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Cover Letter

February 15, 2013

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U.S.D.A Forest Service, Madison Ranger District, 5 Forest Service Road, Ennis, MT 59729
U.S. Army Corps of Engineers, 10 W 15th St. Suite 2200, Helena, MT 59626
U.S. Fish and Wildlife Service, MT Field Office, 100 N. Park Ave. Helena, MT 59601

Ladies and Gentlemen:

The enclosed Environmental Assessment (EA) has been prepared for the Cataract Creek Dam and Reservoir Transfer and is submitted for your consideration. **Comments will be accepted until 5:00 p.m., Monday, March 18th, 2013.** Comments may be submitted via mail/e-mail/telephone to:

James P. Domino
MT DNRC, State Water Projects Bureau
1424 9th Avenue, P.O. Box 201601
Helena, MT 59620-1601
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Copies of the EA are available upon request. The EA can also be viewed on the DNRC website at www.dnrc.mt.gov. Thank you.

Sincerely,

Tim Davis
Water Resources Division Administrator

Draft MEPA

Environmental Assessment

Photograph of Cataract Creek Dam

Cataract Creek Dam and Reservoir Transfer

Prepared By the State Water Projects Bureau, MT DNRC

February 4th, 2013

Cataract Creek Dam and Reservoir Transfer

DRAFT ENVIRONMENTAL ASSESSMENT

Prepared By the State Water Projects Bureau, MT DNRC

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Appendix A Economic Report
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**Appendix C, the HKM Feasibility Study Report is available for review at the State Water Projects Bureau Helena Office, (406) 444-6646

List of Acronyms and Abbreviations

BLM.....Bureau of Land Management

COE ..... U.S. Army Corps of Engineers

DEQ ..... Montana Department of Environmental Quality

DFWP..... Montana Department of Fish, Wildlife, and Parks

DNRC..... Montana Department of Natural Resources and Conservation

EA ..... Environmental Assessment

EIS ..... Environmental Impact Statement

MCA ..... Montana Code Annotated

MEPA ..... Montana Environmental Policy Act

NHP..... Montana Natural Heritage Program

USFWS ..... U.S. Fish and Wildlife Service

USGS ..... U.S. Geological Survey

SHPO ..... Montana State Historic Preservation Officer

SWCB.....State Water Conservation Board

SWPB..... State Water Projects Bureau

CCWUA..... Cataract Creek Water Users Association

MBMG.....Montana Bureau of Mines and Geology

1.0 - PURPOSE AND NEED FOR ACTION

The Cataract Creek Dam and Reservoir Project is located on Cataract Creek, in Madison County approximately 8 miles southwest of Harrison and 2-1/2 miles southwest of Pony (upstream of both communities). The dam was constructed in 1959 by the State Water Conservation Board. The Project is currently owned and administered by the Montana Department of Natural Resources and Conservation (DNRC) through its State Water Projects Bureau (SWPB) for the benefit of the Cataract Creek Water Users Association (CCWUA). The CCWUA operates the Project under a water marketing contract with the DNRC. The CCWUA is a private not for profit corporation organized pursuant to Mont. Code Ann. § 85-6-101 et seq.

The dam consists of an earthen embankment, 80 feet high, 775 feet long with a concrete weir and unlined open channel spillway, and a low level outlet works that is operated with two 30-inch diameter gate valves in series. Storage capacity at the spillway crest was originally estimated at 1,478 acre-feet, however, recent storage estimates puts full pool storage at 1,157 acre-feet (DOWL-HKM Study, May 2010, *"Cataract Creek Dam Preliminary Feasibility Study"*). The Project provides limited supplemental irrigation water for 16 farms and ranches.

Seepage from the Project has been excessive since initial filling. Because of the seepage, the reservoir rarely fills above 60 to 70% of capacity. Grouting efforts conducted in the 1960's did little to lessen the seepage.

Even with the excessive seepage, downstream water users / irrigators benefit from the Project. The storage reservoir delays runoff such that base flows downstream are maintained during the irrigation season. However, seepage discharges are not controlled. If the Project could be modified to significantly reduce seepage, more storage water would be available for controlled discharges later in the season.

In addition to the seepage problem, the Project spillway only marginally meets dam safety standards. Preliminary findings indicate that the spillway capacity meets current State Dam Safety Standards with the reservoir pool at dam crest, i.e., no freeboard. The unlined spillway channel downstream of the concrete weir shows erosion from the two or three times the Project filled and spilled. While it is likely that further erosion would result in a natural armoring of rock, additional analysis is required to determine if frequent spillway releases would adversely affect the structural integrity of the spillway. This would be needed if the system was modified to reliably store to full pool.

In 2009, SWPB hired an engineering firm (Dowl-HKM) to evaluate rehabilitation alternatives and the estimated costs for those alternatives. The alternatives considered dam safety and project functionality. Of the four alternatives presented in Dowl-HKM's report, the CCWUA preferred modifying the Project to enable full pool storage without excessive seepage. Dowl-HKM's estimate for this alternative was $4.2 million dollars. SWPB did not feel it could justify the expense to pay for this alternative given the small amount of available capacity. The SWPB preferred the alternative that reduced storage in the reservoir below 50 acre-feet so that high-hazard dam regulations would no longer apply. In this scenario, the dam would mitigate flood events and minimize the State's risk and liability due to the permanent lower reservoir pool and very infrequent operation of the spillway. The Dowl-HKM estimated cost for this alternative was $359,000.

The reduced pool alternative preferred by the SWPB was not acceptable to the water users because they would lose the reservoir storage and the runoff would pass through prior to the irrigation season. The CCWUA believed that the goal of reliable full pool storage could be accomplished at substantially less cost if the Association were to assume ownership of the Project. Subsequently, the 2011 Montana Legislature enacted House Bill No. 568 directing that the SWPB attempt to dispose of the Cataract Creek Project by June 30, 2013. See MCA 85-1-211 (5)(b).

SWPB options for disposal of a state water conservation project are limited where there is an active water user's association such as at the Cataract Project. See Mont. Code Ann. §§ 85-1-211(5)(a) and 85-6-109. The water user's association has a purchase preference and the association must approve any sale or disposition to any other entity. Also, the preamble to the 2011 legislation was clear that the legislation was prompted by the CCWUA's interest in owning the Project. Consequently, SWPB is not considering a transfer or sale to entities other the CCWUA.

SWPB is authorized to transfer ownership of a state water conservation project property and facilities to a water users' association without regard to other laws that would otherwise pertain to the disposition of state property. Mont. Code Ann. § 85-1-211(5)(a). However, SWPB is required to determine the market value of the property. Mont. Code Ann. § 85-1-211(5)(a). The determination of market value must consider all liens, encumbrances, and other limitations on the water project. The market value of the Cataract Project is limited because of the limitations on SWPB ability to sell the property to other than the CCWUA.

Because of the costs and liabilities that CCWUA would assume if it were to take ownership of the Project and attempt rehabilitation, SWPB has determined that a no fee transfer would be appropriate. However, the Project lands were purchased and the Project constructed with public funds for agricultural purposes and the Project also provides public recreational benefits. Any transaction to transfer ownership of the Project should maintain the original public purposes and benefits. The transfer documents will reserve public recreational access, restrict development on the lands surrounding the Project, and will limit water rights associated with the Project to their historic agricultural uses. The State shall have the option to reacquire the site at no fee should the Association dissolve or determine that they cannot maintain the project.

