been use for irrigation for some time. The land that historically was irrigated is presently taxed as grazing land and non-irrigated tillable fallow land. The tax base would remain unchanged.

4. Agricultural or industrial productivity.

Agricultural production is not expected to change since irrigation has been discontinued for some time.

5. Human Health

In February 2010, DNRC completed the hazard classification for Cow Creek Dam. The result of this investigation determined that the dam was classified as not high-hazard. This classification means that if the dam failed, the resultant flood of water would not result in loss of life. Even though it is unlikely failure of the dam would result in loss of life, repair of the dam would further decreases any chance that dam failure could occur and would further reduce the possibility for injury or loss of life.

7. Access to & quality of recreational and wilderness activities

The project would ensure continued access to Cow Creek Reservoir for public fishing and would provide for public access for fishing on Cow Creek upstream of the reservoir.

14. Transportation networks & traffic flows

Minor short-term impacts to road traffic would occur if borrow material and riprap is hauled on public roads. The impacts would similar to other impacts occurring in the area associate with oil and gas development and ranching activities.

VII. Discussion and Evaluation of Reasonable Alternatives.

1. No Action Alternative

If no Future Fisheries Improvement funding is provided, the Landowner would have to either seek other sources of funding to complete the project or the dam on Cow Creek Reservoir would continue to be susceptible to failure. Failure of the dam would eliminate a valuable fishery that annually supports several hundred angler days. Pool levels in the reservoir would continue to be operated in a manner that would limit fish productivity. Sand Creek Ranch could begin to irrigate again to protect the water rights from abandonment as a result of ongoing non-use. As a result, a portion of Cow Creek could become dewatered in the future.

2. The Proposed Alternative

The proposed alternative is to provide partial funding through the Future Fisheries Improvement Program toward completion of the dam repair. Repairing the face of Cow Creek Dam would benefit aquatic habitat in the reservoir, water quantity and distribution in the reservoir and in the stream, and recreational fishing opportunities in the drainage.

VIII. Environmental Assessment Conclusion Section

1. Is an EIS required? No.

   Based on this review, the proposed activities will have minor negative impacts on the physical and human environment, most of which will be short-term in nature. We conclude that the proposed project will result in an overall positive impact on the physical and human environment.

2. Level of public involvement.

   The proposed project was reviewed and supported by the public review panel of the Future Fisheries Improvement Program and Future Fisheries funding has been approved by the Fish, Wildlife and Parks Commission. The application materials for the Future Fisheries Improvement Program were made available for public review prior to the meeting of the review panel and prior to action by the FWP Commission. 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: http://fwp.mt.gov/news/publicnotices/environmentalAssessments.html

3. Duration of comment period?

   Public comment will be accepted through November 1, 2010, 5:00 PM.

4. Person responsible for preparing the EA.

   Mark Lere, Program Officer
   Habitat Protection Section
   Fisheries Bureau
   Montana Fish, Wildlife and Parks
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MONTANA DEPARTMENT OF FISH, WILDLIFE AND PARKS
1420 East 6th Ave., P.O. Box 200701, Helena, MT 59620-0701
(406) 444-2535

ENVIRONMENTAL ASSESSMENT

Project Title: Cow Creek Reservoir Restoration and Stream Flow Protection Project
Division/Bureau: Fisheries Bureau - Future Fisheries Improvement
Description of Project: The Future Fisheries Improvement Program is proposing to provide partial funding for the repair of Cow Creek Reservoir Dam and to change existing irrigation water rights to in-stream and in-lake fishery purposes to benefit the fishery in both Cow Creek Reservoir and Cow Creek. The project is located approximately 40 miles south of Chinook.

