

Montana Fish, Wildlife & ParKş

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December 9, 2015

Legislative Environmental Policy Office Attn: Jason Mohr Capitol Building, Room 171 P.O. Box 201704 Helena, Montana, 59620-1704

Dear Mr. Mohr:

Enclosed is the "Biennial Progress Report – FWP Water Leasing Study 2014 and 2015." This report is being submitted to the Water Policy Committee via your office.

Montana Department of Fish, Wildlife and Parks is statutorily required to develop this report which describes any new water leasing activities conducted to enhance instream flow conditions under 85-2-436 MCA, *Water Leasing Study*.

From our December email correspondence I understand that we are to present this report to the Committee the morning of January 11, 2016. I will provide a PDF version of this report via email.

If you have any questions please feel free to call me at 444 - 1563

Sincerely,

Jane

Michael McLane, Water Conservation Specialist Fisheries Division, Water Resources Program



BIENNIAL PROGRESS REPORT - FWP WATER LEASING STUDY -2014 & 2015

Submitted to:

Water Policy Committee Montana Department of Natural Resources and Conservation And Montana Fish & Wildlife Commission

Submitted by:

Montana Fish, Wildlife & Parks Fisheries Division

December 2015

Executive Summary: This report has been prepared to summarize the instream flow water right leasing activities conducted by Montana Fish, Wildlife & Parks (FWP) during the last two calendar years, 2014 and 2015. Those activities include lease renewals, exploration of lease opportunities and progress on the authorization of potential water leasing opportunities.

- No new leases or conversion of water rights to instream flow were perfected by during the biennium.
- No existing leases were renewed during the reporting period.
 - FWP submitted a Notice of Renewal to the Department of Natural Resources and Conservation (DNRC) in March 2015 for a lease on Cedar Creek, a tributary to the upper Yellowstone River, near Gardner, Montana. DNRC has not yet acted on this Notice.
 - A water lease renewal is being negotiated on the Hells Canyon Creek, tributary to the Jefferson River north of Twin Bridges, Montana.
- In 2013, FWP reported on the
 - donation of water rights in Nevada Spring Creek in the Blackfoot River Drainage and
 - water rights in Mill Creek and Willow Creek, both tributaries to the upper Clark Fork River accepted by the state as part of the Natural Resources Damage law suit settlement.

FWP has not yet applied for authorization to change the use of these water rights to instream flow due to factual issues that must be resolved through adjudication.

- Potential water leases are being examined on the following streams (applications for change of use have not been submitted to DNRC):
 - o Long Creek, a tributary to the Red Rock River above Lima Reservoir,
 - Cow Creek, a tributary to the Missouri River originating in the Bear Paw Mountains near Chinook, Montana, and
 - o Deep Creek, a tributary to the Missouri River near Townsend, Montana.

<u>Authority to Lease:</u> The conversion of existing water rights to instream flow by FWP is governed by §85-2-436 MCA, *Instream flow to protect, maintain, or enhance streamflows to benefit fishery resources – change in appropriation rights by department of fish, wildlife and parks until June 30, 2019.*

This section authorizes FWP to change a water right to instream-flow use to protect, maintain or enhance stream flows to benefit the fishery resource by:

- o leasing and temporarily changing someone else's water right,
- o temporarily changing an FWP water right held in fee simple, and
- o permanently changing a water right held in fee simple on a limited number of streams reaches (12).

<u>Reporting Requirements:</u> Under subsection 4 of the water leasing statute, FWP has a responsibility to submit a biennial progress report to the FWP Commission, the legislative Water Policy Committee and the DNRC. This biennial report must include a summary of all appropriation rights changed to an instream-flow purpose *in the last two years*. The report must include specific information for each *new* lease including:

- o the length of the stream reach and how it is determined;
- o streamflow or volume needed to enhance or preserve fisheries;
- o the amount of water available for instream flows as a result of the change in appropriation rights;
- o contractual parameters, conditions, and other steps taken to ensure that each change in appropriation right does not harm other appropriators, particularly if the stream is one that experiences natural dewatering; and
- o methods and technical means used to monitor use of water under each lease.

