WATER LEASING STUDY

FINAL REPORT

Prepared by Montana Fish, Wildlife & Parks

for the

Environmental Quality Council

Adopted by the

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"Rivers are marvelous spirits. Perpetually singing and dancing, they amble merrily toward the ocean, where they rejoin their cradle and their grave, lose their identities, and are mystically transported to the tops of the mountains to begin new lives."

--Constance Elizabeth Hunt, "Down by the River"

"Rivers have what man most respects and longs for in his own life and thought -- a capacity for renewal and replenishment, continual energy, creativity, cleansing."

--John M. Kauffmann, former American Rivers board member

INTRODUCTION

The Water Leasing Study was first authorized by the 1989 Montana Legislature and amended by the 1991 and 1993 legislatures. The study is codified as 85-2-436/437/438, MCA. Section 85-2-436 (2) (a) states "The department of fish, wildlife, and parks, with the consent of the commission, may lease existing rights for the purpose of maintaining or enhancing streamflows for the benefit of fisheries in stream reaches determined eligible by the department pursuant to 85-2-437." This report was prepared under 85-2-436 (3) (b), MCA, which states "A final study report must be adopted by the department and commission and submitted to the Environmental Quality Council, which shall complete the final report by December 1, 1998." The "department" is the Department of Natural Resources and Conservation and the "commission" is the Montana Fish, Wildlife and Parks Commission.

Staff of Montana Fish, Wildlife and Parks prepared a preliminary working document and submitted it to the EQC staff for initial comment. The working document was then submitted to the Water Policy Subcommittee of the EQC for their comment. Finally, the document was submitted to the Fish, Wildlife and Parks Commission, which subsequently adopted the report and forwarded it back to the EQC.

NEED FOR WATER LEASING

During the early settlement of the west, the development attitudes and economics of the times did not contemplate the recreational use of water in streams. The water resources were used for economic development and no consideration was given to maintaining water instream for fish and wildlife. Instead, emphasis was placed on the removal of water for mining, agricultural and other purposes. After more than 130 years of water development in Montana, many streams are over appropriated, resulting in them being "dewatered," particularly late in the summer and most

severely during low flow years. This dewatering has caused adverse impacts on the fisheries, other aquatic life and the recreational use of the streams.

Because "first in time is first in right" in Montana, as it is in many western states, the removal of water has had priority over keeping it in streams. In recent times, however, recreation, particularly fishing, has attained increased social and economic importance. There is increasing emphasis on finding ways to maintain and improve streamflows to provide fisheries that will satisfy the angling public as well as improve environmental conditions for other aquatic and terrestrial life that depend on the stream corridor. But, because many streams are already over appropriated, flows can only be improved by putting some of the already appropriated water back into the stream.

Why is leasing important? Because good habitat produces good fish populations. Fish habitat in streams consists of three basic components: (1) An unaltered physical channel, (2) an adequate quantity of water to fill the physical channel, and (3) good water quality. The higher the quality of these components, the more fish the stream can produce. Instream flow is the water quantity component of stream habitat. One means to provide that component in dewatered streams is to lease existing diversionary water rights and temporarily transfer the water back to the stream, thereby making previously diverted water available to improve fish habitat.

LEGISLATIVE HISTORY

The Water Leasing Study was established in 1989 by the 51st Montana Legislature through passage of HB 707. It was probably the most controversial natural resource issue that came before that body. The issue arose primarily as a result of the 1988 drought's impact on stream fisheries. The bill was supported by the environmental and recreational groups and opposed by agriculture. It was, at one point, rejected by the legislature but was later revived and, through amendments, approved in the closing days of the session. It was signed into law in May, 1989.

A sample of newspaper headlines before and during the 1989 legislative session provides a glimpse of the debate that took place prior to the bill's approval:

"Water Fight: Irrigators, environmentalists see battle in '89 legislature." Great Falls Tribune, Sept. 12, 1988.

(Then Governor) "Stephens supports water leasing bill." Ravalli Republic (Hamilton), February 15, 1989.

"Debate boils over proposed water bill: Ranchers and recreationists disagree about the bill's intent and power." Ravalli Republican, February 20, 1989.

"Water rights leasing plan endorsed" (by the House). Independent Record (Helena), February 22, 1989.

Water leasing bills concerns stockgrowers" (sic). Montana Stockgrower, March, 1989.

"A good bill goes down." Independent Record, March 4 1989.

"Both sides threaten water-lease suits." Independent Record, March 16, 1989.

"Water lease amendments advance." Independent Record, March 21, 1989.

"Senate kills water leasing." Independent Record, March 23, 1989.

"Water lease defeat makes a lawsuit, (constitutional) amendment likely." Independent Record, March 23, 1989.

(Representative) "Marks condemns ag lobbyists' tactics." Independent Record, April 4, 1989.

"Water leasing back on burner." Independent Record, April 10, 1989.

"No dredging up water-lease bill." Independent Record, April 11, 1989.

"Water lease bill may be revived." Independent Record, April 12, 1989.

"Water lease bill revived." Independent Record, April 14, 1989.

"Senate OKs watered-down water lease." Independent Record, April 15, 1989.

"Water lease compromise sent to governor." Independent Record, April 21, 1989.

The purpose of the leasing law is to study the feasibility of leasing existing water rights to enhance streamflows for fisheries. The original bill created a four-year pilot program that allowed only FWP to lease water rights from willing individuals. FWP, with the consent of the Fish, Wildlife and Parks Commission, provided the Board of Natural Resources and Conservation (Board) with a list of specific stream reaches on which leasing was desired. The Board had the responsibility of approving streams for water leasing before FWP could pursue a water lease to conclusion. The Board could designate up to five stream reaches where water could be leased for instream flows to enhance the fisheries.

The 52nd Legislature, in 1991, amended the original legislation as follows:

1. Increased the term of leases from four to ten years and extended the leasing study from June 30, 1993 to June 30, 1999;

2. Required FWP to submit an annual leasing report by December 1 of each year;

3. Extended the date for the final leasing report to December 1, 1998;

4. Added procedural wording concerning lease renewal to protect existing water users;

5. Added language stating that the leasing program does not create a right for a person to bring suit to compel the renewal of an expired lease, and;

6. Increased the number of stream reaches that the Board can designate from five to no more than ten and, allowing the Board to remove designated reaches at FWP's request.

The 53rd Legislature, in 1993, made additional amendments to the legislation as follows:

1. Added additional reporting requirements for the annual report;

2. Increased the number of stream reaches where leasing can occur from 10 to 20;

3. Allowed River Restoration Program funds to be used for water leasing.

No further amendments were made in the 1995 or 1997 legislative sessions.

The current law expires on June 30, 1999.

Note: State government reorganization eliminated the Board on July 1, 1995 and its duties were taken over by the Department of Natural Resources and Conservation (DNRC).

DESIGNATED STUDY STREAMS

The following leasing study streams have been designated to date. Also listed are the approving authority and date of approval. Current law allows no more than 20 streams to be approved for water leasing.

1. Swamp Creek (Big Hole R.drainage); **Board;** March 5, 1990

2. Big Creek (Yellowstone R. drainage); **Board;** March 5, 1990

3. Mill Creek (Yellowstone R. drainage); **Board;** November 9, 1990

4. Cedar Creek (Yellowstone R. Drainage); **Board;** January 6, 1992

5. Blanchard Creek (Blackfoot R. drainage); **Board;** September 25, 1992

6. Hells Canyon Creek (Jefferson R. drainage); **Board;** September 25, 1992

7. Tin Cup Creek (Bitterroot R. drainage); **Board;** October 30, 1992

8. Rattlesnake Creek (Clark Fork R. drainage); **Board**; May 25, 1995

9. Mol Heron Creek (Yellowstone R. drainage); **DNRC**; November 28, 1995

10. Rock Creek (Blackfoot R. drainage); **DNRC**; November 28, 1995

11. Chamberlain Creek (Blackfoot R. drainage); **DNRC**; January 3, 1996

12. Pearson Creek (Blackfoot R. drainage); **DNRC**; January 3, 1996

13. Rock Creek near Garrison (Clark Fork R. Drainage); **DNRC**; July 13, 1998.

Leases have been finalized on all but five (5) of the designated study streams: Swamp Creek, Big Creek, Rattlesnake Creek, Rock Creek and Rock Creek near Garrison. FWP and the potential lessor on Swamp Creek could not reach agreement on a price for the lease. Sprinkler irrigation projects that will salvage water for instream use on Big Creek and Rock Creek near Garrison are being considered for funding. If funded, salvaged water will be leased to FWP at no cost. Discussions with the potential lessor on Rattlesnake Creek are on hold. Negotiations with the potential lessor on Rock Creek (Blackfoot R. drainage) have ended without a completed lease.

EARLY LEASING CHALLENGES

"Ask the typical man on a horse to tell you about water leasing in Montana, and you're likely to a get a blank stare if not worse. Although the state's lease program is nearly four years old, not much is known about it, thus, like most unknowns, it carries the burden of suspicion."

--Montana Stockgrower, October 1993. Article on Water Leasing by Joyce Lancey, editor.

"Although this idea is simple enough, the design and implementation of Montana's water leasing program is fraught with problems."

--McKinney, M. J. 1991. Leasing water for instream flows: The Montana experience. In: Rivers, Vol. 2 (3), July, 1991. p. 247.

The leasing study got off to a slower start than anticipated for several reasons. First, FWP elected to proceed at a cautious, yet deliberate, pace given the concern and controversy surrounding passage of HB 707. Second, FWP proceeded to conduct several studies related to leasing. One of the studies was to determine the market value of leasing existing water rights for instream flows. Two others involved hydrologic analyses of the first two streams approved for leasing to determine the possible effects of the leases on existing water users. The latter

two studies were completed prior to completing leasing agreements with the potential lessors to provide FWP with some idea about how other water users might be affected by leasing.

There was disagreement between FWP and some supporters of the leasing bill as to whether the market value study was necessary. They believed that FWP should simply go out and start negotiating water leases. Because a market for transfer of existing rights to instream flow has not been established in Montana, the market value study provided a basis for negotiating the price of leasing water. However, the amount paid for a lease is negotiable and the outcome depends, to a large extent, on how the negotiating parties perceive the value of the rights to be leased.

The initial slow pace of the program can also be attributed, in part, to the post-legislative carryover of agricultural concern that leasing would interfere with their water rights and would go against the traditional concept of water use, opening the door for other changes in water use that would be unacceptable. Some potential lessors were unwilling to be the first persons to lease water because of perceived repercussions from others in the agricultural community. As time passed, the concern of these folks diminished as they found that FWP was not acquiring leases very fast and that interference with their water rights and existing water use was not occurring. Gradually, the leasing program became more accepted as a potential "win/win" process through agreements between willing lessors and FWP. No one was being forced to lease water and there were benefits to the water right holder.

