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January 5, 2018

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 2016 and 2017." This report is being submitted to the Water Policy Interim Committee via your office. I will provide a PDF version of this report via email.

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 to benefit fisheries. See §85-2-436 MCA.

I will present this report to the Committee the morning of January 8, 2018.

If you have any questions please feel free to call me at 444-3312.

Sincerely,

William A. Schenk



# BIENNIAL PROGRESS REPORT - FWP WATER LEASING STUDY 2016 & 2017

## **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

November 2017

#### **EXECUTIVE SUMMARY:**

This report summarizes Montana Fish, Wildlife & Parks' (FWP) instream flow water right leasing activities during 2016 and 2017. It also serves as a reminder that FWP's statutory authority to lease or convert diversionary water rights to instream flow will sunset June 30, 2019. Legislative action will be required to extend this authority.

Water right leasing activities include approval of new leases, lease renewals, monitoring existing leases, exploration of lease opportunities and progress on the authorization of potential water leasing opportunities. Program highlights for 2016 and 2017 include:

- One new instream flow lease, for Long Creek, was perfected.
- Three existing leases were renewed.
- Two additional lease renewals, Chamberlain and Pearson Creeks, are before DNRC pending authorization.
- In 2016, FWP applied to the Department of Natural Resources and Conservation (DNRC) to convert existing, instream flow leases on Cedar Creek to a **permanent** instream flow water right. DNRC's Preliminary Determination is pending.
- Eight potential water right leases or lease modifications are currently in process. Two applications, pertaining to water rights on the Teton River, have just been submitted to DNRC.

## AUTHORITY TO LEASE OR CONVERT WATER TO INSTREAM FLOW

The conversion of existing water rights to instream flow by FWP is governed by statute. See §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* (Attachment I) 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).

The statute also requires FWP to submit a report of activities to the Legislative Water Policy Committee, the Department of Natural Resources and Conservation and the Fish and Wildlife Commission.

#### Reauthorization

Since its initial enactment in 1989, FWP's statutory authority to lease and convert water rights to instream flow has been constrained temporally. That temporal limitation has been reauthorized multiple times, most recently in 2009. Currently, the statute states:

After June 30, 2019, the department of fish, wildlife and parks may not enter into any new lease agreements pursuant to this section or renew any leases that expire after that date. §85-2-436 (7) MCA (2017).

Further, the existing statute limits future permanent conversions of FWP owned water rights: After June 30, 2019, the department of fish, wildlife, and parks may not change the appropriation rights that it holds in fee simple to instream flow purposes on any stream reach. §85-2-436 (6)(b).

In 1991, §85-2-407, MCA, *Temporary Changes In Appropriation Right*, was enacted, in part to address drought related short term transfers of water. (See Attachment 2.)

In 1995, with the enactment of the code section titled "Temporary Change Authorization for Instream Flow - - Additional Requirement" (§ 85-2-408 MCA (2017)) the legislature expanded the temporary change provisions to include instream flow leasing and conversion authorities to most water right holders and to private entities (See Attachment 3.). These statutory provisions are now commonly used method of defining discrete, stream-reach specific instream flows. Section 408 does not have a sunset date. Section 408 also does not provide for permanent instream flow conversion.

It is very important to note that FWP and other governmental entities are prevented from leasing water rights under the authority found in *Temporary Change Authorization for Instream Flow-Additional Requirements* The existing statute, Subpart 408 (2)(ii), states,

For the purpose of this subsection "person" means and is limited to an individual, association, partnership, or corporation.

So long as the above definition of person remains in sub-section 408, FWP cannot utilize the *Temporary Change In Appropriation Right* statute to lease water rights for instream flow purposes from other parties. FWP would be limited to converting / changing water rights owned by the agency.

Multiple legislative solutions are available to extend FWP's instream flow water leasing / conversion authority.

#### REPORTING REQUIREMENTS

Under §85-2-436 (4) of the water leasing statute, FWP must submit a biennial progress report to the FWP Commission, the Water Policy Interim 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.