<u>General Approach to Leasing</u>: Historically, FWP's water-leasing activities largely focused on tributaries to larger rivers that provide important spawning habitat. Typically, these tributaries flow from the mountains onto the valley floor where they are tapped for irrigation. Irrigation diversions often cause seasonal or periodic dewatering between the diversion and the main-stem river. The dewatered reaches typically extended a few miles or less.

Most current leases target the restoration of flow in these dewatered reaches so that redds, (fish spawning beds), are not dewatered, fry can emerge and migrate to the main-stem river, and connectivity between the main-stem and tributary can be maintained. Water conservation leases focus on improving irrigation efficiency and keeping the amount of irrigation unchanged, while reducing the diversions so that stream flow can be restored. FWP continues to emphasize leasing on small tributary streams that provide significant benefits for the propagation of game fish.

<u>**Current Leases:**</u> FWP has eleven active leases and one conversion of a FWP irrigation right to instream flow. All have approved "Change of Use Authorizations" issued by DNRC. These current instream flow transactions are located on the following ten streams:

- 1. Big Cr., tributary to the Yellowstone River (two leases)
- 2. Cedar Cr., tributary to the Yellowstone River (two leases)
- 3. Mol Heron Cr., tributary to the Yellowstone River
- 4. Locke Cr., tributary to the Yellowstone River
- 5. Hells Canyon Cr., tributary to the Jefferson River in the Upper Missouri Basin
- 6. Cottonwood Cr., tributary to the Blackfoot River in the Clark Fork Basin (FWP right)
- 7. Chamberlain Cr., tributary to the Blackfoot River in the Clark Fork Basin
- 8. Pearson Cr, tributary to the Blackfoot River in the Clark Fork Basin
- 9. Rock Cr., tributary the upper Clark Fork River
- 10. Lazyman Cr., tributary to the Ruby River in the Upper Missouri Basin

Figure 1 is a table displaying all of the leases (active, terminated, or transferred) that FWP has been associated with over the life of the water-leasing study. Three of the listed leases were not renewed by FWP. A fourth lease, on Tin Cup Creek, could not be renewed a second time by FWP under the statutory provision in place at that time. However, the Montana Water Trust (now part of the Clark Fork Coalition) was able to acquire and maintain this water lease. Two leases were not perfected through a Change of Use Authorization and were terminated.

The Hells Canyon Creek lease expires in April 2016. The lease on Rock Creek, tributary to the upper Clark Fork River near Deer Lodge, Montana, expires in October 2016.

Leasing Activity 2014 – 2015:

Cedar Creek. The 10-year lease with the U.S. Forest Service on Cedar Creek, a tributary to the Yellowstone River near Corwin Springs, expired on September 20, 2015. This lease was previously renewed in 2005. FWP negotiated another renewal of the lease with the Forest Service and submitted and Notice of Renewal to DNRC in March 2015. DNRC has yet to process the renewal.

Hells Canyon Creek. The 20-year lease at Hells Canyon Creek is set to expire on April 1, 2016. Beginning in the spring of 2014, FWP has been negotiating three landowners to seek a renewal of this lease. The landowners have expressed an interest in seeking improvements to their current irrigation system. In order to finance the improvements, the landowners are seeking assistance through the U.S. Department of Agriculture's (USDA) Natural Resource Conservation Service (NRCS). FWP proposed a temporary, three-year lease renewal in an effort to accommodate the time it takes to ensure grant money is available as a cost share with the landowners. Once the financing for the upgrades has been secured, FWP plans to seek a longer term lease agreement before the temporary, three-year lease agreement expires.

Cow Creek In August 2014, FWP entered into a water lease agreement on Cow Creek located on the east side of the Bears Paw Mountains south of Chinook. The project involves a temporary change to fishery use for a large reservoir with public access in addition to a temporary change to instream flow in Cow Creek itself. FWP has worked with the water right owners to negotiate a resolution of water right ownership issues with the DNRC Trust Lands Division. Once the ownership and division of water rights is approved by the Water Court, the temporary applications to change will be prepared and submitted to DNRC.

Deep Creek. Deep Creek originates in the Big Belt mountains and joins the Missouri River between Toston Dam and Canyon Ferry Reservoir. Deep Creek has an existing instream flow water reservation of 9 cfs. This junior water right provides limited instream benefit in the lower stream reaches due to the high diversionary demand of senior water rights in the lower reaches of the drainage.