LATER LEASING SUCCESSES

FWP has finalized ten leases on eight study streams. All of the approved leases are on tributary streams to larger rivers that will improve fish spawning and reproduction in the larger rivers. The approved leases are:

Mill Creek. The first lease was completed in August, 1992 on Mill Creek, a tributary to the Yellowstone River near Pray, MT. The lease is with the Mill Creek Water and Sewer District and involves 48 individuals and 95 different water rights. It is a result of a water conservation project in which three inefficient ditch systems used for flood irrigation were converted to a gravity pipeline and sprinkler system to irrigate the same lands more efficiently. This lease provides a once per year, 48-60 hour flushing flow of up to 65 cfs to move young cutthroat trout out of the creek into the Yellowstone River. This lease was first implemented during the 1993 irrigation season.

Mill Creek. The second lease was also completed on Mill Creek, in October, 1992. The lease is with a single individual and is also a result of the water conservation project. This "salvage" water lease helps improve the base flow in the creek during the irrigation season to allow young cutthroat trout to grow and finally migrate to the Yellowstone River. This lease was also first implemented during the 1993 irrigation season.

Blanchard Creek. The third lease, completed in August, 1993, is with a single individual on Blanchard Creek, a small tributary in the Blackfoot River basin near Clearwater Junction. FWP leases irrigation water by paying the rancher to stop irrigating when streamflows drop to an agreed to level. This lease was first implemented during the 1994 irrigation season.

Tin Cup Creek. The fourth lease, completed in October, 1994, is with six individuals holding divided portions of the first water right that is located at the lowermost diversion on Tin Cup Creek, a spawning tributary to the Bitterroot River near Darby. FWP pays for leaving all of the right in the creek below the diversion point. The lease is expected to improve flows for rainbow and cutthroat trout that migrate from the Bitterroot River to spawn in the creek. This lease was first implemented during the 1995 irrigation season.

Cedar Creek. The fifth lease is with the U.S. Forest Service on Cedar Creek, another important spawning tributary to the upper Yellowstone River near Corwin Springs. The Forest Service purchased a private ranch in upper Cedar Creek for elk habitat. They will continue to irrigate some lands but have leased some of their rights to FWP for instream flow to improve Yellowstone cutthroat trout spawning in the lower 1/4 mile of the creek. The lease agreement was completed in December, 1993 but the lease was not implemented until the 1996 irrigation season due to a lengthy administrative process resulting from objections from other water users on the creek.

Hells Canyon Creek. The sixth lease, completed in August, 1995, is the result of converting a flood irrigation system to a gravity pipeline sprinkler system. It involves three individuals who irrigate from Hells Canyon Creek, a Jefferson River tributary near Silver Star. The lease is expected to improve rainbow trout spawning and reproduction in the creek that will improve the fish population in the Jefferson River. The new system was completed in the fall of 1995 and the lease was first implemented during the 1996 irrigation season.

Mill Creek. The seventh lease is with a third individual on Mill Creek where the first two leases were obtained. This person is also on the pipeline and FWP leases his salvaged water. This lease joins the second lease in adding to the base flow in the creek to benefit cutthroat trout. The lease agreement was completed in August, 1995 and was first implemented during the 1996 irrigation season.

Chamberlain Creek. The eighth lease is with a landowner who formerly irrigated from Chamberlain Creek, a small tributary to the Blackfoot River near Ovando. The creek is an important westslope cutthroat trout spawning stream. The lease agreement was completed in March, 1996 and the lease became effective in October, 1996 after the "change" was granted by DNRC. The lease was first implemented in 1997.

Pearson Creek. The ninth lease is with the same landowner as the eighth lease, on Pearson Creek, a tributary to Chamberlain Creek. Pearson Creek underwent a River Restoration Program stream improvement project that significantly improved the physical habitat of the stream, which

was entirely diverted for irrigation. The channel was gradually obliterated below the diversion point. The lease will retain in the creek all the water formerly diverted and, coupled with the habitat improvement, is expected to improve westslope cutthroat spawning capability. The lease agreement was completed in March, 1996 and the "change" approved by DNRC in October, 1996. The lease was first implemented in 1997.

Mol Heron Creek. The tenth lease is with a private ranch on Mol Heron Creek, a cutthroat spawning tributary to the upper Yellowstone River. The ranch is converting, with FWP funding, from flood to more efficient sprinkler irrigation, thereby improving the instream flows that are needed for cutthroat spawning and for the out-migration of young to the mainstem river. Leasing of the salvaged water, as well as a minimum flow of 5.0 cfs, was finalized in May, 1998 when the "change" was granted by the DNRC. The lease will be implemented in 1999.

In addition to the above leases, FWP converted portions of its own water rights formerly used for irrigation on the Blackfoot-Clearwater Wildlife Management Area (WMA) to instream flow in Cottonwood Creek, a Blackfoot River tributary which flows through the WMA. This project was accomplished under 85-2-439, MCA as a result of SB 144 in the 1995 legislature that established an instream flow pilot program in the upper Clark Fork River basin. The conversion was possible because of ditch lining on the WMA which improved the efficiency of the flood irrigation system. Conversion of these rights will improve brown trout and bull trout spawning in the stream and also help improve a westslope cutthroat trout population in its upper reaches. The "change," which was approved by DNRC in October 1996, was implemented in 1997.

Hearings were held by DNRC on two of the change applications (Cedar Creek and Tin Cup Creek) to allow objections to the leases to be heard. No objections were received on the other eight leases and no objections were received on the Cottonwood Creek conversion.

A summary of the features and costs of the approved water leases is shown in Appendix A.

Note: The Cottonwood Creek water rights conversion is also included in Appendix A.

FWP has investigated over 100 potential water leases during the ten years of the program. Most of them were not pursued because the water rights were: not located on a dewatered stream; too small to help the stream; had a calculated consumed portion that was too small to benefit the stream; in the wrong location; had a poor priority date; appeared to be an invalid water right; had too short a period of use; had questions about abandonment; or, would have known adverse effects on other water users.

LEASING REQUIREMENTS

Before a lease can be obtained, FWP must assess the impacts of potential leases on other water right holders on the stream and seek approval from DNRC through the existing water right

"change" process. An Environmental Assessment is written for each lease and distributed for public review and comment.

FWP can only lease water from a willing party. If FWP and the water rights holder cannot agree to the terms of a lease, the lease will not occur. Leases cannot result in the confiscation of water rights and a lease may not be approved until any objections to the lease are resolved through the change process.

The maximum amount of water that may be leased is the amount historically diverted by the lessor at his point of diversion. However, only the amount historically consumed, or a lesser amount as determined by DNRC, may be protected for instream flows below the point of diversion (85-2-436 (2) (d), MCA).

A lease may be issued for a maximum period of 10 years but may be renewed one time for an additional 10 years. Leases that are the result of a water conservation or storage project, such as converting from flood to sprinkler irrigation, can be issued the first time for not more than 20 years (85-2-436 (2) (e), MCA). There is no provision for renewing a 20-year lease. All leases entered into prior to June 30, 1999 remain valid until the expiration of the leases (85-2-438, MCA).

STATUTORY REPORTING REQUIREMENTS FOR COMPLETED LEASES

Section 85-2-436 (3)(a) requires an annual leasing progress report that contains the following specific information listed under 85-2-436(1)(a) and (b) on each pilot lease entered into during the report period:

(a) provide the following data for each designated stream reach and each pilot lease entered into under subsection (2):

(i) the length of the stream reach and how it is determined;

(ii) technical methods and data used to determine critical stream flow or volume needed to preserve fisheries;

(iii) legal standards and technical data used to determine and substantiate the amount of water available for instream flows through leasing of existing rights;

(iv) contractual parameters, conditions, and other steps taken to ensure that each lease in no way harms other appropriators, particularly if the stream is one that experiences natural dewatering; and

(v) methods and technical means used to monitor use of water under each lease;

(b) based on the data provided under subsection (1)(a), develops a complete model of a water lease and lease authorization that includes a step-by-step explanation of the process from initiation to completion.

Each annual report specifically addresses these points for each lease obtained during the report period.

WATER LEASE MODEL

Section 85-2-436 (1)(b) requires FWP to develop ". . . a complete model of a water lease and lease authorization that includes a step-by-step explanation of the process from initiation to completion." FWP provided this information in the annual reports for each lease approved by listing the chronology of events that occurred (a leasing log) from the beginning of discussions with a potential lessor through final approval of the lease by DNRC.

WATER LEASE MONITORING PLAN

Section 85-2-436 (2) (j), MCA states that FWP shall pay all costs associated with installing devices or providing personnel to measure streamflows according to the measuring plan submitted under this section. Section 85-2-436 (1)(a)(v) requires FWP to describe the methods and technical means used to monitor use of water under each lease. Monitoring plans for each approved water lease have been designed and implemented. The details of each monitoring plan are provided in the annual report for the year the lease was approved.

ANNUAL REPORTS

Beginning in 1990, annual reports were prepared on the Water Leasing Study and submitted to the commission and EQC. The last annual report written prior to this final report is for 1997. The first lease agreements obtained are described in the 1992 annual report. Each report presents the details of each water lease obtained as well as those that were investigated and not pursued or were still under investigation when the report was completed.

PROTECTION OF LEASED WATER

Four of the ten water leases approved to date are on two streams which have water commissioners who administer water rights (Mill Creek and Tin Cup Creek). Both these streams have many other water users besides FWP. We have had some difficulty with commissioners understanding the concept of a water lease and how it should be administered. The concept of not diverting water at a former diversion site was a confusing point for one commissioner when he had to let water go past upstream diversions. He understood the concept of providing higher priority water if it was to be diverted downstream but was confused by how much water, if any, should be released for instream flow. He thought it was wasting water to pass it by an upstream diversion which was not getting all the water it needed anyway when there was no diversion of

the water downstream, even though the downstream water right leased by FWP had a higher priority date.

We are educating the commissioners about how the instream flow water lease is supposed to work. Commissioners who have remained on the job for more than one year now have a better understanding of the concept of instream flow and have tried to do a good job of administering the water leases. However, as commissioners change, education will have to be a continuing job for FWP so the instream flows are properly maintained. In both 1996 and 1997, however, we had some difficulty getting the leased water from upstream users on Tin Cup Creek. Each summer the creek dropped to about half of the water lease flow. Part of the problem was getting a commissioner appointed on time to deal with low flows. Also, there was apparently a difficult relationship between the commissioner, the district judge and certain other water users as the commissioner was administering everyone's water rights.

Montana has not suffered a major drought since leases were approved. A drought, or a low flow year, will make lease administration even more difficult.

The remaining six leases are on streams with fewer or no other water users. Monitoring is done by FWP and there have been no major problems with lease implementation. Again, a drought or low flow year may alter this situation.

BIOLOGICAL MONITORING OF LEASE STREAMS

Biological monitoring is being done on all leases to determine their effectiveness in improving fisheries. Monitoring intensity varies and is currently done by FWP fisheries biologists and graduate students when they are available. FWP currently does not have sufficient staff for intensive monitoring of leases. Local biologists collect data when they can but have many other duties that often conflict with an adequate monitoring program.

The following is a summary of the monitoring conducted on each stream through 1997. Monitoring for 1998 is incomplete.