Goals of this transfer proposal include the following:

A. Meet the 2011 Legislature's directive to attempt to dispose of the Project by June 30th, 2013.

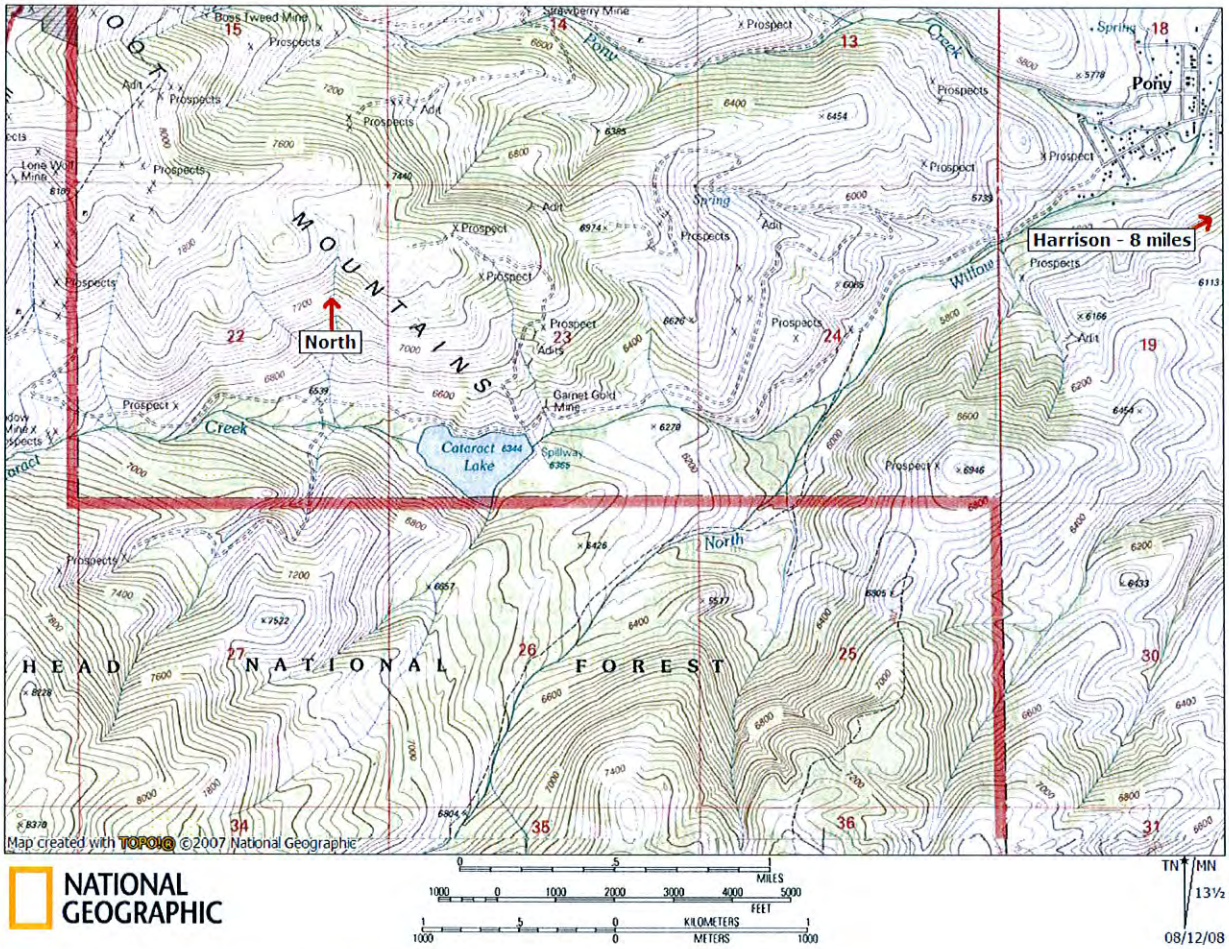
B. Exercise the authority granted to the SWPB under Title 85 MCA to dispose of state water conservation projects.

C. Transfer ownership of the Project to the Cataract Creek Water Users Association.

D. Allow the CCWUA to investigate, pursue, and control their options for rehabilitating the Cataract Creek Dam.

E. Maintain agricultural purposes and public recreational uses.

1.2 Project Location



- Cataract Lake on Cataract Creek; tributary of N. Willow Cr.
- Located approximately 8 miles southwest of Harrison in Madison Co. at T2S, R3W, Sec. 23, and 2-½ miles upstream of Pony.

1.3 Scope of Environmental Analysis

Public and Agency Involvement

Representatives from the CCWUA were involved in the planning process for the transfer. DNRC also contacted other state and federal agencies to discuss the transfer and to identify potential environmental issues. These agencies included the DFWP, DEQ, NHP, and the SHPO. Because the proposed action is the transfer of ownership only, and does not involve physical or operational changes to the Project, involvement by the other governmental agencies and the scope of this environmental analysis is limited.

Issues Studied in Detail

Because the proposed action—to transfer ownership of the Project from the DNRC to the CCWUA—does not involve physical or operational changes for the Project, many issues ordinarily considered in an environmental assessment of an action pertaining to a state water conservation project were not applicable. The issues examined in this draft EA were identified by the DNRC, communications with the CCWUA, and other agencies. Issues identified through the public comment period (see cover letter) will be addressed in the final EA. Listed below are potential project related impacts examined:

- Effects to agricultural water uses, public and private land use and ownership.
- Effects to public safety, including traffic, noise, air quality, etc.
- Effects on recreation and esthetics.
- Effects on private property, the local economy and government services.
- Cumulative and secondary effects due to Project transfer.

Issues Eliminated from Further Study

The following resource issues were considered and eliminated from further study because the proposed action does not involve any construction or operational changes:

- Effects on downstream water quality and quantity.
- Effects on Plant and Animal Threatened and Endangered Species, and Species of Special Concern, and effects to other wildlife and fisheries resources.
- Effects on historic and cultural resources.
- Effects on vegetation, including weed proliferation.

These resource categories are summarized in Section 3.0 Affected Environment but are not discussed in Section 4.0 Environmental Consequences since no changes would occur. Also see the Alternative B (preferred alternative) narrative on page 6.

1.4 Applicable Regulatory Requirements

Montana Department of Natural Resources and Conservation (DNRC)

- Disposal of property by Department: Mont. Code Ann. § 85-1-210 – Defines procedures and requirements for the Department to dispose of projects.
- Water resources property management: Mont. Code Ann. § 85-1-211(5) - Defines applicable conditions and requirements for the Department to sell, abandon or transfer projects.
- Operation of projects with water users' associations: Mont. Code Ann. § 85-6-109(5) – Requires receipt of petition by 2/3 of stockholders in order for Department to dispose of project. Allows for petition of protest signed by 30% of stockholders to block disposal of project.
- Montana Dam Safety Act: Mont. Code Ann. § 85-15-105 et seq.–Requires dam owners to have permits for operating high hazard dams (85-15-212). If CCWUA becomes the owner they will be required to obtain their own permits. In addition, subsequent dam rehabilitation will require a construction permit (85-15-213).

2.0 ALTERNATIVES INCLUDING THE PROPOSED ACTION

This chapter describes the alternatives that were analyzed in this EA.

2.1 Development of Alternatives

The purpose of developing action alternatives is to address issues or potential problems raised by the proposed action. For this assessment three alternatives were considered.

Issues

As identified in Chapter 1.0, several issues are raised by the Proposed Action. These include potential effects to land use and ownership, public recreation, water use, and dam safety. The effect of the preferred alternative on these individual resource areas is examined and compared in the succeeding chapters.

2.2 Description of Alternatives

Alternative A - No Action

The no action alternative would result in the State retaining ownership of the Project. The CCWUA would continue to have access to stored water for agricultural uses. Dam safety at the Project would continue to be DNRC's responsibility. The DNRC must compare and prioritize any rehabilitation of the Cataract Project with other state water conservation projects. Given the scope of DNRC's responsibilities with its projects state wide, and given the risk of liability at the Cataract Project, it is unlikely that the Project would be rehabilitated as desired by the CCWUA for the foreseeable future. In order to comply with dam safety requirements and / or to mitigate liability, it is likely that DNRC would reduce the pool of the reservoir below the high hazard classification, given the limited resources available.