#### GENERAL APPROACH TO LEASING

Through nearly two decades of leasing water, FWP has learned that successful water leases not only require the commitment of the party leasing water, but also at a minimum an understanding and general agreement amongst all water users on the source as to how the change to instream flow is to be operated. This necessitates making clear how much water is protected and where it is measured along with providing up to date measurements to the water users so that the stream can be managed to meet the instream flow requirements. FWP's most successful leases involve buy-in from all of the water users on the stream

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.

FWP continues to emphasize leasing on small tributary streams that provide significant benefits for the propagation of game fish. Most current leases target the restoration of flow near the stream's confluence with the river. Leases emphasize maintaining connectivity between the main-stem and tributary. Leases in these lower stream reaches prevent dewatering to protect redds, (fish spawning beds), maintain flow and habitat for emerging fry and facilitate outmigration into the main-stem river.

Water conservation leases are also a priority. These projects focus on improving irrigation efficiency and keeping the amount of irrigation unchanged, while reducing the amount of water diverted for irrigation. The saved water, some of it protectable, restores stream flow.

#### **CURRENT LEASES**

FWP has instream flow protections on eleven streams using temporary changes to instream flow. This includes twelve active leases and one conversion of FWP-owned irrigation rights to instream flow. All have approved "Change of Use Authorizations" issued by DNRC. These current instream flow transactions are located on the following eleven streams:

- 1. Big Cr., tributary to the Yellowstone River (two leases)
- 2. Cedar Cr., tributary to the Yellowstone River (two leases)
- 3. Mulherin 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
- 11. Long Cr., tributary to the Red River in the Upper Missouri Basin.

Attachment 4 is a table displaying all the leases (active, terminated, or transferred) that FWP has been associated with over the life of the water-leasing study. Inactive leases include three leases 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) acquired and now maintains this water lease. Two leases were not perfected through a Change of Use Authorization and were terminated or allowed to lapse.

# **LEASING ACTIVITY 2016 – 2017:**

#### **NEW LEASES**

#### Long Creek.

**Background.** In recent years, FWP found Arctic grayling present 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. In the summer and 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. From 2010 through 2014, TNC and FWP monitored streamflow and groundwater levels to assess the potential benefits of changing TNC's irrigation water rights to instream flow.

In August 2014, the Fish, Wildlife & Parks Commission directed FWP staff to negotiate a water right acquisition agreement with TNC. FWP and TNC agreed that the best approach would be for FWP to temporarily lease the four water rights for a period of 10 years. Under the lease agreement irrigation continues in May and June but ceases in July. This seasonal approach helps preserve agricultural production as well as irrigation return flows that benefit Long Creek later in the summer. This shift in water use improves later summer and early fall instream flow during the time when dewatering was historically most severe. The lease payment was a one-time \$20,000 payment with TNC responsible for constructing infrastructure that would return waste and seepage water to Long Creek, which maximizes the benefits of the change to instream flow.

In July 2016, DNRC issued the Temporary Authorizations to Change the four water rights to protect and restore instream flows in Long Creek to benefit the fishery. The water sources for the four water rights include one Long Creek, waste and seepage rights that are tributary to Long Creek (2 rights), and Divide Creek (Ruby River drainage) that supplements flow in Long Creek through an inner-basin transfer. The lease agreement is for a period of 10 years, expiring December 31, 2026, but is renewable if allowed under statute.

#### **Change in Appropriation Information**

Section 85-2-436(4)(b), MCA, requires that FWP provide certain information with respect to the change in appropriation rights as follows:

The length of the stream reach and how it is determined:

The length of stream in which flow is being restored through the protection of the historically consumed water is approximately 6.4 stream miles (about 3.5 straight-line miles) from the lower point of diversion for the rights being changed to the mouth of Long Creek. The full diverted amount is protected to the lower point of diversion. The reach below the TNC diversions was the reach being most severely dewatered and was the focus of flow restoration. The amount of water historically consumed by the July – September irrigation is protected in this reach.