1. Blanchard Creek. This lease has been in effect since 1994. However, the water right holder began increasing instream flows in 1991. Fish population monitoring is done by the local fisheries biologists. Rainbow trout are the dominant fish in the stream reach affected by the water lease. With additional instream flows, the numbers of rainbow trout over 4 inches in length has improved significantly from 6/100 feet of stream in 1990 to 12-25/100 feet from 1992 to 1997 (Appendix B). The numbers of young-of-the-year rainbow trout have fluctuated over this same time period with no clear pattern developing. The diversity of species present, however, increased between 1990 and 1997. In 1990, there were only rainbow, brown and brook trout present. By 1997, cutthroat trout, longnose dace, sculpins, mountain whitefish, large scale suckers and northern squawfish were being collected in the stream reach.

2. Hells Canyon Creek. The lease has been in effect since 1996. Monitoring of adult rainbow and brown trout migrating upstream and young fish migrating downstream to the Jefferson River is done by the local fisheries biologist, whose monitoring report is presented in Appendix C.

3. Chamberlain Creek. This lease was first implemented in 1997. Monitoring is done by the local fishery biologists. The creek has an excellent westslope cutthroat trout population at stream mile 3.9. However, immediately below this point, barriers to fish migration and poor habitat and streamflow problems severely limited fish production and the stream's contribution to the Blackfoot River. Fish populations were inventoried in 1990 prior to completion of a river restoration project to improve physical habitat elements in the lower reach of stream. The stream was surveyed again in 1995 (two years prior to implementing the water lease) and fish populations improved in the altered reach. However, the water rights obtained in the lease had not been used for irrigation during this period, indicating that the poor physical habitat was a major reason for poor fish production. In 1997, a survey at stream mile 0.5, which is below an irrigation diversion in the dewatered section of stream affected by the water lease, found two juvenile bull trout. Bull trout had not been recorded in this reach since 1982. The irrigation diversion, formed by hay bales, was a seasonal barrier to fish movement and is now replaced with a concrete structure and fish ladder that will improve water management and fish passage. Additional monitoring will be necessary to determine if the long-term improvement in flows will further improve the fisheries.

4. Pearson Creek. This lease was first implemented in 1997. Monitoring is done by the local biologists. Pearson Creek was historically entirely diverted for irrigation. The lower section of stream channel was nearly obliterated from non-use. It was reconnected to Chamberlain Creek in 1994 through a stream restoration project which reestablished the physical features of the channel. Fish populations were inventoried in 1991 prior to completion of the restoration project. The water lease affects the lower mile of stream, which is in a newly reconstructed and naturally intermittent channel. The primary value of Pearson Creek is to provide a migratory corridor for fish from the Blackfoot River to migrate into the upper reaches of Pearson Creek to spawn. Out-migrant fish have been observed in the stream section since its reconstruction and good numbers of multiple age classes of cutthroat trout have been sampled. Also, brook trout have been collected in a section of the reconstructed channel. Additional monitoring will be needed to determine the long-term effectiveness of the water lease.

5. Mill Creek. Two of the leases have been in effect since 1993 and one of them since 1995. One of the leases, with the Mill Creek Water and Sewer District, provides a 48-hour flushing flow at the time cutthroat trout fry are migrating from the creek back to the Yellowstone River. The other two leases with private individuals provide a base flow throughout the irrigation season to help ensure some flow at the mouth of the creek, which has historically gone dry in most years due to upstream irrigation.

Monitoring has been done by the local biologists and a fisheries graduate student at Montana State University, who is assisted by FWP in setting up and conducting the monitoring program.

The most intensive monitoring was done in 1996 and 1997 by the graduate student. The abstract from her Master's Thesis, completed in 1998, is shown in Appendix D.

It is encouraging to note the larger number of fry out migrating in 1997 than in 1996. These small fish will be the basis for an adult population that will migrate back into Mill Creek to spawn in 3-4 years, repeating the cycle and, hopefully, eventually reestablishing a suitable spawning run of fish into Mill Creek. In the past, there have been inadequate flows at the mouth of the creek to allow fry to reach the Yellowstone River. It should be noted, however, that higher flows have occurred naturally in Mill Creek in the last 2-3 years, which contributes substantially to the success of spawning and out migration. The higher numbers of fry cannot be attributed just to the water leases.

6. Cedar Creek. The lease was first implemented in 1996. Monitoring has been done by both FWP and the same graduate student working on Mill Creek.

The Monitoring Plan for Cedar Creek requires three gages be installed to monitor flows. All three gages were installed by the USGS prior to the 1996 irrigation season when the lease took effect. The extremely high flows of spring runoff in 1996 damaged the gages and they had to be reset and recalibrated after runoff was over. The monitoring effort was hindered by the high flows but some data were obtained. There were some lapses in the 1.3 cfs minimum flow in the water lease during the course of the irrigation season. However, 1996 served as a pilot monitoring effort that was expected to be improved in 1997.

Cedar Creek experienced a large out migration of cutthroat fry in 1997. In the past, spawning redds have been dewatered when flows dropped after spawning occurred. No redds were dewatered in 1997. A total of 25,781 fry were caught in traps as they were out migrating to the Yellowstone River in 1997, compared to 13, 251 fry caught in 1996. Again, the high numbers of fry cannot be entirely attributed to the water lease but it is, nevertheless, encouraging to see improving spawning success. The abstract from the student's Master's Thesis, completed in 1998, is shown in Appendix D.

7. Tin Cup Creek. The lease was first implemented in 1996. Monitoring is done by the local fisheries biologist. Data on rainbow trout spawning and reproduction was collected in 1992, 1993 and 1994, prior to implementing the lease. One year of data has been collected since the lease (1997). The 1997 data show the number of rainbow fry leaving the creek is not an improvement over pre-lease years. However, sampling rainbow fry is difficult since they leave the creek before high flows are completed. Sampling efficiency is variable depending on flow conditions and the intensity of sampling has an effect on estimating numbers of fry. Further monitoring will be needed before firm conclusions can be made about the benefits of the lease to rainbow trout.

Cutthroat trout may also migrate into Tin Cup Creek to spawn, but we have no data either previous to or since the lease to compare, largely because cutthroat spawn during higher flows

and the spawning redds are difficult to detect. Cutthroat trout are becoming more abundant in the upper Bitterroot River due, perhaps, to more restrictive fishing regulations and Tin Cup Creek may become more important for cutthroat spawning in the future. More information is needed to reach conclusions on the value of this lease to cutthroat trout.

8. Cottonwood Creek. The water rights conversion on this stream was first implemented in 1997. Monitoring is done by the local fisheries biologists. Salvaged water obtained by ditch lining on the Blackfoot-Clearwater Wildlife Management Area is left in the stream to improve flows below a major irrigation diversion on the creek. Seasonal dewatering downstream of the diversion had occurred for decades from water users taking the entire stream flow for late season irrigation. Historically, no fish would have existed there at this time of year. Since water has been left instream, bull trout, cutthroat trout and brook trout have been found in the previously dewatered reach.

FUNDING FOR LEASES

Funding for the leasing study was first approved by the 1989 Legislature, with expenditures authorized to begin July 1, 1989. FWP established a project and budget for potential payments to lessors and, when necessary, to conduct hydrologic studies and provide legal assistance to complete water lease agreements. Prior to the 1997 Legislature, FWP was paying $32,700 per year for five leases plus about $5,000 per year for hydrologic studies and legal assistance. The 1997 legislature reduced the FY 98/99 biennial budget to $66,000 to cover only the current cost of lease payments and provided no funds to acquire new leases. Table 1 shows the appropriations for the water leasing study from 1989-1999.

Although leasing can be funded through the Future Fisheries Improvement Program (FFIP) by application to, and approval by, the FFIP Review Panel and the Fish, Wildlife and Parks Commission, the process is much more complicated than using an established budget. Also, hydrologic analyses and legal assistance are not, by themselves, acceptable projects for funding by the FFIP. Therefore, FWP's ability to acquire new water leases during the FY 98/99 biennium was hindered by lack of funding.

TABLE 1. LEASING APPROPRIATIONS, FY 90 - FY 99 (1989 - 1999).

Fiscal Year									
90	91	92	93	94	95	96	97	98	99
$40,000	40,000	55,000	55,000	47,500	47,500	37,500	37,500	33,000	33,000

THE FUTURE OF LEASING

Montana's leasing program is still somewhat in its infancy. We have seen more interest in leasing as the original concerns subside and word spreads that leasing is not the bogeyman it was first thought to be. Also, the "change" process protects those who believe a lease will affect their water rights.

FWP is currently investigating other potential leases. These are also on tributary streams to larger rivers and would either improve spawning for these rivers or would improve the habitat for fish that reside in the smaller streams year-round. Leasing is a relatively slow, complicated and long-term process, with both avoidable and unavoidable delays in negotiating lease agreements and getting approval from DNRC. Leasing is not a panacea for addressing instream flow problems but should be considered as one tool available for their solution. FWP will continue to pursue leases in a careful and deliberate manner that will result in improving fisheries and other riparian-dependent aquatic and terrestrial wildlife while, at the same time, protecting existing water users.

CONCLUSIONS

The Water Leasing Study was borne out of great controversy. FWP chose to take a very deliberate approach to the study and was initially criticized for this approach. However, with the passing of time, an ensuing dialog and on-the-ground experience, this criticism has waned. Water leasing is also now more accepted, and even supported, by many of its former foes.

FWP has been very careful in obtaining the leases it currently holds. Although many potential leases have been investigated, only a small number have been pursued to completion. Interest in leasing is more prevalent now than it was during the first few years of the study. Water leasing will not solve all of Montana's stream dewatering problems because of the complexity of obtaining leases, the small quantities of water that are usually involved and the potential effects on existing water users. However, because leasing is one tool that can help balance the competing uses of a finite water resource, leases should continue to be cautiously selected and pursued where they will benefit the fisheries resource without adverse effects on existing water users.

When considering the importance of water in Montana's streams, the many beneficial uses it provides and the increasing demands among the various users, the future of water use may best be summarized in the words of Justice Oliver Wendell Holmes, Jr.:

> "A river is more than an amenity, it is a treasure. It offers a necessity of life that must be rationed among those who have power over it."

RECOMMENDATIONS

PROBLEM: The water leasing statute expires on June 30, 1999. Since leasing was enacted in 1989, FWP has finalized 10 leases and is currently pursuing two others that have potential to succeed. FWP has proven its ability to implement leases that benefit fisheries and, at the same time, fully protect the interests of other water users. Water leasing has proven to be a useful, although limited, tool for rewatering some of Montana's chronically dewatered streams. Continued success is dependant on the reauthorization of the water leasing statute.

RECOMMENDATION:

Reauthorize the water leasing statute, making it permanent.

PROBLEM: A maximum of 20 stream reaches, designated by the DNRC, are eligible for water leasing by FWP. Thirteen stream reaches have been designated since 1990, the year the first study reach was approved. If leasing is reauthorized, the 20 stream limitation could soon be reached.

RECOMMENDATION:

Increase the 20 stream limit to an unlimited number of stream reaches.