Alternative B - No Fee Transfer (Preferred Alternative)

The no fee transfer alternative would transfer the Project, including the associated water rights, to the CCWUA. The CCWUA would assume all Project costs and liabilities including responsibility for dam safety. The no fee transfer would require that the Project, which includes the associated water rights, remain dedicated to agricultural / irrigation purposes, that Project lands could not be developed or subdivided, and that the site remain open to the public for recreational purposes. These conditions continue the historical uses of the site and protect the local agricultural community. The CCWUA would be responsible for dam safety and project rehabilitation. The CCWUA would evaluate rehabilitation alternatives based on the needs, preferences, and financial resources of the Association.

Alternative C – Transfer for Fee

This alternative would require CCWUA to repay the State / SWPB for the original construction costs (approximately $300,000) of the Project, and pay fair market value for the Project water (estimated range from $270,000 to $500,000). The Project would be transferred to the CCWUA without additional restrictions on future use or development. Although CCWUA intends to use the Project for its original agricultural purposes and continue to allow public access for recreation, there would be no guarantees. The CCWUA would be responsible for dam safety and project rehabilitation. The CCWUA would evaluate rehabilitation alternatives based on the needs, preferences, and financial resources of the Association.

3.0 - AFFECTED ENVIRONMENT

To evaluate potential impacts resulting from the proposed alternative and the other alternatives described in Chapter 2.0, it is necessary to understand the current environmental condition of the project area.

3.1 Geology

Cataract Dam is situated on Cataract Creek on the northeast side of the Tobacco Root Mountains. The Tobacco Roots are composed of a Cretaceous granitic core (Tobacco Root Batholith) intruded into predominantly Precambrian metamorphic rocks. Cataract Dam is near the northeast-trending contact between the Tobacco Root Batholith and the Archean gneissic basement rocks. Pleistocene glaciation in the Tobacco Roots sculpted the valleys and modified the local geomorphology via deposition of massive moraines in the valleys and outwash pediment on the flanks of the mountains. The dam occupies a constriction in the valley where a large glacial moraine is deposited against granitic intrusive rocks of the Tobacco Root Batholith.

3.2 Topography

Generally, the 6.1 square mile drainage basin for Cataract Creek Dam flows from southwest to northeast and is steep and mountainous with elevations ranging from approximately 6,353 feet at the spillway crest to more than 10,000 feet in the upper reaches of the basin.

3.3 Water Resources

The reservoir is fed by Cataract Creek. Recent studies estimate reservoir capacity at 1,157 acre-feet at full pool (spillway crest). Water from the reservoir is primarily used for irrigation water supply. The reservoir is also used for water-based recreation, primarily fishing. Water from the reservoir is delivered to Association members via Cataract Creek and North Willow Creek to their diversions on North Willow Creek. Water stored in the reservoir supplements the flow of North Willow Creek during the irrigation season. To the State's knowledge, the reservoir has filled to the spillway crest only four or five times, and spilled only three of those times since it was constructed in 1959. Inflows from this small drainage basin generally peak late May to early June. Historically, water from the reservoir supplements irrigation flows for a month or more after the reservoir reaches its highest level. The actual dates vary depending on each year's climatic and hydrologic conditions. Water from Cataract Creek Reservoir is discharged via seepage due to the very porous nature of the right abutment and reservoir pool. The timing of the seepage discharge generally suits the needs of the CCWUA contract holders. Typically, the dam operator uses the outlet works to allow stored water from Mason Lake (2.3 miles upstream) to pass through Cataract Dam.

Wetlands: Wetlands are present downstream from the dam and in the upper reaches of the reservoir. These wetlands are altered (dependent on the dam) and consist primarily of scrub-shrub and forested classes. They are seasonally flooded and dewatered depending on reservoir storage and releases from the dam.

Water Rights and Reservations: The DNRC water right at Cataract Reservoir (Water Right No. 41G-119410) is currently designated for irrigation and storage.. The priority date is July 15, 1957 and volume is 9,521 acre feet. A copy of the water right's general abstract is included in Appendix D.

3.4 Soils

The glacial material is a massive, hummocky, boulder dominant terminal moraine forming the right (southern) side of the dam and reservoir. Sands and silty sands are predominant interstitial constituents of the boulder moraine. The boulder moraine underlying and abutting the right side of the reservoir and dam is an unconsolidated deposit. The moraine is estimated to be comprised of approximately 50% boulder size

granitic rocks from the central portion of the Tobacco Root Mountains, 25% mixed cobbles and gravels, and 25% sands and silty sands interstitial to the larger fractions. Predominate soils in the vicinity of the dam include Hapgood-Sebud very stoney loam, Macfarlane stoney sandy loam, Sebud-Hapgood complex, and Sebud-Rochester-rock outcrop complex.

3.5 Vegetation

Climax overstory vegetation is the vicinity of the dam and reservoir is predominately a subalpine fir (65%), Douglas-fir (25%) and Engelmann spruce (10%) type forest complex. In the absence of the climax forest overstory lodge pole pine can occupy the Douglas-fir sites and all but the upper limits of the subalpine fir sites. Engelmann spruce and whitebark pine can also be found in scattered locations. Quaking aspen occurs throughout all vegetation zones in moist locations. Other dominate non-woody species common throughout the area include pinegrass, danthonia, Kentucky bluegrass, weedy forbs, common snowberry, wild rose, common beargrass, elk sedge, dwarf huckleberry, bearded wheatgrass, mallow ninebark, oregongrape, Saskatoon serviceberry, Richardson needlegrass, Columbia needlegrass, spike trisetum, blue wildrye and Idaho fescue.

Weeds: Spotted knapweed is present in small patches around the shore of the reservoir Canada thistle, musk thistle, houndstongue, and common mullen also occur in varying densities.

3.6 Wildlife

Wildlife commonly found in the vicinity of the project area include moose, elk, mule deer, white-tailed deer, beaver, muskrat, mink, Columbian ground squirrel, mountain lion, black bear, coyote, fox, raccoon, badger, sage grouse, sharp-tailed grouse, ruffed grouse, ring-necked pheasant, Canada geese, great blue heron, sand hill crane and a variety of duck and song bird species. Raptors that have been sighted in the area include bald eagles, golden eagles, great horned owls, turkey vultures, osprey and red-tailed hawks. Osprey, golden eagles and bald eagles and great-horned owls are not year-round residents of the area. The threatened grizzly bear is not known to be present within the project area, nor is there any known denning or summer use sites.

Species of Special Concern: The lynx is listed as threatened in the western third of Montana (including the project area). The following is a list of specie of special concerns that may be found within the general area (Tobacco Root mountains): Information is from http://mtnhp.org/SpeciesOfConcern/.

Western Spotted Skunk
(Spilogale gracilis)
Riparian Shrub

Sharp-tailed Grouse
(Tympanuchus phasianellus)
Shrub Grassland

Townsend's Big-eared Bat
(Corynorhinus townsendii)
Caves in Forested Habitat

Black-tailed Jack Rabbit
(Lepus californicus)
Sagebrush/Grassland

Great Basin Pocket Mouse
(Perognathus parvus)
Sagebrush/ Grassland

Canada Lynx
(Lynx canadensis)
Subalpine Conifer Forest

Grizzly Bear
(Ursus arctos)
Conifer Forest

Mountain Plover
(Charadrius montanus)
Grasslands

Black Rosy-Finch
(Leucosticte atrata)
Alpine

Lewis's Woodpecker
(Melanerpes lewis)
Riparian

3.7 Fisheries

The DFWP Montana Fisheries Information System lists Yellowstone cutthroat trout, an introduced species, as being found in the Cataract Creek drainage both above and below the reservoir, and in varying densities within the reservoir.