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			X
7. Unique, endangered, fragile, or limited environmental resources				X		
8. Demands on environmental resources of land, water, air & energy			X			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		X
4. Agricultural or industrial production				X		X
5. Human health			X			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		
14. Transportation networks & traffic flows			X			X

Other groups or agencies contacted or which may have overlapping jurisdiction: none
Individuals or groups contributing to this EA: Andy Brummond, FWP Water Restoration Specialist; Steve Dalbey, FWP Fisheries Manager; Cody Nagel, FWP Fisheries Biologist
Recommendation concerning preparation of EIS No EIS required.
EA prepared by: Mark Lere
Date: September 23, 2010

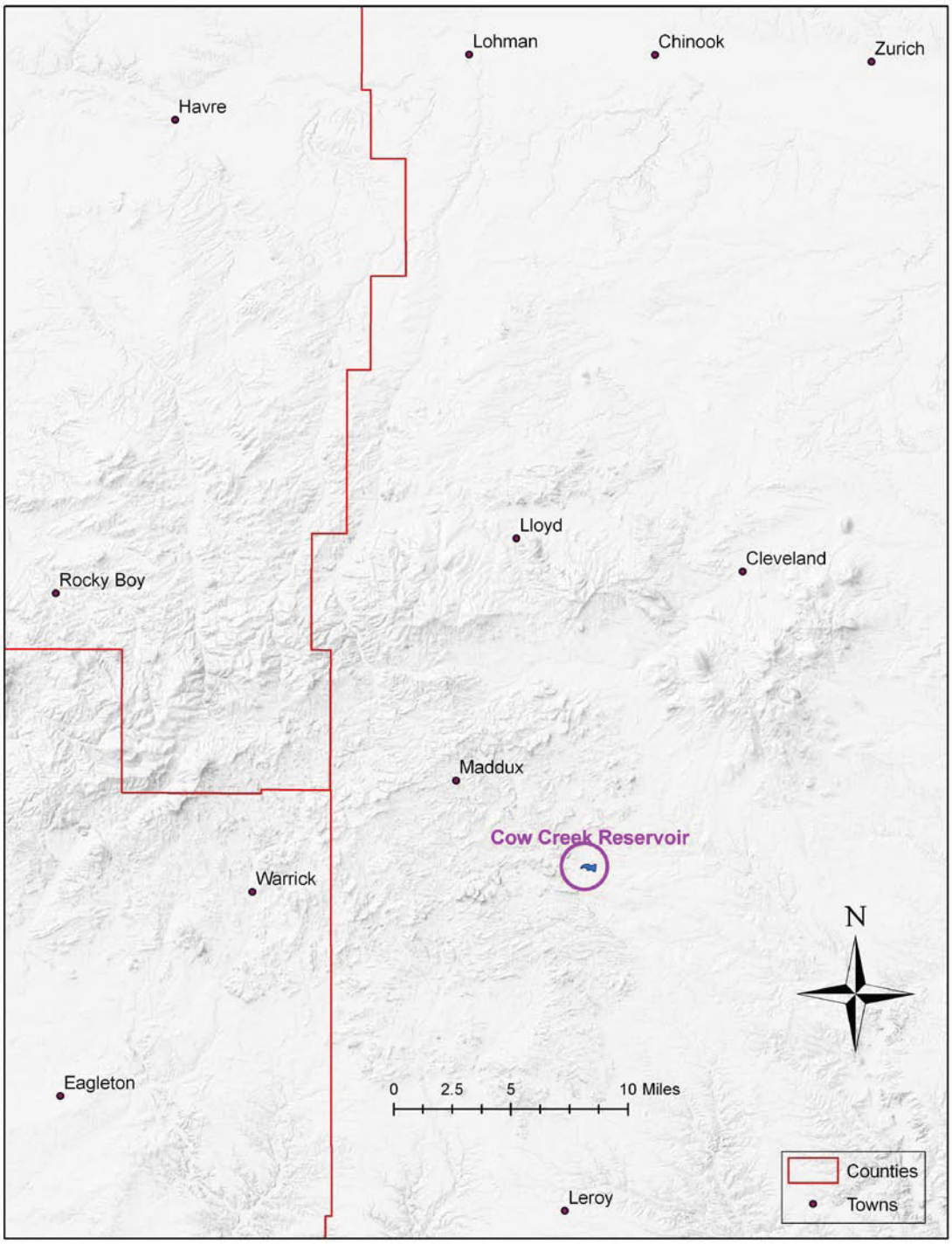

Figure 1. Map showing general project location.