PROBLEM: The leasing statute requires the DNRC to approve the stream reaches that are eligible for leasing. The former Board of Natural Resources and Conservation performed this task in an open forum having public input and debate. After the abolishment of the Board in 1995, the task was relegated to the staff of the DNRC. Approval has since become more of a formality having little, if any, public involvement.

The public already has ample opportunity to voice concerns and objections to proposed leases during a number of other steps in the leasing process. Public comments are considered during: 1) the FWP Commission's approval of a study stream for leasing; 2) the FWP Commission's approval of a water leasing contract; 3) the Environmental Assessment (EA) process; and 4) the DNRC's water right "change" process. Additionally, if lease funding is pursued through the Future Fisheries Improvement Program (FFIP), funding must be approved by the 10-person FFIP Review Panel and the FWP Commission, which provide added opportunities for public involvement.

RECOMMENDATION:

Eliminate from the leasing statute the required approval of designated leasing streams by the DNRC.

PROBLEM: As a component of its water leasing program, FWP is funding private water conservation projects in which irrigated land is being converted from flood to more efficient sprinkler irrigation. In return for FWP's one-time investment in the project, which could exceed many hundreds of thousands of dollars, the developer agrees to lease to FWP all water salvaged by the project at no-cost for instream use. Leasing is the only legal means to ensure that salvaged water remains instream, thereby serving its intended purpose and guaranteeing FWP's investment. These conservation projects can have a working life of 30 years or more. However, the water leasing statute restricts the term of a lease of water made available from the development of a water conservation project to no more than 20 years. The funding of large scale conservation projects potentially costing hundreds of thousands of dollars are often difficult to justify if FWP's investment must be recouped within 20 years and not within the life of the project, which could extend for an added 10 years or more. This 20-year limitation hinders FWP's ability to participate in the funding of these projects.

RECOMMENDATION:

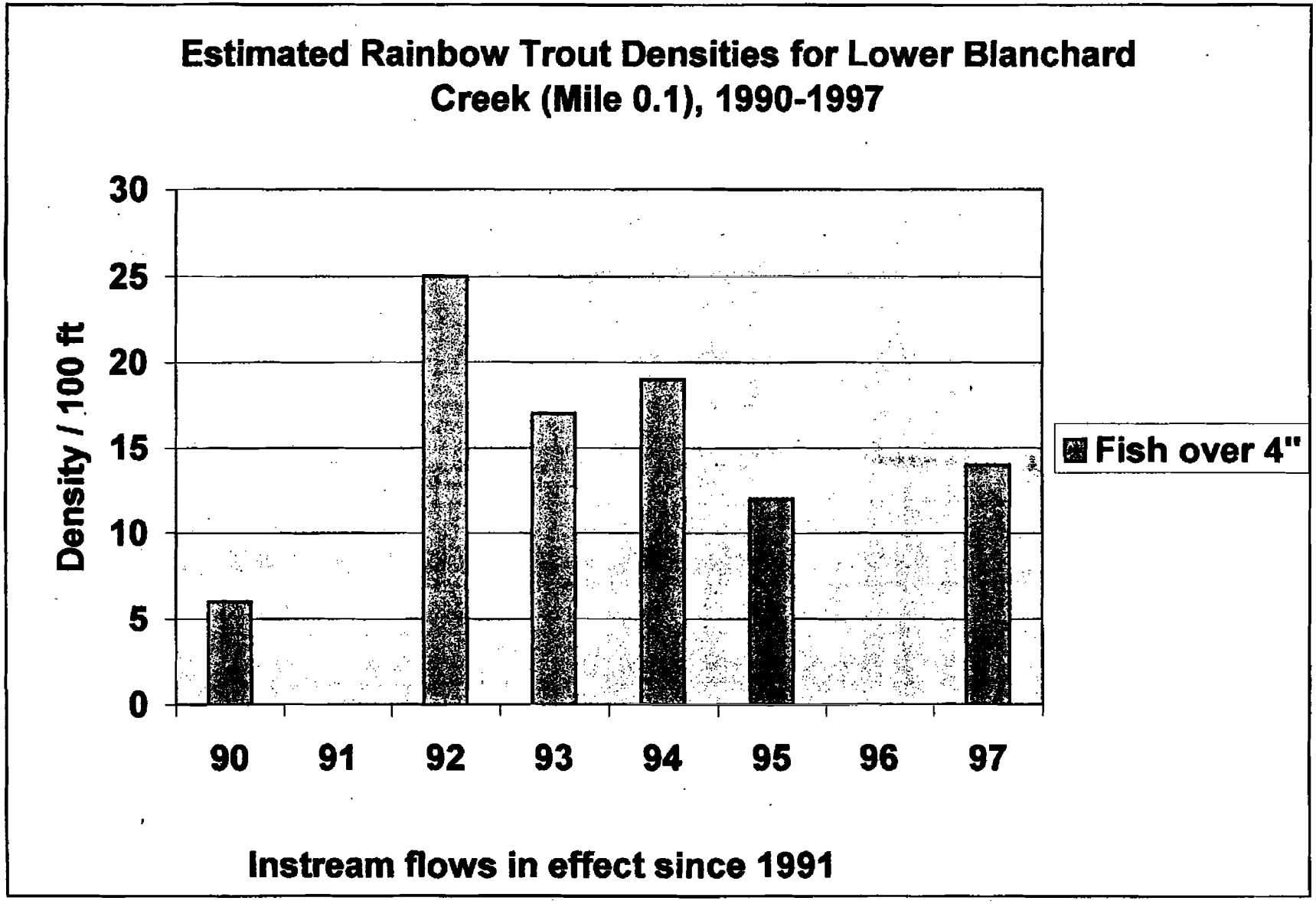
Increase the term of salvaged water leases that are made available from water conservation projects to the working life of the conservation project, not to exceed 30 years.

APPENDICES

APPENDIX A
Features and Costs of Approved Water Leases

SOURCE	LESSOR	LEASE TERM/EXP.	PRIORITY OF RIGHT	QUANTITY LEASED	PERIOD OF USE	COST
Mill Creek	Mill Creek Water and Sewer District	10 years Aug. 1, 2003	95 right with various priorities	41.4 cfs	48-60 hours in Aug. Diversion shut off after 10-day notice from FWP	$12, 750 per year[1]
Mill Creek	Individual	10 years April 1, 2003	June 30, 1880; June 1, 1903	2.0 cfs (1880) and 4.13 cfs (1903) (salvaged water)	May 1 -October 4	$7,500 per year
Blanchard Creek	Individual	5 years June 20, 1999	May 11, 1913 (first right on stream)	3.0 cfs	April 15 -October 15	Up to $2,000 per year
Tin Cup Creek	Six Individuals	5 years Nov. 4, 2000	August 1, 1883 (first right on stream)	2.28 cfs April 1-April 14 4.32 cfs April 15-April 30 4.72 cfs May 1-October 19 1.8 cfs October 20-November 4	April 1- November 4	$6,260 per year
Cedar Creek	US Forest Service	10 years Sep. 20, 2005	April 1, 1890; April 1, 1893; April 1898; April 1, 1904; April 7, 1972 (high water rights only)	6.77 cfs May 1-July 15[2] 6.39 cfs July 16-July 31 9.64 cfs August 1-August 31 6.39 cfs Sept 1 - October 15	May 1-October 15	$1.00 per year
Hells Canyon Creek	Three Individuals	20 years Apr. 1, 2016	December 31, 1884 (first right on stream); August 23, 1889; August 29, 1912	1.12 cfs (salvaged water)	April 1- November 4	$45,000 - One-time payment
Mill Creek	Individual	10 years May 1, 2006	June 1, 1891	2.64 cfs (salvaged water)	May 1-October 19	$4,200 per year
Chamberlain Creek	Individual	10 years Apr. 1, 2007	October 10, 1911	½ the flow up to 25 cfs	April 1 - October 31	$1.00 per year
Pearson Creek	Individual	10 years Apr. 1, 2007	October 10, 1911	Up to 8 cfs	April 1 - October 31	$1.00 per year
Cottonwood Creek	FWP[3]	9 years June 30, 2005	May 1, 1884	14.0 cfs April , 37.0 cfs May 1-June 30, 32.0 cfs July, 9.0 cfs August, 6.0 cfs Sept, 9.0 cfs Oct, 8.0 cfs November (salvaged water)	April 1- November 4	None
Mol Heron Creek	Private ranch	20 years Dec. 31, 2018	July 15, 1884; May 7, 1885; June 15, 1893; January 1, 1900; March 2, 1903; June 5, 1905; August 5, 1920; April 15, 1967	5.0 cfs to 27.0 cfs	April 15 - October 19	$100,000 - one-time payment

[1]Lessor pays for water commissioner and the installation of measuring devices on all on-farm turnouts from the pipeline.
[2]These rights are used to maintain a flow of 1.3 cfs at the mouth of Cedar Creek, eliminating effects on other water users.
[3]FWP converted its own water rights to instream flow under 85-2-439, MCA.


Estimated Rainbow Trout Densities for Lower Blanchard Creek (Mile 0.1), 1990-1997
Density / 100 ft
30
25
20
15
10
5
0
90
91
92
93
94
95
96
97
Fish over 4"
Instream flows in effect since 1991

APPENDIX C

Hell's Canyon Creek Water Lease, Fish Screen, and Gravity Pipeline Project:
Comparison of stream flow and fish loss to the irrigation system
in 1992 (pre-project) and 1997 (post-project).

Monitoring of stream flow of Hell's Canyon Creek and rainbow trout fry production was conducted in 1992 to document the importance of the stream for providing recruitment of juvenile trout to the Jefferson River and to evaluate the need for improving stream flow and rearing conditions in the creek. The Hell's Canyon Creek Project was implemented prior to the 1996 irrigation season, and post-project monitoring of stream flow and trout fry production was repeated in 1997 to evaluate effectiveness of the project.

PRE-PROJECT SAMPLING (1992)

Drought conditions in 1992 resulted in very low flow conditions throughout the Jefferson basin. Discharge of Hell's Canyon Creek was measured near the mouth of the creek, and stream flow ranged from 4.6 cfs on 15 July to 0.8 cfs on 19 August 1992. During much of August and early September, discharge was less that 1.6 cfs at the mouth of Hell's Canyon Creek. Two measurements were made at the Carroll Ditch during 1992. The canal contained 2.4 cfs on 15 July, and only 1.5 cfs on 19 August when stream flow above the canal was 2.3 cfs..

Traps were placed near the mouth of Hell's Canyon Creek to monitor trout fry migration to the Jefferson River and in the Carroll Ditch to monitor fry loss to the irrigation system. From 12 June through 19 August, an estimated 16,913 rainbow trout fry migrated to the Jefferson River. During the same period, 9,579 rainbow trout were lost to the Carroll Ditch. This loss to the irrigation system was estimated to be 36% of the total fry production at Hell's Canyon Creek.