3.8 Ownership and Land Use

Land Ownership: Land ownership within the project area and immediate vicinity of the reservoir includes federal, state and private lands.

Land Use: Primary land uses in the vicinity of the project area include livestock grazing, farming (primarily hay and alfalfa), and recreational use associated with the Cataract Creek Reservoir and surrounding lands. BLM land is found along the west side of the reservoir, with a small parcel of Forest Service land along the southwest shore. Mining and cattle grazing occur on both public and private lands in the area. Most of the land surrounding the reservoir on the east and north shores is privately owned.

Regulatory Restrictions on Private Property Rights: The Cataract Creek Reservoir and Dam are owned by the State of Montana. Private land exists on the east and north shore of the reservoir. No regulatory restrictions on private property are associated with the normal operation and maintenance of the dam and reservoir.

Wilderness: No designated wilderness or wilderness study areas exist in the immediate area.

3.9 Cultural Resources

The Cataract Creek Dam has been documented and recorded as a cultural resource (site number 24MA350) due to the dam's age. The dam was completed in 1959.

Cultural Uniqueness and Diversity: Based on information from the DNRC Trust Lands Division Archeologist, no unique cultures or cultural diversities exist in the immediate project area.

3.10 Noise

Existing noise sources in the project area are from agricultural and recreational activities, birds and animal life.

3.11 Air Quality

The air quality in the area is generally considered good. Significant reductions in visibility are generally weather related.

3.12 Transportation Facilities

The primary transportation facilities in the project area include the main, paved county road from Harrison to Pony, gravel county roads, non-improved dirt access routes (two-tracks), motorized, hiking and equestrian trails.

3.13 Socio - Economic

Economic activity:

Economic activity is almost entirely dependent on agriculture, with livestock production, grazing, hay and alfalfa being the major local commodities. Some limited logging and mining occur in the nearby Beaverhead-Deer Lodge National Forest and other state and private land in the area. Other economic activity is generally associated with the recreational use of the reservoir and surrounding area.

Employment:

Agricultural and agricultural related business account for the majority of the jobs in the area. Logging, mining, recreation, service sector businesses and government account for the remainder of the job base in the region.

Recreation

Recreational use at the Cataract Creek Reservoir is generally light, with fishing being the most common activity. Angling use varies depending on the local water conditions. Other recreational activities in the area include boating, camping, picnicking, swimming, hunting, and wildlife viewing.

Communities:

Towns in the vicinity of the project include Pony (population 118), located 2 miles east of the dam and Harrison (population 162), located 9 miles northeast of the dam.

Risks / Health Hazards:

Cataract Creek Dam is classified as high hazard by the State Dam Safety Program. The definition of a high hazard dam is one that would likely cause loss of life in the event of catastrophic failure. The classification is not a reflection of the actual condition of the dam. A catastrophic failure of Cataract Dam would inundate portions of both Pony and Harrison, with the greatest loss of life occurring in

Pony where the flood wave arrives with little to no warning. Cataract Dam is currently operating under an approved permit from the State Dam Safety Program.

An inspection of the structure completed in 1981 by the Army Corps of Engineers classified the dam as "unsafe and in need of repair" due to deterioration and inadequate spillway capacity. Subsequent evaluations determined that with no freeboard, i.e., the reservoir at the dam embankment crest, the spillway just meets and is in compliance with Montana Dam Safety requirements. It will be necessary to complete further analyses to confirm that the dam elements are in compliance with Dam Safety requirements, especially if the project is made to reliably store water at full pool levels. The dam is regulated by the State Dam Safety Program (DNRC WRD Water Operations Bureau) and subject to the requirements of the Montana Dam Safety Act as administered by DNRC.

Emergency Response / Emergency Evacuation Plans:

An Emergency Action Plan developed by the SWPB of the DNRC is in place, per Montana Dam Safety Act requirements.

Public Services / Taxes / Utilities:

Public services and utilities in the area include routine road maintenance and repair, police and fire protection, and electrical and telephone service. The local tax base is primarily dependent upon agricultural land uses, outdoor recreation, government and related businesses.

4.0 - ENVIRONMENTAL CONSEQUENCES

This chapter is organized in the same order as Chapter 3.0, with the probable consequences of the action alternatives described for each resource area, along with the probable consequences of the no action alternative. Please note that the probable consequences of the identified action alternatives are similar, since each action alternative would essentially involve the same activity (transferring the dam, reservoir and associated property). If differences in the potential action alternative impacts are anticipated, they will be discussed in each respective section.

The assessment of potential consequences is based on previous project transfers and their associated impacts, and/or issue specific references and evaluation methods (identified in the Reference Section 8.0).

4.1 Geology

Effects of No Action

No effect

Effects of Action Alternatives

No effect

4.2 Topography

Effects of No Action

No effect

Effects of Action Alternatives

No effects

4.3 Water Rights and Reservations:

Effects of No Action (Alternative A)

No effects. The no action alternative would result in the State retaining ownership of the project and water rights. In the short-term the CCWUA would continue to have access to stored water for agricultural uses (as defined by the existing water right). Possible long-term effects will be in part decided by the willingness of the CCWUA to fund State recommended rehabilitation actions at the site and / or by further analysis by the State determining the cost benefit and risk of maintaining this project in its current condition. In the long term, it is likely that DNRC would reduce the pool of the reservoir below the high hazard classification, given the limited resources available.

Effects of Action Alternatives

Alternative B (No Fee Transfer, Preferred Alternative) would commit the water right to continued use for irrigation/agricultural. The short term effects are non-significant since the existing water right is already limited to agricultural irrigation uses. Possible long-term effects will depend on the ability of the CCWUA to accomplish their preferred rehabilitation while complying with dam safety requirements. If the seepage problem is resolved, there will be increased water storage and control of downstream deliveries for irrigation. There would be possible effects on the water supply for the downstream Willow Creek Reservoir. These effects would be evaluated and considered at the time the rehabilitation project is proposed.

Alternative C (Transfer for Fee) would involve no restrictions that would commit the water right to agricultural uses other than those already on the existing water right. However, the CCWUA 's intent for acquiring the Project is to continue the agricultural use, and no significant effects are anticipated in the short term. Possible long-term effects depend on the ability of the CCWUA to accomplish their preferred rehabilitation while complying with dam safety requirements. If the seepage problem is resolved, there will be increased water storage and control of downstream irrigation deliveries. There would be possible effects on the water supply for the Willow Creek Reservoir (located downstream). These effects would be evaluated and considered at the time rehabilitation is proposed. In the long term, CCWUA or its successor would not be precluded from seeking a change authorization to use the water for other purposes. Adverse effects to downstream users would be considered in the change authorization process (Mont. Code Ann. § 85-2-402).

In summary, no negative effects on water reservations and water rights to downstream water users are anticipated with alternatives A, B, or C. There may be future, rehabilitation related effects. These effects would be evaluated at the time rehabilitation plans are confirmed. This is beyond the scope of this EA.

4.4 Soils

Effects of No Action

No effects.

Effects of Action Alternatives

No effects.

4.5 Land Ownership and Use

Effects of No Action

No effect

Effects of Action Alternatives

Alternatives B and C would affect land ownership and use due to the transfer of title to the CCWUA. Under Alternative B restrictions would be placed upon the property to insure the site could not be developed, and that the property would remain open to the public for recreational uses. These effects would be minor and non-significant in the short and long term. Under Alternative C there would be no restrictions on future development or transfer of the land and public access for recreational uses could be restricted. These effects are unknown but could be major and significant in the short and long term.