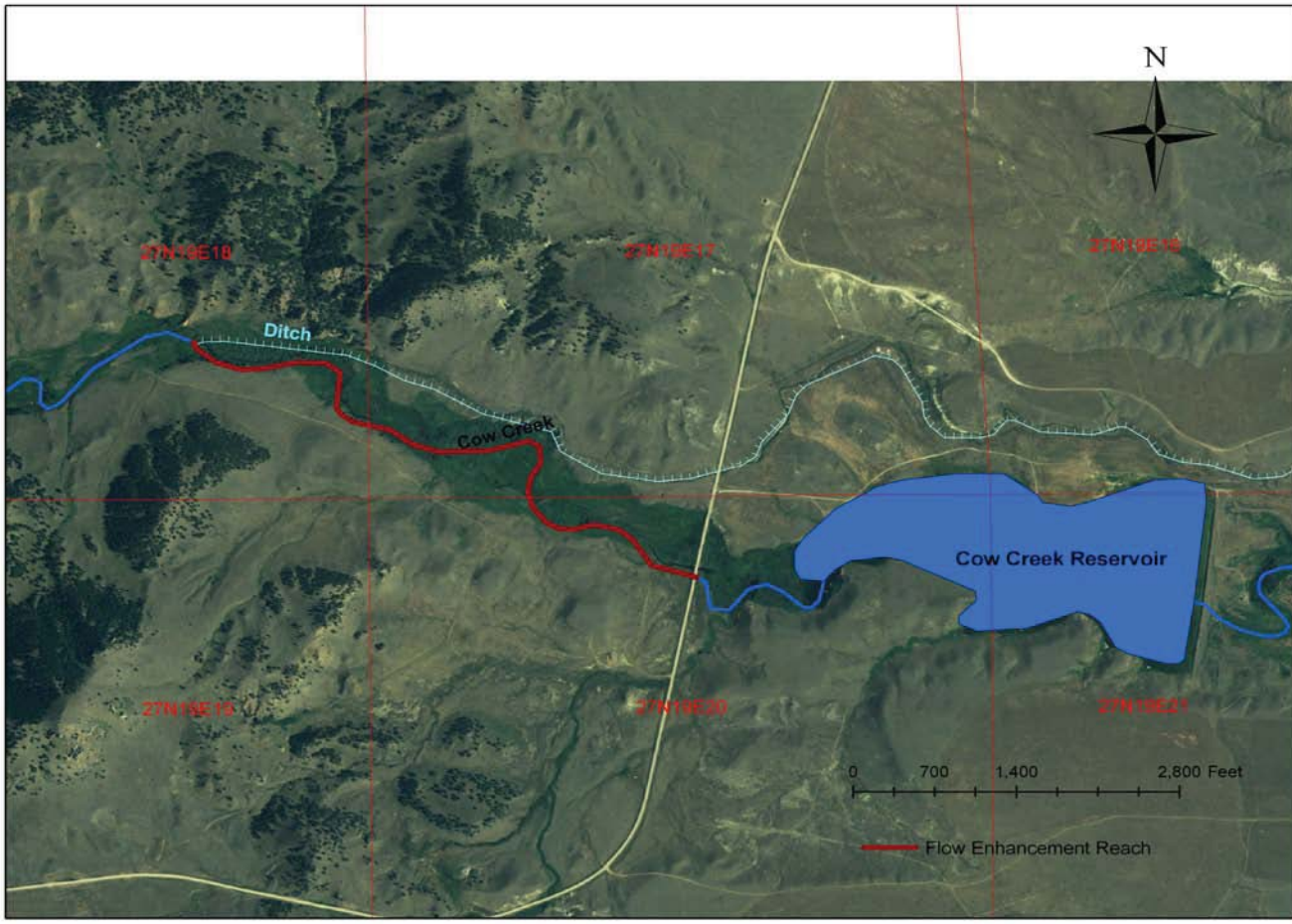

Figure 2. Map of Cow Creek Reservoir.

Figure 3. Plan View and typical dam cross section.