POST-PROJECT SAMPLING (1997)

In contrast to 1992, the irrigation season of 1997 was wet and stream flow was above average throughout the upper Jefferson basin. Consequently, improved flow conditions were expected at Hell's Canyon Creek. Daily visits at a staff gage installed and monitored by U.S.G.S. document significantly higher stream flow downstream of the pipeline withdrawal. Discharge ranged from 3.8 cfs to 16.4 cfs between 15 July and 30 September. The average discharge for the month of August was 8.3 cfs. Daily flow records were also obtained from the gravity pipeline. Withdrawal typically averaged 350 gpm throughout the irrigation season. Flow ranged from 0 gpm to a maximum of 650 gpm.

Fry production was lower in 1997 compared to 1992. High flow conditions and flooding during rainbow trout spawning and egg incubation in May and June likely resulted in scouring of spawning gravel and may have contributed to relatively low spawning success. High flow conditions also contributed to difficulties in trapping juvenile trout during peak movement periods in July. An estimated 2,500 rainbow trout fry emigrated from Hell's Canyon Creek from 11 July through 1 October 1997. This should not be considered an estimate of total fry production because high flow prevented trapping during late June/early July when significant numbers of fry typically migrate from the creek. Monitoring of fish movement at the fish screen bypass indicated that no fish were lost to the irrigation system, and approximately 1,000 trout were effectively screened from entering the pipeline system. Comparisons of fry captured at the fish screen bypass and in Hell's Canyon Creek immediately below the irrigation withdrawal documented that about 40% of the fry would have entered the irrigation system had the fish screen not been present in 1997.

Although there is no estimate of trout fry numbers rearing in the stream downstream of the pipeline withdrawal, rearing conditions for small trout were significantly improved in 1997 compared to 1992 because of improved stream flow. This improved rearing environment is expected to provide increased survival of juvenile trout that would otherwise be forced to rear in the Jefferson River.

APPENDIX D

ABSTRACT

In 1989 the Montana Legislature passed House Bill 707, allowing Montana Fish, Wildlife and Parks to lease water rights to benefit fisheries. The first water leases on tributaries of the upper Yellowstone River were finalized in 1992 on Mill Creek, and in 1993 on Cedar Creek. The leases provide instream flows from May to October in an attempt to reestablish Yellowstone cutthroat trout (*Oncorhynchus clarki bouveri)* spawning runs. This study evaluated the existing leases' effect on fry recruitment. Recruitment to the Yellowstone River was measured in 1996 and 1997 on four tributaries: Locke, Mill, Cedar, and Mol Heron creeks. Since Yellowstone cutthroat trout fry move out of their natal tributaries soon after emergence, outmigration was monitored using traps located near the mouth of each stream. More fry were captured in 1997 than in 1996 in all but Mol Heron Creek. Mill Creek had the greatest percent increase in fry captured (4000%), followed by Locke Creek (300%), and Cedar Creek (200%). The lease on Cedar Creek prevented extended pre-emergence dewatering in 1996. The instream flow lease in Mill Creek was critical during fry outmigration in 1996, but not in 1997 because of unusually high discharge. For sampling protocol development, fry outmigration was broken into three stages based on observed patterns; the ascending limb, peak region and descending limb. Three pattern-based, and three systematic sampling protocols were evaluated in terms of their ability to provide a reliable estimate of fry outmigration with a minimum number of sample days. Mean estimates from four replications of each of the three pattern-based protocols were less variable and sampled fewer days than those from the three systematic protocols. Pattern-based protocol A, which concentrated sampling during the peak region of fry outmigration, and minimally sampled the descending limb, was chosen as the best protocol for all four streams because of the consistently narrow 95% confidence interval for its estimates, and was recommended to Montana Fish, Wildlife and Parks for adoption. Based on my results, other water leases should be pursued on creeks where dewatering is affecting fry recruitment, and fry outmigration should be monitored periodically to evaluate each lease's effectiveness.

APPENDIX B. SUMMARY OF WATER LEASING PRESENTATIONS (3 PROGRAMS) TO EQC

At their November 13, 1997, meeting in Missoula, the EQC heard from spokespersons for three different water leasing programs in Montana; the FWP water leasing study, the private party water leasing program, and the Clark Fork water leasing pilot program. These presentations are summarized (from meeting minutes) below. Opinions expressed are those of the presenter.

FWP Water Leasing Study

Mr. Liter Spence, a representative of FWP who has worked with instream flow programs for 25 years, presented the FWP flow leasing study. He provided a history leading up to the Department's present day program. He described the 1969 law which allowed the Department to appropriate the unappropriated waters in twelve designated streams; the early 1970s Murphy rights which were acquired by the Department under the old water law; the 1973 Water Use Act which allowed for water reservations; and the three large quantification processes (which took place from the mid-1970s until 1994), used to acquire instream flows under the water reservation process.

Mr. Spence explained that the purpose of the 1989 HB 707 was to return water to streams that had been de-watered. This was not possible with the previous water reservation process since reservations had little influence on de-watered streams whose users had more senior rights. As this was a very controversial natural resource issue, the legislation was restrictive. It authorized a four-year study set to expire in 1993, thereby limiting the number of streams which could be studied for leasing. Moreover, it stated that any leases which were acquired during the four year period also expired with the bill in 1993. This aspect of the program concerned ranchers who were interested in leasing water, so, in 1991, the legislation was amended to allow any leases which were acquired during the four-year time frame to continue past the expiration date of the statute. These amendments also expanded the number of streams that could be studied from five to ten. Additional reporting requirements were added in 1993, and the number of streams increased from ten to twenty streams. This legislation will expire in 1999.

Mr. Spence described several aspects of the present water leasing program. One of these is the relationship between water leasing and fish habitat in streams in the present program. He explained the three components which provide for fish habitat: a suitable physical channel, suitable water quantity, and suitable water quality. The program provides that, through a voluntary agreement with the water right holder, the Department can acquire senior water rights, and use those rights to put water back into the stream for fish habitat.

Mr. Spence outlined the steps in the water leasing process. First an environmental assessment is prepared and sent out for public comment. When a lease agreement is completed, the Department files a change application with DNRC which changes the purpose and place of use of the water right. It is DNRC's responsibility to determine whether there will be any adverse affects on other water users, if the water lease is initiated. This is accomplished by sending notices to all water users in the area and publishing the information in area newspapers. Should there be an adverse effect, the lease is not granted.

The process of water leasing was slow due to many people's hesitation to participate in such a program. The first two leases went into effect in 1993, both on Mill Creek. In 1994, one lease was obtained on Blanchard Creek. In 1995, four leases were obtained at Cedar Creek, Hells Canyon Creek, Tin Cup Creek and Mill Creek. Two more leases were obtained in the Blackfoot drainage (on Chamberlain and Pearson Creeks) in 1996. These leases have improved fish habitat by keeping water in the creeks during the irrigation season, and increasing flows to improve spawning conditions. The leasing program also assists users with such projects as installing fish screens to prevent small fish from moving into irrigation works, and converting flood irrigation, where appropriate, to sprinkler irrigation.

Mr. Spence explained that leasing is one tool which FWP uses to work with water users for the purpose of improving water flows. The Department hopes to continue obtaining leases in the future. Although they had approximately 85 interested parties at that time, there is a need to be very selective with the leases they choose. The Department would like to see the statute renewed in 1999 for this purpose.

Private Party Instream Flow Program

Bruce Farling, representing Montana Trout Unlimited, presented information on the private party instream flow program -- also known as that created via 1995 passage of HB 472, the private leasing bill. He noted that this legislation was the result of eight months of negotiations between Trout Unlimited, the Montana Wildlife Federation, and the four main agricultural groups in the state (Montana Stockgrowers' Association, Montana Water Resource Association, Montana Association of Conservation Districts, and the Montana Farm Bureau Federation). In addition to water leasing, the bill allowed landowners to temporarily change the use of an appropriated right to instream flows. In this manner, water does not need to be leased.

The details of the private leasing bill were listed on a handout presented to the Council (see attached). The handout explains that when private parties temporarily lease an appropriated right, only water that is historically consumed, as in evaporation or plant transpiration, is left instream. Thus downstream users depending on return flow from their upstream neighbors, are not affected. Any appropriator considering a change must have a public notification of that intent in a local newspaper at least 30 days before the application is submitted to the DNRC. Other appropriators are allowed to file objections related to that change before approval. The handout also explains that the provision will sunset in 2005, although it can be continued for an additional ten years if approval is granted before the sunset date.

Mr. Farling stated that Trout Unlimited obtained the first lease in Montana of a private water right for instream flow purposes. This lease involved a tributary of Nine Mile Creek on the middle Clark Fork. Seven landowners involved in the contract leased the area for one dollar. The focus of this action will be to improve juvenile rainbow and cutthroat trout in the Clark Fork system. Other potential leasing sites around the state include the Bozeman and Livingston areas. Mr. Farling added that he prepared a rough screening process for possible leases. He feels the present process needs to be streamlined via some minor changes in the legislation, to be more cost effective for the people working on the leases.

Mr. Farling felt that one challenge facing the private party instream flow program is the need for more promotional help from agriculture in the area of peer promotion. The private party instream flow

process is another tool to allow for cooperative improvements which make the small amount of water available in Montana go further for more uses. Currently there is a relative truce between the conservation community and agriculture over water use in the state. Mr. Farling's goal is to make this truce a permanent situation.

Clark Fork Basin Leasing Pilot Program

Ms. Holly Franz, a member of the Clark Fork Basin Steering Committee, presented the Clark Fork Basin Leasing Pilot Program to the Council. Ms. Franz provided a brief history leading up to the present program.

In 1991, the Legislature set up a committee charged with drafting a management report for the upper Clark Fork. The committee was comprised of a variety of interests, of which Ms. Franz represented the Montana Power Company. Instream flow was one of the main interests of the committee. They started working with the ranchers in the area as their first priority, and provided for extensive public comment and hearings. Many of the ideas brought forth at these hearings became incorporated into the private party leasing program.

Ms. Franz presented a comparison of the three water leasing programs in the state (see attached). Ms. Franz indicated that one of the most important differences between the Clark Fork Program and the private party program is the Clark Fork's inclusion of public agencies as potential lessees. The private party program does not include public agencies in its leasing programs, and instead defines potential lessees as private individuals, private corporations or private partnerships. Another interesting component of this program is the conversion of water rights to instream flow. Ms. Franz suggested this to be the trend for the future. Ranchers, industry and other municipalities who have water rights which are in transition in their water use will use this program as a tool to ensure those water rights are not abandoned. The one lease which has been established under the Clark Fork program, with the Department of Fish, Wildlife and Parks, involves such a conversion of water rights.

Ms. Franz highlighted one last difference in the Clark Fork Program: the prevailing party in the DNRC proceedings is allowed attorneys fees.

Ms. Franz mentioned that two studies are currently underway to research return flow; in the Flint Creek Basin, and in the Big Hole Basin. Return flow studies relate to the provision made by both the statewide and Clark Fork Program to only leave instream the water which would historically be consumed by evaporation or plant transpiration.

Council Discussion

The Council discussed (as did the Subcommittee the preceding day) the role of irrigation return flows can play in providing late-season instream flows. And the concern that not every location or operation is appropriate for conversion from flood irrigation to sprinkler irrigation.