Government Regulatory Restrictions on Private Property Rights:

Effects of No Action

No effect

Effects of Action Alternatives

Alternative B would impose deed restrictions on use of the property to insure the property could not be developed, and would remain open to the public for recreational uses. However, these are not regulatory restrictions but rather a reservation of public rights that already exist in the property. These effects would therefore be minor and non-significant in the short and long term.

Alternative C would impose no additional restrictions on future development, transfer of the land, or the ability of CCWUA or successor to restrict public access. These effects are unknown but could be major and significant in the short and long term.

Wilderness:

Effects of No Action

No effect

Effects of Action Alternatives

No effect (no designated wilderness or wilderness study areas exist in the area)

4.6 Noise

Effects of No Action

No effects

Effects of Action Alternatives

No effects.

4.7 Air Quality

Effects of No Action

No effects.

Effects of Action Alternatives

No effects.

4.8 Transportation Facilities

Effects of No Action

No effects.

Effects of Action Alternatives
No effects.

4.9 Socio – Economic

Economic Activity:

Effects of No Action
No effects.

Effects of Action Alternatives
No effects.

Quantity and Distribution of Employment:

Effects of No Action

No effects.

Effects of Action Alternatives

No effects.

Recreation:

Effects of No Action

No effects. Recreational opportunities associated with the reservoir would continue.

Effects of Action Alternatives

No effects with Alternative B. Public recreational opportunities would continue due to deed restrictions that would insure the property is not developed, and remains open to the public for recreational use.

Alternative C could result in Project lands development and closure to public recreational use. These effects are unknown but could be major and significant in the short and long term.

Community Impacts:

Effects of No Action

No effects.

Effects of Action Alternatives

No effects.

Risks / Health Hazards:

Effects of No Action

No effects.

Effects of Action Alternatives

No effects. The dam would still have to be maintained and operated to insure compliance with the Montana Dam Safety Act, regardless of ownership.

Emergency Response / Emergency Evacuation Plans

Effects of No Action

No effects.

Effects of Action Alternatives

No effects – New owner would be required to develop and maintain their own Emergency Action Plan.

Public Services / Taxes / Utilities:

Effects of No Action

No effects.

Effects of Action Alternatives

No effects.

5.0 CUMMULATIVE EFFECTS

The EA to this point has discussed impacts that could result solely from the proposed property transfer. This section will discuss impacts that may occur when the proposed actions are considered cumulatively to other potential changes or developments.

No specific projects or actions have been identified that, taken cumulatively, will cause any significant, long-term environmental impacts.

Effects of No Action

No significant cumulative environmental impacts are anticipated. However, for dam safety reasons, risk of liability, and the availability of funds, continued State ownership will potentially result in substantially reduced water storage in the future

Effects of Action Alternatives

No significant cumulative environmental effects associated with the action alternatives are anticipated. However, under Alternative C there would be no restrictions placed on the title that would prevent a future private owner from developing the property. There is a possibility under this alternative that the agricultural purpose would be abandoned and public access for recreation blocked. These effects are unknown but could be major and significant in the short and long term.

6.0 PREFERRED ALTERNATIVE

6.1 Preferred Alternative B

The preferred alternative is Alternative B, as discussed below, along with an explanation of why this alternative was selected over the other proposed action options.

Alternative A - No Action

The no action alternative would result in continued State ownership of the site. The State would retain the liability associated with a Project that provides limited supplemental irrigation. Agricultural uses and public access would be maintained. For dam safety reasons, risk of liability, and the availability of funds, continued State ownership will potentially result in substantially reduced water storage in the future.

Alternative C – Transfer for Fee

The fee transfer would repay the State for initial construction and pay the State for the water made available by the Project. The CCWUA would obtain full ownership without deed restrictions on future development and requiring public access. The cost to CCWUA would probably be in the range of $600,000 to $900,000. After purchase, the Association would still need to expend funds to rehabilitate the project. This cost is unknown, but HKM's estimate to ensure that the project reliably stored water to full pool on a yearly basis was $4.2 million. Under this alternative, future development, transfer, and use of the Project would be controlled by the Association and there would be no guarantees that existing agricultural uses and public access would continue. These effects are unknown but could be major and significant in the short and long term.

Preferred Alternative B – No Fee Transfer

The No Fee Transfer alternative would transfer the project and associated water rights to the CCWUA. To implement the option of a no fee transfer, certain restrictions and conditions would be applied to the physical components of the project. Assurances committing the water right to agricultural / irrigation uses would be placed on the underlying water right. In addition, deed restrictions to available uses of the lands transferred would be necessary to ensure that the site would not be developed by the Association or subsequent owners, and that the property continues to be open to the public for recreational purposes. These restrictions prevent the Association from profiteering from a State asset, while protecting the agricultural community and continuing the historical uses of the site. Liability associated with site ownership would become the responsibility of the CCWUA. No short or long term adverse or significant effects are associated with this preferred alternative.

6.2 Proposed Actions to Offset Adverse Impacts

The Preferred Alternative B was chosen to avoid the possible long term adverse affects to agriculture and public recreation presented by Alternative C. The No Action alternative was not selected because it would not meet the objective of disposing of the Project and its liabilities.

6.3 Need for an EIS

Because no significant impacts were identified, the DNRC believes this EA is sufficient to comply with the MEPA and that an EIS will not be required. A comparison table for the action alternatives and the no action alternative follows. No adverse effects or significant impacts were identified

6.4 Comparison Table – No Action and Action Alternatives:

RESOURCE Cited I	ALTERNATIVE No Action		Action Alternatives – Reason(s) for
Geology	No Effect		No Effects
Topography	No Effect		No Effects
Water Rights	No Effect		No Effects – Alternative B (preferred) – restrictions would be placed on existing water rights to insure they are used for agricultural / irrigation uses. Alternative C – No additional restrictions on future uses of water rights. However, existing water right is for irrigation. A change authorization from DNRC would be required to use the right for other purposes. None of the action alternatives would significantly impact water rights.
Ownership/Land Use	No Effect		Alternatives B and C would affect land ownership and use due to the transfer of title to the CCWUA. With Alternative B conditions (deed restrictions) would be placed upon the property to insure the site could not be developed, and that the property would remain open to the public for recreational uses. These effects would be minor and non-significant in the short and long term. With Alternative C, there would be no restrictions on what the CCWUA could do with the property. It would be possible that the lands could be developed for other than agricultural uses and that public access would be blocked. These effects are unknown but could be major and substantial in the short and long term.

Resource	No Action		Action Alternatives
Government Regulatory Restrictions on Private Property Rights	No Effect		The action alternatives would not involve additional regulatory restrictions on private property. Alternative B would preserve existing agricultural purposes and public recreational access through the use of deed restrictions. These effects would be minor and insignificant in the short and long term. Alternative C would not involve any additional government regulatory restrictions on private property rights, and there would be no deed restrictions on development or continuing public access. These effects are unknown but could be major and significant in the short and long term.
Noise	No Effect		No Effects
Air Quality	No Effect		No Effects
Transportation	No Effect		No Effects
Socio-Economic	No Effect		No Effects
Economic Activity	No Effect		No Effects
Quantity / Distribution of Employment	No Effect		No Effects
Recreation	No Effect		No Effects
Communities	No Effect		No Effects
Risks / Health Hazards	No Effect		No Effects

Resource	No Action		Action Alternatives
Emergency Response / Evacuation	No Effect		No Effects
Public Services Taxes / Utilities	No Effect		No Effects
Cumulative Impacts	No Effect		No Effects

6.4 Project Implementation

It is anticipated that this project will be completed (implementation of the preferred alternative) by the summer of 2013. The DNRC State Water Projects Bureau will coordinate the transfer.