Deep Creek has a healthy resident fishery upstream of the flow-impaired reach. Potential water quality issues such as metals, temperature, nutrients, and sediment are not limiting the fishery. Therefore, small flow improvements would likely result in significant increases in fish production. Deep Creek contributes significant juvenile production of trout to the main-stem. (FWP has a documented a limited abundance of juvenile trout in this reach of the Missouri River.) Deep Creek has documented potential for complete dewatering in relatively dry years. Although the quantity of leased water is likely to not provide optimal stream flow, the incremental increased flow allows survival during drought and prevents stranding loss.

In 2013, flow in Deep Creek substantially improved due to a change in source of supply from Deep Creek to the Broadwater-Missouri Canal, a major irrigation project. However, it may not be possible to sustain these flow improvements without legally changing existing irrigation rights to instream flow. The City of Townsend has the second priority irrigation water rights on Deep Creek. The City decided to pursue the negotiation of a water right lease with FWP.

On August 26, 2014 the Commission directed FWP staff to negotiate a water right lease with the City subject to final Commission approval. FWP staff drafted a lease agreement for the City's consideration which the City Council approved on January 6, 2015. The lease is for 10 years at a cost of \$1,000 per year and is subject to the DNRC approval of the temporary water right change. The City has already expended considerable resources in researching their water rights, which will benefit FWP in preparing the water right application.

In February 2015, the Fish and Wildlife Commission approved the water right lease with the City of Townsend and directed FWP to submit to DNRC an application to temporarily change the water right to instream flow as described in the lease agreement.

FWP is currently working with the City of Townsend to resolve issues with respect to the place of use and partial ownership of the water rights leased. These issues will require resolution in the Water Court prior to the change application being submitted to DNRC. FWP is currently exploring additional leasing opportunities with other interested parties on Deep Creek.

Long Creek. In 2010, FWP found Arctic grayling in Long Creek, a tributary to the Red Rock River immediately upstream of Lima Reservoir. Previously, Arctic grayling were believed to have been extirpated from the stream. During the summer and into the early fall, dewatering due to irrigation withdrawals negatively impacts stream flow in Long Creek, which in turn negatively impacts the fishery. The Nature Conservancy (TNC) owns land along the creek which is irrigated by several water rights including the most senior right. Over the past four years, TNC and FWP have monitored stream flow and groundwater levels to assess the potential benefits of changing TNC's irrigation water rights to instream flow.

On August 7, 2014, the Commission directed FWP staff to negotiate a water right acquisition agreement with TNC. Through negotiations FWP and TNC agreed that the best approach would be for FWP to temporarily lease the water rights for a period of 10 years. Under the agreement irrigation would continue in May and June and then cease from July forward. This would partially preserve agricultural production as well as irrigation return flows that benefit Long Creek later in the summer, while improving stream flow later summer and early fall when dewatering is most severe. TNC would be paid \$20,000 and be responsible for construction of infrastructure that would return waste and seepage water to Long Creek, which is necessary to maximize the benefits of the change to instream flow.

In January 2015, the Fish and Wildlife Commission approved the water right lease with TNC and directed FWP to submit to DNRC an application to temporarily change the water right to instream flow as described in the lease agreement. FWP submitted the application to DNRC in March 2015. It is currently being reviewed by DNRC.

Nevada Spring Creek. As reported in 2013, FWP was offered (through donation) several water rights from Nevada Springs and Nevada Spring Creek. These water rights, for both irrigation and stock use, are located on a spring creek tributary to Nevada Creek in the Blackfoot Basin.

Public comment was collected in November and December 2012 as part of the "Nevada Spring Creek Water Right Acquisition Environmental Assessment". The Fish and Wildlife Commission authorized acceptance of the irrigation water rights in December, 2012. In July 2013, the Fish and Wildlife Commission authorized acceptance of the associated stock water rights. In August 2013, the quit claim deed was recorded and the Water Right Ownership was filed with DNRC.

The subject water rights are part of the Montana Water Court's ongoing Blackfoot River Basin Preliminary Decree (Basin 76F). The Montana Water Court is actively adjudicating water rights in the Blackfoot River Basin, which includes Nevada Creek. Review of the claims defined inaccuracies in the Nevada Spring Creek water rights as donated to FWP. Therefore FWP objected to those water rights. Through amendments and withdrawals, FWP has corrected the inaccuracies of those claims. The Water Master's report was finalized in July, 2015. The Water Judge adopted the Masters Report in August 2015.