The Council requested Mr. Farling provide a copy of the checklist which shows the critical path that needs to be followed when pursuing a water lease (see attached).

Montana Council

P.O. Box 7186 Missoula, MT 59807 (406) 543-0054

HB 472
Temporarily Changing Water Rights for In-stream Flows

What It Means and How it Works

- Allows an existing appropriated right to be temporarily changed to in-stream flow to benefit fisheries.
- Allows private parties to temporarily lease an appropriated right for in-stream flow.
- Is designed to ensure that only water historically consumed is left in-stream, and that existing, valid water rights are not harmed by the change of use/leases for in-stream flows.
- Requires appropriators who are considering changing an appropriated right to in-stream flows to publish in a local paper a notice of their intent to apply to DNRC for a change of use to in-stream flows. The notice must be published 30 days before the application is submitted to DNRC.
- Allows other appropriators to file objections related to the change/lease with DNRC during the initial application process, once during the period the use is changed and at the time the application is renewed.
- These provisions sunset June 30, 2005, though exsting changes of use and leases can be renewed for 10 more years if done before that date.
- Directs the governor's office to convene an ongoing working group to monitor the law's effects.
- Requires the working group in consultation with DNRC to report to the 2001 Legislature on the status of activities that have occurred under the law.

COMPARISON OF MONTANA'S INSTREAM FLOW LEASING PROGRAMS

	Water Leasing Study	Statewide Instream Flow Pilot Project	Upper Clark Fork Instream Flow Pilot Project
Term of lease	10 years, renewable once for up to 10 years. 20 years if the leased water is made available from water conservation or storage.	10 years.	10 years.
Potential lessees	DFWP.	Private individuals, associations, partnerships or corporations.	Private individuals, associations, partnerships, corporations and public entities, including DFWP.
Allows a water right holder to convert their own water right to instream flow purposes	No.	Yes.	Yes.
Purpose	Maintain or enhance stream flows for the benefit of fisheries in stream reaches determined eligible by DFWP.	Maintain or enhance instream flow to benefit the fishery resource.	Maintain and enhance stream flows to benefit the fishery resource in the Upper Clark Fork River basin.
Administrative approvals	All leases must be approved by the Fish & Game Commission. Must also obtain DNRC change approval.	DNRC temporary change approval. Must show no adverse effect to other water rights and the requested amount of water is need to benefit the fishery.	DNRC temporary change approval. Only the amount of water historically consumed can be protected past the historic point of diversion.

Measurement requirement	DNRC must approve a detailed measuring plan describing the point of measurement. DFWP must pay all measuring costs.	DNRC must approve the method and point of measurement.	DNRC must approval a detailed measuring plan describing the method and points of measurement. Applicant pays all measuring costs.
Study requirement	Prepared by DFWP in consultation with EQC. An annual study progress report must be submitted to DNRC, Fish & Game Commission and EQC by Dec. 1 of each year. Final report completed by Dec. 1, 1998.	A working group, convened by the governor and consisting of representatives from the agricultural, recreation, and conservation communities, must consult with DNRC and submit a report to the governor and the legislature in 2001.	Upper Clark Fork River Basin steering committee must submit a report to the governor and the legislature by Dec. 31, 2004. Report must specifically address the effects on tax values and revenue.
Unique provisions		Must publish notice in a local newspaper 30 days prior to filing change application.	The prevailing party is entitled to attorney's fees.
Expiration date	June 30, 1999. Leases may extend beyond expiration date	June 30, 2005. Leases may extend beyond expiration date.	June 30. 2005. Leases may extend beyond expiration date.
Statutory provisions	85-2-436 to 438.	85-2-408 to 409.	85-2-439 to 440.

Source: Franz, 1997.

TROUT UNLIMITED IN-STREAM FLOW LEASING KEY

I. Level I Coarse Screening For Identifying Fisheries Limited by Water Availability

A. Is the stream on DFWP's list of chronically de-watered streams?
- If yes, go to C.
- If no, go to B.

B. Is the stream on DFWP's list of periodically de-watered streams?
- If yes, go to C.
- If no, go to C.

C.. Has dewatering been identified as a limiting factor for the fishery?
- If yes, go to E.
- If no, don't pursue lease.

D. Is the stream on DEQ's impaired waters list?
- If yes go to E
- If no, go to F

E. Does the water quality impairment limit the fishery, and can it be remedied adequately by enhancing flows?
- If yes, go to Phase 2
- If no, don't pursue lease.

F. Is there other information that demonstrates water availability is limiting the fishery.
- If yes, go to Level 2 Screening
- If no, don't pursue lease

II. Level 2 Screening

A. What fishery need is limited by water availability?
- spawning/recruitment. Go to B.
- access/migration. Go to B.
- cover. Go to B.
- water quality. Go to B.
- other. Go to B.

B. How much water is needed?
- go to C

C. Are there local water-right holders who may want to enter into a volunteer agreement to change their water right for in-stream flows without entering a lease agreement, or who may lease for free?
- If yes, go to D
- If no. go to D

D. Are there local water right holders who may want to enter into a lease agreement to change their water right for in-stream flow enhancement?
- If yes, go to E
- If no, don't pursue lease.

E. Are available water rights adequate to partially or fully remedy problem?
- If yes, go to F
- If no, don't pursue lease

F. Would a lease or change of use for in-stream flows be generally acceptable to other local water right holders?
- If yes, go to G
- If no, go to G

G. If there is local resistance to a lease, would education and dialogue reduce it?
- If yes, go to H
- If no, reconsider whether moving to H is appropriate

H. Are there likely to be many objectors to the change of use, and are they likely to prevail?
- If yes, don't pursue lease
- If no, go to I

I. Is funding for the change of use, or the lease relatively available?
- If yes, go to J
- If no, don't pursue lease at this time

J. Are there other complications that would make the change and lease complicated?
If yes, re-evaluate whether lease is feasible
- If no, go to K

K. PURSUE CHANGE OF USE AND LEASE

BASIC STEPS FOR THE CLARK FORK IN-STREAM FLOW PILOT PROGRAM

Step #1. Work with local landowners to identify a potential opportunity for voluntarily dedicating an existing full or partial water right for in-stream flows that protect or enhance a fishery.

Step #2. Determine which route the water-right holder wants to take:

A. Voluntarily leave water in-stream through DNRC's "change of use" process; or

B. Voluntarily leave water in-stream under the "change of use" process through a lease with a private party or public agency.

Step #3. If practical, the water right holder and potential lessee should contact the local watershed group and potentially affected water right holders to discuss the plan for the voluntary change of use. The water right holder should attempt to deal with potential objectors at this stage.

Step #4. Water right holder, or lessee and lessor put together draft lease agreement and/or plan. The lease agreement should include descriptions of:

- existing water right and historic use
- affected stream reach
- period of temporary change
- how the change of use will benefit the fishery
- how much water will be left in-stream
- how the change will not adversely affect other water right holders
- season of change, and amount of water affected
- measurement method

Step #5. File a "change of use" application with DNRC, describing the water right, point of diversion, method of measurement, and other necessary information.

Step #6. DNRC files a public notice on the change, inviting objections to the change of use.

Step #7. If there are no valid objections, DNRC makes a decision on the change.

Step #8. If DNRC approves the change, the measurement device is installed and the in-stream flow plan is put in place

Step #9. The change/lease will be evaluated for adverse impacts on other water users 5 years after it goes into effect, but only upon formal request to DNRC by a valid water right holder who claims harm.

Step #10. The change/lease will be included in the 10-year pilot program requested by the Legislature; a report on the study will be submitted 10 years after legislative enactment, which will be 2005.

ENVIRONMENTAL QUALITY COUNCIL

STATE CAPITOL
PO BOX 201704
HELENA, MONTANA 59620-1704
(406) 444-3742

Memo To: Members, Water Policy Subcommittee

From: Staff

Date: June 16, 1998

Subject: Results of Phone Polling to Initial Stakeholder List

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At its March meeting, Subcommittee members discussed potential legislative changes to the statute related to the FWP instream flow leasing program. It was suggested that a bill be drafted for discussion with agency representatives and a selection of "stakeholders" at a September Subcommittee meeting. A suggested starting point for the list of stakeholders was the list of persons who participated in the HB472 (private party) Instream Flow Working Group. Although their efforts resulted in a different program, they had been involved recently in instream flow-related deliberations, and were familiar with the issue.

At its May meeting, the Subcommittee expressed interest in gathering information on stakeholder opinions regarding the FWP program sooner than September, and requested additional information on the three programs, how they were different, and some Legislative history from the FWP-related bill. The Subcommittee requested EQC staff to call around to discuss stakeholder opinion of the FWP program, and provide that information in advance of their June meeting.

The following summarizes the results of brief conversations with five of the eight members of the HB472 Instream Flow Working Group. The remainder were contacted twice, but we were unable to speak with them before this memo was prepared. If they provide comments between now and the June meeting, staff will share those with you at the meeting.

A list of the members of the Working Group is attached.

General Results

Several members of the Working Group commented that they hesitated to provide a detailed response without first discussing with their Boards or membership the questions we posed. However, all those we spoke with provided some general conclusions, and expressed interest in

continued involvement in a dialogue related to the program and potential legislative proposals. (Please note: the Subcommittee agenda for June includes a "public comment?" component within the FWP Instream Flow Leasing agenda item. Therefore, the Subcommittee may receive additional comment from these organizations, or others, at that time.)

Responses to EQC Staff Questions

EQC staff developed and asked the following questions of the Working Group members we spoke with. The questions were based upon components of Subcommittee discussions over the last several months regarding the program and potential legislative proposals. If Subcommittee members wish additional (or different) questions to be asked of the Working Group members, they can suggest those to staff in June and we will call these folks again.

Bulleted items listed below are staff's summary of the opinions expressed by the interviewees.

What's Good about the FWP Instream Flow Leasing Program?

- The program works with willing lessors. It has safeguards in it, such as requiring a lease proposal to go through the change authorization process, including the notice/objection process. There haven't been many objections; most of the leases have been pretty small-scale. The program has been well-received by the lessors, especially in water-saving/water leasing situations.
- Some positive things have been accomplished; there are no serious complaints.
- It's a good program.
- It's a good program. It allows FWP to address priority fisheries and work one-on-one with citizens. It's voluntary. It was slow in getting moving, but now seems to be up and running.

What Could be Improved with the FWP Instream Flow Leasing Program?

- The program is slow-moving. Like the private party leasing program, people are not taking advantage of a good opportunity. If there were leases in place, there would be some critical protection in place -- in wet years nobody cares... FWP has a lot of constraints; maybe it could be made more flexible for them.
- There's lots of "folderol" (sp?) the department has to go through to get a lease. Maybe the process could be made less burdensome.
- I hesitate to make suggestions until I can discuss with my Board.

- There are likely potential improvements, but I'm not sure what they would be. The process seems slow and cumbersome, but that was intended -- to be careful.

Should the FWP Instream Flow Leasing Program be Continued?

All said yes. One said it was a good complement to the private party leasing program. Another stated he "strongly" supported continuing the program.

How about Other Potential Legislative Changes?