6.5 Monitoring

Other than insuring that all project transfer stipulations are adhered to, it is not anticipated that any long-term monitoring will be required with the implementation of the preferred alternative.

7.0 GLOSSERY of TERMS

Acre-foot: The volume of water that would cover an area equivalent to 1 acre, 1 foot deep, or 43,560 cubic feet (325,851 gallons).

Aggregate: Sand and gravel materials used to make concrete or roller-compacted concrete or used to surface roads.

Aquatic Habitat: The place in which water-dependent plants or animals normally live.

Aquifer: A water-bearing layer of permeable rock, sand, or gravel.

CFS: Measure of water flow rate in cubic feet per second. One cfs is equal to about 450 gallons per minute.

Chute: The face or channel of a dam's spillway.

Conservation Pool: Beneficial use of stored water for fisheries, downstream flows, etc.

Crest: The top face of a dam's spillway or dam itself.

Cumulative effects: A general estimation of the effects of project impacts in combination with other past, present, and reasonably foreseeable future developments.

Enhancements: Measures taken to improve natural and man-made resources.

Full pool: Reservoir at spillway crest.

High hazard: A dam whose failure would result in the loss of life; not a statement of condition.

Inflows: Water flowing into a reservoir.

Lithic: Relating to or made of stone.

Long-term impact: Impacts that occur beyond the actual construction timeframes.

Mitigation: Measure taken to lessen an impact.

Outflow: Releases from a project made through the outlet works or spillway.

Spillway: Structure used to discharge large quantities of water around the dam without damaging the dam.

Spillway Design Flood: The peak flood flow used to size the maximum discharge capacity of a dam project.

8.0 REFERENCES

Water Storage in Montana; A Report Submitted to the 63rd Legislature – Office of the Governor, Jan. 2013

MT Natural Heritage Program – Data Query on Plant and Animal Species of Special Concern. December 2012

MT DFWP On-line Fishing Guide, December 2012. DFWP Website, www.dfwp.mt.gov

Census and Economic Information Center Website, MT Dept. of Commerce, November 2012. www.ceic.mt.gov

MT DNRC State Water Project Bureau, Project Information Report, by James P. Domino, MT DNRC State Water Projects Bureau, December 2008, revised December 2010.

Cataract Creek Dam Preliminary Feasibility Study - Dowl HKM, Billings, MT. May 2010.

Cataract Creek Dam Cultural and Historic Resources Site Report, by Patrick Rennie, DNRC Trust Lands Management Division, October 2006.

A Guide to the Montana Environmental Policy Act, John Mundinger and Todd Everts, 1998. Revised by Larry Mitchell, 2004 and Todd Everts, 2006. Published by the Legislative Environmental Policy Office, Environmental Quality Council.

Montana Water Law. MT Department of Natural Resources and Conservation, Water Resources Division, Helena MT., 2003.

Cataract Creek Dam Manual for Operation and Maintenance, DNRC State Water Projects Bureau, 1424 9th Avenue, P.O. Box 201601, Helena, MT 59620, Originally Published 1995, Revised 2001.

Climax Vegetation of Montana Based on Soils and Climate, U.S. Dept. of Agriculture, Soil Conservation Service, Bozeman, MT. September 1976

Water Resources Survey, Madison County, MT, State Water Conservation Board, Helena, MT. June 1965.

9.0 LIST OF PREPARERS

Tim Bryggman, DNRC – Economic information and analysis
Jim Domino, DNRC – Natural resources, socio-economic issues/impacts, MEPA compliance
Dowl HKM – Feasibility Report
Rob Kingery, DNRC - Project timeframes, administrative oversight
Fred Robinson, DNRC – Legal review and water rights
Kevin Smith, DNRC - Budgets, land issues, project timeframes, water rights, administrative supervision

Appendix A:
Economic Report

MEMORANDUM

TO: Kevin Smith
FROM: Tim Bryggman
DATE: November 8, 2012
RE: Cataract Disposal – Irrigation Valuation

Per your request, I have developed some estimates of the value of water from the Cataract project for irrigation subject to the assumptions that we discussed recently. To the extent that existing sources are relied upon, these estimates are somewhat cursory; nevertheless, they should provide a sound basis for informed discussions regarding the disposition of the project.

Cataract provides limited storage of spring flows that is used for supplemental irrigation water for sixteen farms and ranches downstream. Project water is delivered via seepage to Cataract Creek and, ultimately, to diversions on North Willow Creek throughout the irrigation season.
DNRC's Water Projects Bureau (Kingery 2012) has estimated that deliveries average 484 acre-feet between May and September. Information about the water right claim for the Cataract project summarized in a memo by DNRC staff (McBeath 1982) identifies alfalfa as the crop to be grown with project water with field and conveyance efficiencies of 65 percent and 45 percent, respectively.

Because sufficiently comparable transactions are rarely available for determining a fair market value for a given supply of water, examining regional transactions and applying information derived from those transactions to a particular case is of limited usefulness. Further, the operational limitations pertaining to Cataract present challenges for evaluating the use of project water beyond those posed by projects that store and deliver water in a more conventional fashion.

This estimate relies on a method based on the Marginal Physical Product (MPP) of water. The method has been used in Montana to provide guidance for the lease of agricultural water for instream flows (Duffield 1991) and to estimate the value of irrigation water in an assessment of the benefits and costs of rehabilitating the St. Mary Diversion and Milk River Project (Bioeconomics 2005). Under this method, the annual value of a source of irrigation water is estimated based on the value of the contribution of the net amount of irrigation water to crop production. Economic theory suggests that a water user would be willing to pay for an amount of irrigation water up to the value of the contribution of that amount of water as an input in producing a crop. The method applies particularly well in the case of supplemental water where fixed costs are recovered through crop production that relies on primary sources of water. No reductions have been made for any variable costs associated with additional production made possible through the use of supplemental water.

Relying on the MPP for alfalfa reported in Duffield 1991 and Bioeconomics 2005 of 0.19 tons per acre-inch with adjustments for field and conveyance efficiencies contained in McBeath 1982 and a factor for reduced yields in an establishment year of 0.9 (Bioeconomics 2005) results in an estimated additional 291 tons provided by the 484 acre-feet of supplemental water delivered by the Cataract project. At an average all-hay price for the years 2001-2011 of $94.67 (2011 $'s), the annual value of this additional production is estimated to be $27,502 or $56.82 per acre-foot. At discount rates of 5.0, 7.5, and 10,0 percent, the estimated present value of the project water for irrigation would be $502,071, $356,831, and $272,675, respectively. Discount rates reflecting risk and opportunity costs for farming operations over the long-run would probably be closest to 7.5 percent. The calculations are presented below.