FWP continues to collect operational, hydrologic and historical use data. FWP is in the process of preparing a Change Application to convert the irrigation water rights to an instream-flow purpose, and plans to submit the application to the DNRC for approval in the first quarter of 2016.

Mill Creek and Willow Creek. In 2008, as part of a settlement agreement, the State of Montana Department of Justice accepted ownership of a number of water rights held by ARCO Environmental Remediation LLC. Under these rights, water was diverted water from Mill and Willow creeks, both tributaries to the Clark Fork River. These two streams have confluence with the river near Anaconda, MT.

Montana Department of Justice's Natural Resources Damage Program (NRDP) intends to transfer management of these water rights to FWP. They will then be converted to an instream flow purpose. FWP began a due diligence evaluation of those rights in February 2013. The evaluation has revealed issues of overlapping and conflicting claims of ownership. Ownership issues must be resolved in some manner before a lease authorization is sought from DNRC.

Other Instream Flow Protection Methods: Montana's water law currently provides several mechanisms to protect flows or water levels in addition to water leasing. Most of these provisions were added with the passage of the Water Use Act in 1973, and therefore are relatively late in Montana's water allocation history. The other tools to create water-right or other protections for instream flow include:

- State-based *Water Reservations*.
- Water rights obtained as a result of statutory directive and legislative authorization. (These are pre-1973 water rights and include *Murphy Rights* and *public recreational claims*.)
- Purchase or contract from new or existing water storage.
- Designation of a stream or river basin as closed to additional water-right appropriation (Closed Basin).

Water reservations are the most common water rights for instream flow found in Montana. The Yellowstone and Missouri river basins contain all of FWP's water reservations. The water reservations were developed through state-initiated, water planning processes. Through separate processes in the Yellowstone River and Upper and Lower Missouri basins, public entities received water rights for future diversionary development and for instream-flow protection. Diversionary reservations were granted to cities, towns, Conservation Districts, and the U.S. Bureau of Reclamation. FWP, the Department of Environmental Quality and the U.S. Bureau of Land Management received reservations for stream-flow and water-level protection. Statutory authorization for such rights is found in §85-2-316 MCA.

Water rights created by statutory directive or authorization are derived from two separate acts. The 1969 Legislature directed FWP to establish water rights in a specified set of rivers and streams known as "blue ribbon" streams.¹ (Instream flow water rights developed under this statute are known as Murphy Rights in honor of the legislative sponsor.) In 1979, under Senate Bill 76 (a statute modifying Montana's general stream adjudication process), the Legislature also directed FWP to file "Statements of Existing Water Right Claims" for public recreational uses (§85-2-222 MCA). The Montana Supreme Court, in a series of cases commonly referred to as the *Bean Lake* decisions, further explored these legislative requirements. Their most recent holding recognized that there could be other pre-1973, judicially recognizable, non-diversionary, instream water rights. Through the general stream adjudication proceedings, those claims are to be reviewed and decided by the Montana Water Court.

Water for instream flows is and can be purchased from existing storage facilities. FWP possess two long-standing contracts for stored water. Both are in the Bitterroot River basin and come from Painted Rocks Reservoir, a DNRC water project, and Lake Como, a storage reservoir operated by the Bitter Root Irrigation District.

The designation of a basin as "closed" to certain new appropriations of water does not create any new water rights or specifically protect an instream-flow level. However, the designation places a cap on additional depletions of water from the system, thus protecting existing water rights and maintaining the status quo water for demand and therefore indirectly maintains existing stream flow conditions. The legislative Upper Clark Fork Basin Closure was specifically crafted to protect status quo conditions and, thereby, protect fisheries and existing water-right holders.²

Conclusion: FWP will continue to administer its existing leases and pursue new leases where opportunities arise. In the next two years, projects involving permanent changes to instream flow will continue to move forward. FWP will also explore other opportunities, such as the purchase of stored water to restore and supplement instream flow.