There were no specific suggestions for changes (when asked as an open-ended question), so two proposals that had been discussed by Subcommittee members were proposed to them.

a. Make it Permanent?

- A sunset is better, until there's enough information on the potential ramifications of removing water from the land. I'd suggest a 10- to 15-year sunset, with a focus on analyzing the ramifications.

- I favor permanency. There should be no problem taking off the sunset. Or, the two (FWP and private party) could sunset at the same time.

Two other respondents stated they favored making the statute permanent (i.e. take off the sunset clause altogether).

b. Remove the "cap" on the number of streams that can be leased from?

- Yes, as long as safeguards (e.g. the change of use process, with notification and opportunities to object) are left in place.

- I strongly suggest removing the cap. If there's 100 streams, it shouldn't matter.

Two other interviewees just said "yes" to removing the cap.

Other Comments (i.e. instream flow leasing in general, the other programs, etc.)

- I would expect some effort to try to extend the program; there's no tangible reason not to. It was set up with a sunset, so it would be assessed as to how it's working; specifically, if water is removed from the land (e.g. by converting to sprinkler irrigation and leasing the savings), what are the ramifications, say, on return flows? The implementation part needs to be studied.

  It seems sort of a crazy idea to have three different instream programs. Like why is there

a separate one for the Clark Fork? On the other hand, that legislation was moving at the same time as the private party proposal, so the result isn't unexpected. Also, why should there be a FWP program, when they could maybe go through the private party program? Free-market approaches are a good idea. Ramifications of leasing is still a concern.

There really ought to be more proactive use of the FWP instream flow leasing "tool".

The lessors involved in the FWP leasing program would be some good people to talk to about their experiences with the program.

- I'd like to look at the final report before taking a position on any legislative proposals.

- I'd be happy to bring these questions to our Board at their August meeting and let you know what they say.

It takes time to build the credibility factor that is needed to implement this program. More time may allow FWP to do more. The FWP program (in comparison to the others) has money tied to it; the environmental groups want to see money committed to the program.

I have a general concern about government involvement in general; free enterprise is good.

It could be dangerous to change HB472 (the private party leasing statute) now; there was lots of talk about seeing how it works.

- I'd suggest the EQC or Consensus Council get the members of the Instream Flow Working Group back together, with FWP, to discuss these questions. They could discuss whether the 3 programs could be combined.

- It's really no big deal that there are 3 different programs. The Clark Fork is a special one; they worked on that for a long time. These are changing times; we need to be careful.

- I don't have any other comments, but I'll call you if I think of any.

HB 472 Instream Flow Working Group

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To: Kathleen Williams, EQC

From: Matt

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MEMORANDUM

To: Water Policy Subcommittee

From: MV Mary Vandenbosch
Staff

Date: June 16, 1998

Subject: Survey of Lessors Participating in the Montana Department of Fish, Wildlife and Parks Water Leasing Program

Introduction

Staff contacted water right holders who have leased their water rights to the Montana Department of Fish, Wildlife and Parks (FWP) in June 1998. Seven of the ten lessors were successfully contacted. Respondents were asked a standard list of both open-ended and specific questions. The first two respondents raised the issue of how to determine the value of the water leased; consequently, all other respondents were asked for their thoughts on this issue.

Survey results are summarized below. Comments of respondents are displayed in *italic type*. Clarification is provided in brackets [ ] where necessary.

In general, how do you think the program is working?

Overall, responses to this question were generally positive:

- *Excellent. There is water in Mill Creek all of the time now. There never was before. Great program. Money well spent.*
- *Wonderful. The gravity irrigation system we installed is so efficient. It is really valuable.*
- *Going fine.*

- *It's a great program. It's win/win: for sportsmen, because they are able to decrease the demand for water with installation of a sprinkler system; and for water users with salvaged water.*

- *Works very well. It depends on the discipline of the people monitoring.*

- *Went pretty well. It was linked with a Future Fisheries grant for a fish friendly diversion-- that part is complicated and still unresolved.*

- *Not too bad -- I am weighing whether or not it is worth it for me.* [He is not producing hay where he once was.] *So far it is working okay because it is wet. What will happen when it is dry?*

One lessor noted that it took a long time to negotiate an agreement with FWP:

- *The biggest trouble was the slow negotiations, hurdles. FWP took way more time than necessary to reach an agreement. They used a lawyer. Liter* [Spence] *and Ron Spoon* [FWP staff] *were great to work with.*

In contrast, another lessor indicated that the water lease negotiations with FWP went well:

- *FWP contracted with a private attorney and it went smoothly. Not cumbersome.*

Two people mentioned that obtaining the change authorization from the Department of Natural Resources and Conservation (DNRC) took a long time:

- *It took six to eight months for DNRC to process the change authorization.*

- *I have no complaints about FWP, but I do have a complaint about the water bureaucracy -- DNRC. I was required to prove that my neighbors didn't need the water. I don't understand this. I feel that if you have a water right, it is yours.*

What changes could be made to improve the program?

Two people mentioned that FWP should ensure that the streams are monitored to ensure that the leased water is not being used by someone else:

- *FWP should hire someone to monitor the creeks when they lease water. Monitoring should be considered an expense of leasing. It would only be necessary for two to three months of the year.*

- *I am not sure that FWP is monitoring to ensure that they are getting the* [instream] *flow. Money should be appropriated for monitoring.*

Two people suggested that FWP consider leasing water with later (junior) priority dates or "high water" rights:

- *Would like to see FWP lease high water rights for a minimal amount. The landowners want to protect these rights. If they lease them to FWP they can say the water rights are being used. FWP says it requires too much paperwork. They want the District [*Mill Creek Water District] *to lease these water rights in one chunk.*

- *FWP is only interested in early priority dates but water rights with later* [junior] *priority dates would be useful. For example ,in our situation they could ask someone with a later priority date (1963) to shut off on July 15. It* [streamflow] *is usually critical in August.*

Other comments and suggestions:

- *Extend the term of the lease. The investments made by FWP* [in structures] *are 50 year investments.*

- *More cooperation from FWP. They should let us know how they feel it is going. We have to call and ask them.*

- *Follow through to ensure that what we paid for is what we get in terms of instream flow.*

- *It works well now.*

- *None. It is a very good program.*

What do you think about the process for determining the value of the water?

As noted above, two people raised this issue in response to the previous question. Consequently, this question was posed to all remaining respondents.

- *We need a real value for the water. I'm not sure they* [FWP] *are getting their money's worth on the* [lease on Mol Herron Creek]. *It looks like "we have money to spend so we will spend it."*

- *It is difficult -- every creek is different. The value must relate to the priority date.*

- *There is no market for water rights so we don't know what it is worth. A person will pay more for a ranch with good water rights than a ranch with bad water rights, so we know it is worth something. In my case, it was wheeling and dealing. I was aware of the other leases. There was no problem with the negotiation.*

- *This was part of the problem with the negotiation. The volume of water* [they are leasing] *is small but the benefit to the fishery is great. Need to consider more flexibility with respect to the volume of water. FWP had a dollar value per acre-foot range and they had a hard time going outside of that range. In this case, the text of the law was not the problem.*

- *The most nebulous part of this process is how to go about valuing water rights. There is little guidance or data. It came down to the cost of the changes to the irrigation system that were necessary to lease that amount of water. There is no clear-cut process for valuing water rights. There is a disparity in the results. We could look to other states. I know Colorado has a process. The program would be more successful if there was a more objective process for placing a value on water rights. Landowners will compare notes.*

- *We worked out a program between us. It protects me.*

If the Legislature considers amending the law, are there any particular provisions that you feel should be preserved?

None of the respondents had a specific answer to this question. Some indicated that they were not very familiar with the law.

Under the current law, the program will expire in 1999 unless the Legislature takes action. [If the program expired, your lease would continue according to the term of the lease, but FWP could not negotiate new leases.] Do you think the program should be:

Allowed to expire? (0)

Extended (7)
- **temporarily** (1)
- **permanently** (5)
- **not sure** (1)

None of the lessors felt that the program should be allowed to expire. All seven of them thought that the program should be extended. Five thought that it should be extended permanently. One of them was not sure whether or not it should be extended temporarily or permanently. One stated that it should be extended for at least ten years. Specific comments are provided below:

- *Sooner or later the same problems will come back* [if the program is not extended.] *You will face the "use it or lose it" issue. Want to protect the instream flow without giving water users an incentive to use water just to protect the water right.*

- *It benefits fisheries and encourages irrigators to improve the use of water through sprinklers. The money has helped our whole program work.*

- *It is very instrumental in keeping the streambed wet.*

- *It would be very short-sighted to let that expire. I have never understood why there were problems* [controversy surrounding the program] *because it is completely voluntary. It has the potential to save creeks.*

- *It should be extended permanently, because if you run up against a deadline there is an incentive [*for FWP*] to throw out dollars without evaluating the value of the benefits received.*

Under the current law leasing is only allowed on 20 stream reaches designated by the DNRC. Do you feel that leasing should be:

Limited to 20 stream reaches? (0)

Limited to a specific number of stream reaches? (0)

Allowed on any stream reaches as long as the proposed lease meets the other requirements of the law? (3)

Other? (4, see below)

- *Allowed on any streams that have a tendency to be dewatered.*
- *Need to weigh the costs and benefits. FWP could designate stream reaches. There are pros and cons to this.*
- *Can't see why it could not be done on a bigger scale.*
- *Any stream with threatened or endangered species.*

None of the respondents indicated that the leasing program should be limited to 20 stream reaches. Three of the lessors felt that it should be allowed on any stream reach as long as the other requirements of the law were met. Two suggested that it be allowed on streams that met certain criteria (i.e., dewatered, presence of threatened or endangered species). The remaining two respondents indicated that leasing should be allowed on a larger scale but did not provide specific criteria. Additional comments:

- *The streams are probably chosen on the basis of fisheries. However, there is lots of agricultural water that is wasted and we should try to save it. Could provide income to people who are on the edge if they have good early water rights.*

- *Personally, I see no hazard in allowing it anywhere. People are concerned that FWP will dominate the river. FWP isn't going to dominate the river with the current law.*

- *The state budget should be the only limit.*

There is another law that allows private parties to temporarily lease water rights. How do you feel about this option? Do you think it is valuable to have a separate program for FWP and private parties?

Only five of the respondents had time to answer this question. Four out of the five who answered the question supported the idea of private parties leasing water rights. Of these, two felt that there should be separate programs for FWP and for private parties and the other two felt the programs should be combined under one umbrella. One of those who supported separate programs provided the rationale that FWP must operate under certain laws regarding procurement, etc. and that private parties should not be subject to those laws. Specific comments:

- *Nervous about private party leasing. Concerned that some people with a lot of money may not be as benevolent as FWP and may not be looking out for the rancher.*

- *Leasing by private parties should be coordinated through FWP. It could work like a conservation easement where a private party acquires a water lease and transfers it to FWP.*

Do you have any thoughts about water leasing in general that you wish to share with the EQC?