Acre-feet		484	(R. Kingery 2012)
MPP of Irrigation Water in Alfalfa Production		0.19 tons/acre-inch	(Bioeconomics 2005; Duffield et al 1991)
Additional Water Diverted from Cataract Creek		5,808 acre-inches	
Average Distribution Efficiency			
Conveyance	45%		(McBeath 1982)
Field	65%	29%	
Adjustment for Reduced Yield in Establishment Year		0.9	(Bioeconomics 2005)
Additional Tons		291 tons	
Average All-Hay Price (Olympic Ave.) 2001-2010 (2011 $)		$94.67 per ton	(Bryggman)
Annual Value of Irrigation Water Provided By Project		$27,502	
Present Value – 50 Years			
	5%	$502,071	
	7.5%	$356,831	
	10%	$272,675	
Value per Acre-foot			
Annual		$56.82	
Permanent	5%	$1,037	
	7.5%	$737	
	10%	$563	

References

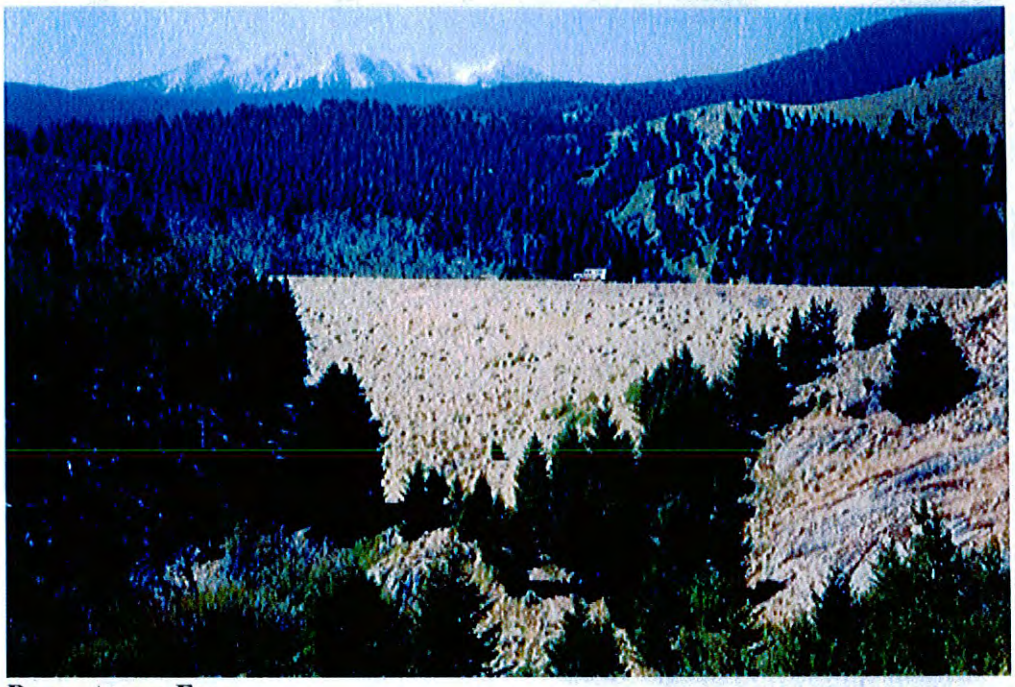
Bioeconomics, 2005. *St. Mary Diversion & Milk River Project: Preliminary Economic Analysis –Impacts and Benefit-Cost Analysis; Phase II; Task 4 – Economic Analysis; Final Report*. Missoula, Montana.

Duffield, J.; C. Neher; M. Josephson; and R. Josephson. 1991. "Market Value of Agricultural Water Leased for Instream Flows." Report for Montana DFWP. Helena, Montana.

Kingery, R. Personal Communication. September 28, 2012.

McBeath, M. 1982. Memorandum of April 2, 1982. Department of Natural Resources and Conservation. Helena, Montana.

Appendix B
Project Photographs



Downstream Face

Upstream Face, looking north

Upstream Face looking south

Spillway

Outlet

Reservoir, looking west

Appendix C
Dowl HKM Feasibility Study

Appendix C, the HKM Feasibility Study Report is available for review at the State Water Projects Bureau Helena Office, (406) 444-6646

Appendix D
Water Rights

STATE OF MONTANA
DEPARTMENT OF NATURAL RESOURCES AND CONSERVATION
1424 9TH AVENUE P.O.BOX 201601 HELENA, MONTANA 59620-1601

GENERAL ABSTRACT

Water Right Number: 41G 119410 00 STATEMENT OF CLAIM
Version: -- ORIGINAL RIGHT
Version Status: ACTIVE

Owners: MONTANA, STATE OF DEPT OF NATURAL RESOURCES
CATARACT DAM
1424 9TH AVE
PO BOX 201601
HELENA, MT 59620 1601

Priority Date: July 15, 1957
Enforceable Priority Date: July 15, 1957

Type of Historical Right: FILED

Purpose (use): IRRIGATION
Irrigation Type: SPRINKLER/FLOOD

Maximum Volume: 9521.00 AC-FT
Climatic Area: 3 - MODERATE

Maximum Acres: 7930.00

Source Name: CATARACT CREEK
Source Type: SURFACE WATER

Points of Diversion and Means of Diversion:

ID	Govt Lot	Qtr Sec	Sec	Twp	Rge	County
1		NESESW	23	2S	3W	MADISON

Period of Diversion: APRIL 1 to OCTOBER 31
Diversion Means: DAM
Ditch Name: CATARACT CREEK RESERVOIR

Reservoir: ON STREAM **Reservoir Name:** CATARACT RESERVOIR

Govt Lot	Qtr Sec	Sec	Twp	Rge	County
	NESESW	23	2S	3W	MADISON

Diversion to Reservoir: DIVERSION # 1

Period of Use: APRIL 1 TO OCTOBER 31

Purpose (use): IRRIGATION
Place of Use: (66 total records)

ID	Acres	Govt Lot	Qtr Sec	Sec	Twp	Rge	County
1	50.00		SE	19	1S	1W	MADISON
2	90.00		SW	19	1S	1W	MADISON
3	1.00		SWSWSE	20	1S	1W	MADISON
4	35.00		SW	20	1S	1W	MADISON
5	5.00		W2NWNE	29	1S	1W	MADISON
6	80.00		NW	29	1S	1W	MADISON
7	130.00		NE	30	1S	1W	MADISON
8	160.00		NW	30	1S	1W	MADISON
9	25.00		SE	30	1S	1W	MADISON
10	110.00		SW	30	1S	1W	MADISON

11	60.00	NW	31	1S	1W	MADISON
12	5.00	SW	31	1S	1W	MADISON
13	80.00	NE	23	1S	2W	MADISON
14	15.00	NW	23	1S	2W	MADISON
15	145.00	SE	23	1S	2W	MADISON
16	15.00	SW	23	1S	2W	MADISON
17	35.00	NW	24	1S	2W	MADISON
18	10.00	SE	24	1S	2W	MADISON
19	55.00	SW	24	1S	2W	MADISON
20	600.00		25	1S	2W	MADISON
21	140.00	NE	26	1S	2W	MADISON
22	30.00	NW	26	1S	2W	MADISON
23	140.00	SE	26	1S	2W	MADISON
24	140.00	NE	34	1S	2W	MADISON
25	10.00	SENW	34	1S	2W	MADISON
26	160.00	SE	34	1S	2W	MADISON
27	10.00	NESW	34	1S	2W	MADISON
28	525.00		35	1S	2W	MADISON
29	510.00		36	1S	2W	MADISON
30	30.00	NE	1	2S	2W	MADISON
31	140.00	NW	1	2S	2W	MADISON
32	20.00	SW	1	2S	2W	MADISON
33	160.00	NE	2	2S	2W	MADISON
34	60.00	NW	2	2S	2W	MADISON
35	140.00	SE	2	2S	2W	MADISON
36	619.00		3	2S	2W	MADISON
37	60.00	NE	4	2S	2W	MADISON
38	10.00	NW	4	2S	2W	MADISON
39	15.00	SE	4	2S	2W	MADISON
40	30.00	SE	5	2S	2W	MADISON
41	160.00	NE	7	2S	2W	MADISON
42	80.00	NW	7	2S	2W	MADISON
43	110.00	SE	7	2S	2W	MADISON
44	540.00		8	2S	2W	MADISON
45	640.00		9	2S	2W	MADISON
46	530.00		10	2S	2W	MADISON
47	6.00	W2SWNE	16	2S	2W	MADISON
48	60.00	NW	16	2S	2W	MADISON
49	25.00	SE	16	2S	2W	MADISON
50	4.00	N2NESW	16	2S	2W	MADISON
51	130.00	NE	17	2S	2W	MADISON
52	120.00	NW	17	2S	2W	MADISON
53	160.00	SE	17	2S	2W	MADISON
54	80.00	SW	17	2S	2W	MADISON
55	130.00	NE	18	2S	2W	MADISON
56	130.00	NE	20	2S	2W	MADISON
57	5.00	NENW	20	2S	2W	MADISON
58	85.00	NE	21	2S	2W	MADISON
59	120.00	NW	21	2S	2W	MADISON
60	10.00	SE	21	2S	2W	MADISON
61	20.00	SW	21	2S	2W	MADISON
62	70.00	NE	28	2S	2W	MADISON
63	10.00	NW	28	2S	2W	MADISON
64	20.00	SE	28	2S	2W	MADISON
65	20.00	SW	28	2S	2W	MADISON
66	10.00	NW	33	2S	2W	MADISON
Total:	7930.00					

Geocodes/Valid:

Remarks:

FOR PARENT FILE SEE J119409-00.