¹ §89-801 RCM (1969)

² §85-2-335 & 336 MCA

			Active Leases				
SOURCE	RIVER BASIN	STATUS	LESSOR	LEASE TERM/EXP.	PRIORITY OF RIGHT	QUANTITY LEASED	PERIOD OF USE
Big Creek	Yellowstone	Active	Two private ranches	20 years April 15, 2020	March 12, 1883; June 30, 1901; May 31, 1909; May 15, 1910; May 15, 1910	 1.0 - 16.0 cfs 2.0 (rights dedicated to a land trust in perpetuity) 	April 15 - October 15
Big Creek	Yellowstone	Active	Private ranch	10 years May 1, 2019	June 30, 1873 (1 st right on stream)	10.0 cfs	May 1 - November 1
Cedar Creek	Yellowstone	Active	FWP purchased right from private ranch	30 years June 9, 2033	May 29, 1894 (4 th right on stream; other high-priority rights already leased by FWP); June 11, 1971 (high-water right); April 7, 1972 (high-water right)	3.25 cfs 3.76 cfs (high water)	April 1 – November 4
Cedar Creek	Upper Yellowstone	Active	US Forest Service	10 years Lease renewed Sep. 20, 2015	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 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
Locke Creek	Yellowstone	Active	Private ranch	30 years; December 14, 2031	March 6, 1915	7.5 cfs	April 20 – October 24
Mol Heron Creek	Yellowstone	Active	Private ranch	20 years December 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
Hells Canyon Creek	Jefferson	Active	Three individuals	20 years Apr. 1, 2016	December 31, 1884 (1 st right on stream), August 23, 1889; August 29, 1912	1.12 cfs (salvaged water)	April 1- November 4
Lazyman Creek	Ruby River	Active	Private ranch	10 years: November, 2021	April 30, 1888 (only diversionary right on source)	Up to 1.0 cfs	May 15 – October 15
Chamberlain Creek	Blackfoot	Active	Individual	10 years April 1, 2017	October 10, 1911	1/2 the flow up to 25 cfs	April 1 - October 31
Pearson Creek	Blackfoot	Active	Individual	10 years April 1, 2017	October 10, 1911	Up to 8 cfs	April 1 - October 31
Cottonwood Creek	Blackfoot	Active	FWP	20 years October 2016	May 1, 1884	14 cfs April, 37 cfs May 1-June 30, 32 cfs July, 9 cfs August, 6 cfs September, 9 cfs October 8 cfs November (Salvaged water)	April 1- November 4
Rock Creek	Clark Fork River, Tributary to the Columbia River	Active	Private ranch	20 years	March 23, 1881; May 15, 1881; June 1, 1892; May 1, 1898; September 29, 1904; May 10, 1907	5.0 - 27.22 cfs	April 15 - October 31

In-active Leases (terminated, not perfected or rescinded)											
Mill Creek	Upper Yellowstone	Inactive	Mill Creek Water and Sewer District	Terminated	95 rights with various priorities	41.4 cfs	48-60 hours in August Diversion shut off after 10-day notice from FWP				
Mill Creek	Upper Yellowstone	Terminated	Individual	Terminated	June 30, 1880; June 1, 1903	2.0 cfs (1880) and 4.13 cfs (1903) (salvaged water)	May 1 -October 4				
Blanchard Creek	Blackfoot	Inactive	Individual	Contract rescinded 3/5/2004	May 11, 1913 (first right on stream)	3.0 cfs	April 15 -October 15				
Trail Creek	Clearwater River	Inactive	Resort (and) Homeowners Association	Not perfected Contract Rescinded	April 10, 1905 January 10, 1911	1.06 cfs 2.37 cfs plus an additional 0.5 cfs during periods of low flow	Both have periods of use: April 1 - October 31.				
Tin Cup Creek ³	Bitterroot River	Inactive	Six individuals	Met statutory limit on renewal. (5-year renewal March 28, 2005)	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	April 1- November 4				
Hell Roaring Creek	Red Rock River	Inactive	Private ranch	Not perfected Contract rescinded	May 26, 1900 October 25, 1901 September 24, 1915	8.0 cfs 4.0 cfs 6.0 cfs	May 1 – October 15 May 1 – October 15 May 1 – October 25				

³ In 2005 the statutory language limited FWP renew and existing lease beyond a second. The water right owner desired to renew the lease. Statutes governing the private water leasing program did not have the renewal constraints found in statutes governing FWP water leases. Thus the Montana Water Trust stepped in and took over the Tin Cup Creek lease. The lease continues to be active today.