- *The type of buyer* [landowner] *is changing. Some people are buying ranches with good early water rights in excess of what they need. They could be interested in leasing water.*

- *It is preferable to deal with a creek in its totality. For example a pipeline was installed on Mill Creek. The pipeline saved water (10 fold efficiency) but people not on the pipeline use it up. It is important to address everyone on the creek.*

- *Leasing is beneficial to those with extra money and to those who want to improve irrigation efficiency. Leases are paid for with fishing fees, not general fund dollars.*

- *Concerned that junior appropriators will try to have the law amended so that salvaged water would go to junior appropriators. Does not want this to happen.*

- *Good program to preserve instream flows for spawning fish.*

- *The water leasing program will help the Governor's Task Force* [Vision 2005 Task Force on Agriculture] *to double output because it improves production* [through installation of improved irrigation systems].

- *FWP got a heck of a deal* [with our lease].

APPENDIX D

DEPARTMENT OF NATURAL RESOURCES AND CONSERVATION

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STATE OF MONTANA

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September 2, 1998

TO: Environmental Quality Council

FROM: Bud Clinch, Director, Department of Natural Resources and Conservation

RE: DNRC Adoption of the Final Report on Water Leasing by DFWP

Under 85-2-436 (3)(b), MCA, the Department of Natural Resources and Conservation (DNRC) and the Fish, Wildlife and Parks Commission must approve and adopt the final study report on water leasing by the Department of Fish, Wildlife and Parks (DFWP). The report has already been adopted by the Fish, Wildlife and Parks Commission.

DNRC has reviewed the Water Leasing Study: Final Report of August 1998 by DFWP. Based on that review, DNRC is approving and adopting the final report on water leasing. In addition, DNRC supports the four recommendations that were included in the report by DFWP. Those recommendations and DNRC's rationale are described below.

1) DNRC supports making the water leasing statute permanent. After 10 years of study, DFWP has proven its ability to implement instream flow leases that benefit both parties to the lease and the local fisheries without impacting other water users.

2) DNRC supports increasing the 20-stream limit to an unlimited number of stream reaches. As long as there are individuals willing to lease their water rights for instream flow to benefit fisheries resources, without adversely affecting existing water users, DFWP should be able to establish as many leases as necessary to protect fisheries and especially fish species that are or could be listed under the Endangered Species Act. For each lease, DFWP is required to go through the statutory change process which is designed to protect all other water users on the stream from adverse effects.

3) DNRC supports the need to remove DNRC's approval of the list of streams for proposed instream leases. Based on the past ten years, there is no need for DNRC to continue to approve each stream for leasing. DNRC's involvement in the formal change process adequately addresses issues relating to DNRC's responsibility.

4) DNRC supports an increased term of leasing salvage water from 20 to 30 years. Many of the salvage water projects have a working life that exceed 20 years and costs that are often amortized for more than 20 years. The economics and working life associated with these projects suggest a 30-year lease would be more viable.

cc. Pat Graham, Director, Department of Fish, Wildlife and Parks
Chris Hunter, Special Projects Coordinator
Jack Stults, Administrator Water Resource Division, DNRC
Rich Moy, Chief, Water Management Bureau, WRD, DNRC

APPENDIX E **Unofficial Draft Copy**
As of: November 2, 1998 (4:01PM)

LC0414

**** Bill No. ****

Introduced By **********

By Request of the Environmental Quality Council

A Bill for an Act entitled: "An Act allowing broader leasing of salvage water created through conservation projects; extending for 10 years the term of the instream flow leasing program operated by the department of fish, wildlife and parks; allowing a longer lease term for leases associated with department investments in water conservation projects; increasing the number of stream reaches that can be leased from; amending sections 85-2-419, 85-2-436, 85-2-437, and 85-2-438, MCA; amending Section 11, Chapter 658, Laws of 1989; amending Section 7, Chapter 740, Laws of 1991; and providing an immediate effective date."

Be it enacted by the Legislature of the State of Montana:

Section 1. Section 85-2-419, MCA, is amended to read:

"85-2-419. **Salvaged water.** It is the declared policy of the state in 85-1-101 to encourage the conservation and full use of water. Consistent with this policy, holders of appropriation rights who salvage water, as defined in 85-2-102, may retain the right to the salvaged water for beneficial use. Any use of the right to salvaged water for any purpose or in any place other than that associated with the original appropriation right must be approved by the department as a change in appropriation right in accordance with 85-2-402. Sale of the right to salvaged water

must also be in accordance with 85-2-403, and the lease of the right to salvaged water for instream flow purposes must be in accordance with 85-2-436, 85-2-408 or 85-2-439."

{*Internal References to 85-2-419: None.*}

Section 2. Section 85-2-436, MCA, is amended to read:

"**85-2-436. (Temporary) Water leasing study.** (1) The department of fish, wildlife, and parks and the department, in consultation with the environmental quality council, shall conduct and coordinate a study that, at a minimum:

(a) provides the following data for each designated stream reach and each pilot lease entered into under subsection (2):

(i) the length of the stream reach and how it is determined;

(ii) technical methods and data used to determine critical streamflow or volume needed to preserve fisheries;

(iii) legal standards and technical data used to determine and substantiate the amount of water available for instream flows through leasing of existing rights;

(iv) contractual parameters, conditions, and other steps taken to ensure that each lease in no way harms other appropriators, particularly if the stream is one that experiences natural dewatering; and

(v) methods and technical means used to monitor use of water under each lease;

(b) based on the data provided under subsection (1)(a), develops a complete model of a water lease and lease

authorization that includes a step-by-step explanation of the process from initiation to completion.

(2) For purposes of undertaking the study described in subsection (1) and as authorized by law, the department of fish, wildlife, and parks and the department may engage in the activities described in this subsection. Except as provided in 85-2-439, for purposes of this study, this section is the exclusive means by which the department of fish, wildlife, and parks may seek to change an appropriation right to an instream flow purpose.

(a) The department of fish, wildlife, and parks, with the consent of the commission, may lease existing rights for the purpose of maintaining or enhancing streamflows for the benefit of fisheries in stream reaches determined eligible by the department pursuant to 85-2-437.

(b) Upon receipt of a correct and complete application for a lease from the department of fish, wildlife, and parks, the department shall publish notice of the application as provided in 85-2-307. Parties who believe that they may be adversely affected by the proposed lease may file an objection as provided in 85-2-308. A lease may not be approved until all objections are resolved. After resolving all objections filed under 85-2-308, the department shall authorize a lease of an existing right for the purpose of maintaining or enhancing streamflows for the benefit of fisheries if the applicant submits a correct and complete application and meets the requirements of 85-2-402.

(c) The application for a lease authorization must include

specific information on the length and location of the stream reach in which the streamflow must be maintained or enhanced and must provide a detailed streamflow measuring plan that describes the points where and the manner in which the streamflow must be measured.

(d) The maximum quantity of water that may be leased is the amount historically diverted by the lessor. However, only the amount historically consumed, or a smaller amount if specified by the department in the lease authorization, may be used to maintain or enhance streamflows below the lessor's point of diversion.

(e) The lease may not be issued for a term of more than 10 years, but it may be renewed once for up to 10 years, except that a lease of water made available from the development of a water conservation or storage project is restricted to a term equal to the expected life of the project, but not more than ~~20~~ 30 years. Upon receiving notice of a lease renewal, the department shall notify other appropriators potentially affected by the lease and shall allow 30 days for submission of new evidence of adverse effects to other water rights. A lease authorization is not required for a renewal unless an appropriator other than an appropriator described in subsection (2)(i) submits evidence of adverse effects to the appropriator's rights that has not been considered previously. If new evidence is submitted, a lease authorization must be obtained according to the requirements of 85-2-402.

(f) During the term of the lease, the department may modify

or revoke the lease authorization if an appropriator other than an appropriator described in subsection (2)(i) proves by a preponderance of evidence that the appropriator's water right is adversely affected.

(g) The priority of appropriation for a lease under this section is the same as the priority of appropriation of the right that is leased.

(h) Neither a change in appropriation right nor any other authorization is required for the reversion of the appropriation right to the lessor's previous use.

(i) A person issued a water use permit with a priority of appropriation after the date of filing of an application for a lease authorization under this section may not object to the exercise of the lease according to its terms or the reversion of the appropriation right to the lessor according to the lessor's previous use.

(j) The department of fish, wildlife, and parks shall pay all costs associated with installing devices or providing personnel to measure streamflows according to the measuring plan submitted under this section.

(3) (a) The department of fish, wildlife, and parks shall complete and submit to the department, commission, and environmental quality council an annual study progress report by December 1 of each year. This report must include the applicable information listed in subsection (1) for each lease, a summary of stream reach designation activity under 85-2-437, and a summary of leasing activity on all designated streams. If the department

of fish, wildlife, and parks has not leased additional water rights under this section by December 1 of any year, the department of fish, wildlife, and parks shall provide compelling justification for that fact in the study progress report.

(b) A final study report must be adopted by the department and commission and submitted to the environmental quality council, which shall complete the final report by December 1, ~~1998~~ 2008.

(4) This section does not create the right for a person to bring suit to compel the renewal of a lease that has expired. (Terminates June 30, 1999--sec. 4, Ch. 740, L. 1991.)"

{*Internal References to 85-2-436:*
85-2-102 *85-2-102* *85-2-102* *85-2-102*
85-2-402 *85-2-402* *85-2-404* *85-2-419*
85-2-437 *85-2-437* *85-2-437* *87-1-257*}

Section 3. Section 85-2-437, MCA, is amended to read:

"**85-2-437. (Temporary) Department designation of eligible stream reaches.** (1) The department of fish, wildlife, and parks, with the consent of the commission, may apply to the department for designation of stream reaches for which water leasing to maintain or enhance streamflows pursuant to 85-2-436 may occur.

(2) The department may declare a stream reach eligible for leasing pursuant to 85-2-436 only if it finds that water leasing is necessary to maintain or enhance streamflows for fisheries.

(3) The department may designate no more than ~~20~~ 40 stream reaches in the state where water leasing pursuant to 85-2-436 may occur. If the department of fish, wildlife, and parks determines

that a water lease cannot be reasonably obtained on a designated stream reach, the department may remove the designation from that stream reach and designate another stream reach pursuant to this section. (Terminates June 30, 1999--sec. 4, Ch. 740, L. 1991.)"

{*Internal References to 85-2-437:*
85-2-436 85-2-436}

Section 4. Section 85-2-438, MCA, is amended to read:

"**85-2-438. (Temporary) Lease validity.** All leases entered into prior to June 30, ~~1999,~~ 2009, remain valid until the expiration date of the lease. (Terminates June 30, 1999--sec. 7, Ch. 740, L. 1991.)"

{*Internal References to 85-2-438: None.*}

Section 5. Section 11, Chapter 658, Laws of 1989, is amended to read:

"**Section 11. Termination.** [This act] terminates June 30, ~~1993~~ ~~1999~~ 2009."

Section 6. Section 7, Chapter 740, Laws of 1991, is amended to read:

"**Section 7. Termination.** [This act] terminates June 30, ~~1999~~ 2009."

NEW SECTION. **Section 7. {standard} Effective date.** [This act] is effective on passage and approval.

- END -

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