STARTING IN 2008, PERIOD OF DIVERSION WAS ADDED TO MOST CLAIM ABSTRACTS, INCLUDING THIS ONE.

THE WATER RIGHTS FOLLOWING THIS STATEMENT ARE SUPPLEMENTAL WHICH MEANS THE RIGHTS HAVE OVERLAPPING PLACES OF USE. THE RIGHTS CAN BE COMBINED TO IRRIGATE ONLY OVERLAPPING PARCELS. EACH RIGHT IS LIMITED TO THE FLOW RATE AND PLACE OF USE OF THAT INDIVIDUAL RIGHT. THE SUM TOTAL VOLUME OF THESE WATER RIGHTS SHALL NOT EXCEED THE AMOUNT PUT TO HISTORICAL AND BENEFICIAL USE W119378-00, W119380-00, W119410-00, W119411-00, W119383-00, W119384-00, W119416-00, W119417-00.

WHEN THIS CLAIM WAS ORIGINALLY DECREED, THE PERIOD OF DIVERSION WAS NOT INCLUDED AS AN ELEMENT OF THE CLAIM. IN 2008, THE PERIOD OF DIVERSION ELEMENT WAS ADDED TO ALL CLAIM ABSTRACTS. IT IS NOT CERTAIN IF THE PERIOD OF DIVERSION DATES ADDED TO THIS CLAIM ACCURATELY REFLECT THE HISTORICAL PERIOD OF DIVERSION. MORE INFORMATION IS REQUIRED.

STATE OF MONTANA
DEPARTMENT OF NATURAL RESOURCES AND CONSERVATION
1424 9TH AVENUE P.O.BOX 201601 HELENA, MONTANA 59620-1601

GENERAL ABSTRACT

Water Right Number: 41G 119413 00 STATEMENT OF CLAIM
Version: -- ORIGINAL RIGHT
Version Status: ACTIVE

Owners: MONTANA, STATE OF DEPT OF NATURAL RESOURCES
CATARACT DAM
1424 9TH AVE
PO BOX 201601
HELENA, MT 59620 1601

Priority Date: July 15, 1957
Enforceable Priority Date: July 15, 1957

Type of Historical Right: FILED

Purpose (use): STOCK

Maximum Volume: THIS WATER RIGHT INCLUDES THE AMOUNT OF WATER CONSUMPTIVELY USED FOR STOCKWATERING PURPOSES AT THE RATE OF 30 GALLONS PER DAY PER ANIMAL UNIT. ANIMAL UNITS SHALL BE BASED ON REASONABLE CARRYING CAPACITY AND HISTORICAL USE OF THE AREA SERVICED BY THIS WATER SOURCE.

Source Name: CATARACT CREEK
Source Type: SURFACE WATER

Points of Diversion and Means of Diversion:

ID	Govt Lot	Qtr Sec	Sec	Twp	Rge	County
1		NESESW	23	2S	3W	MADISON

Period of Diversion: JANUARY 1 to DECEMBER 31
Diversion Means: DAM
Ditch Name: CATARACT CREEK RESERVOIR

Reservoir: ON STREAM **Reservoir Name:** CATARACT RESERVOIR

Govt Lot	Qtr Sec	Sec	Twp	Rge	County
	NESESW	23	2S	3W	MADISON

Diversion to Reservoir: DIVERSION # 1

Period of Use: JANUARY 1 TO DECEMBER 31

Purpose (use): STOCK
Place of Use: (66 total records)

ID	Acres	Govt Lot	Qtr Sec	Sec	Twp	Rge	County
1			NE	20	2S	2W	MADISON
2			SW	20	1S	1W	MADISON
3			SW	19	1S	1W	MADISON
4			SE	19	1S	1W	MADISON
5			NW	30	1S	1W	MADISON
6			NE	30	1S	1W	MADISON
7			SW	30	1S	1W	MADISON
8			SE	30	1S	1W	MADISON
9			NW	29	1S	1W	MADISON
10			SE	24	1S	2W	MADISON
11			SW	24	1S	2W	MADISON

12	NW	24	1S	2W	MADISON
13	SE	23	1S	2W	MADISON
14	NE	23	1S	2W	MADISON
15	NW	23	1S	2W	MADISON
16	SW	23	1S	2W	MADISON
17	NW	26	1S	2W	MADISON
18	NE	26	1S	2W	MADISON
19	SE	26	1S	2W	MADISON
20		25	1S	2W	MADISON
21		36	1S	2W	MADISON
22		35	1S	2W	MADISON
23	NE	34	1S	2W	MADISON
24	SE	34	1S	2W	MADISON
25	SW	34	1S	2W	MADISON
26	NW	34	1S	2W	MADISON
27	NW	4	2S	2W	MADISON
28	NE	4	2S	2W	MADISON
29	SE	4	2S	2W	MADISON
30		3	2S	2W	MADISON
31	NW	2	2S	2W	MADISON
32	NE	2	2S	2W	MADISON
33	SE	2	2S	2W	MADISON
34	NW	1	2S	2W	MADISON
35	NE	1	2S	2W	MADISON
36	SW	1	2S	2W	MADISON
37	SE	5	2S	2W	MADISON
38		8	2S	2W	MADISON
39		9	2S	2W	MADISON
40		10	2S	2W	MADISON
41	NE	18	2S	2W	MADISON
42	NW	17	2S	2W	MADISON
43	NE	17	2S	2W	MADISON
44	SE	17	2S	2W	MADISON
45	SW	17	2S	2W	MADISON
46	SW	31	1S	1W	MADISON
47	NW	31	1S	1W	MADISON
48	NW	7	2S	2W	MADISON
49	NE	7	2S	2W	MADISON
50	SE	7	2S	2W	MADISON
51	NW	16	2S	2W	MADISON
52	SE	16	2S	2W	MADISON
53	SE	21	2S	2W	MADISON
54	SW	21	2S	2W	MADISON
55	NW	21	2S	2W	MADISON
56	NE	21	2S	2W	MADISON
57	SW	28	2S	2W	MADISON
58	NW	28	2S	2W	MADISON
59	SE	28	2S	2W	MADISON
60	NE	28	2S	2W	MADISON
61	NW	33	2S	2W	MADISON
62	SWSWSE	20	1S	1W	MADISON
63	N2NESW	16	2S	2W	MADISON
64	W2SWNE	16	2S	2W	MADISON
65	W2NWNE	29	1S	1W	MADISON
66	NENW	20	2S	2W	MADISON

Geocodes/Valid:

Remarks:
STARTING IN 2008, PERIOD OF DIVERSION WAS ADDED TO MOST CLAIM ABSTRACTS, INCLUDING THIS ONE.

Person with disabilities who need an alternative accessible format of this document should contact:

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