The critical streamflow or volume needed to protect, maintain, or enhance streamflow to benefit the fishery resource:

Data collected for riffles in Long Creek shows that a flow of 10.5 cfs is desirable during the springearly summer spawning period to provide adequate depth of passage for migratory spawning fish. This data also shows that transitioning from 10.5 cfs down to 3.4 cfs in the mid-to-late summer, provides for the riffles to remain mostly covered and provides food production (macroinvertebrates) for the fish in Long Creek. Further, this management action reflects return to conditions closer to natural conditions provides for improved fish habitat and riparian function.

The amount of water available for instream flows as a result of the change in appropriation rights:

The amount of water protected down to the downstream point of diversion for the irrigation rights is 7 cfs in July, 4 cfs in August, and 3 cfs for the first 15 days of September. Below the point of diversion, the amount of water historically consumed that can be protected is 5.49 cfs in July, 2.77 cfs in August, and 1.80 cfs for the first 15 days of September.

The 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:

Below the downstream irrigation point of diversion only that water that was consumed by irrigation and did not return to Long Creek is protected against diversion by other junior water rights. Water that historically returned to Long Creek is not protected and will still be available to junior water rights.

During hydrologic investigations leading up to the water right lease agreement, it was found that below the lower point of diversion, Long Creek at times experience small gains in flows and at other times experiences small losses in flow. In general, the protected stream reach is neither a typically gaining or loosing reach allowing the consumptive amount to be measured without concern that flows are being substantially reduced to stream losses.

The methods used to monitor use of water under each change in appropriation right:

Water is measured at 4 locations. The most downstream measurement point is located at the North Valley Rd near the middle of the protected reach and monitors streamflow in Long Creek in the protected reach. At this location, a staff gage and stilling well housing an electronic water level recorder are in place. A water level – streamflow relationship has been developed. This

relationship is used with water level data recorded every half hour to develop a continuous flow record at the site. This relationship is also used to develop a rating table that can be used to determine streamflow based on staff gage readings. Streamflow measurements continue to be taken monthly if not more often to insure the accuracy of the water level -streamflow relationship and adjust it as necessary.

At a location, just below the lower irrigation point of diversion at the beginning of the protected reach, a staff gage and stilling well like that previously described is in place to monitor and record streamflow in Long Creek. A return ditch from the unnamed tributary of Long Creek enters Long Creek just upstream of this measurement point. There, a rectangular weir and staff gage is used to measure the amount of water returning to Long Creek. Water that returns to Long Creek via this system reduces the amount of water that can be called upon from upstream water users.

Lastly, the amount of water being transferred into Long Creek from Divide Creek is measured near the diversion using a Parshall flume. This flume also has a stilling well and an electronic continuous water level recorder to provide continuous data on the amount of water being diverted into Long Creek from Divide Creek. Streamflow levels are check at least weekly to administer the water lease. Measurement data is submitted annually to DNRC.

#### **LEASE RENEWALS**

**Cedar Creek I - Forest Service Renewal.** The 10-year lease with the U.S. Forest Service on Cedar Creek, a tributary to the Yellowstone River near Corwin Springs, was to expire on September 20, 2015. This lease was previously renewed in 2005. FWP negotiated another renewal of the lease with the Forest Service and submitted a Notice of Renewal to DNRC in March 2015. DNRC approved the renewal in April 2016, with the renewed temporary change to instream flow to expire in 2025.

**Cottonwood Creek.** Cottonwood Creek is tributary to the Blackfoot River near Seeley Lake, MT. The water rights are owned by FWP and associated with irrigation of significant acreage on the Clearwater Wildlife Management area. This bundle of water rights was converted to instream flow as a water conservation project in 2006.

Under DNRC's authorization the water rights provide for both irrigation, primarily during the early portion of the season, and instream flow augmentation. Instream flow augmentation is accomplished primarily during the mid and late summer periods.

The initial term of the authorization was 20 years, expiring in 2016. FWP applied for and was granted a 10-year renewed authorization of this instream flow/split season irrigation conversion. The new expiration is October 18, 2026.

Most Cottonwood Creek water rights, including those held by FWP, have been part of an extensive Montana Water Court adjudication process. FWP chose to not pursue a permanent conversion of these rights to instream flow during the Water Court proceeding. Adjudication activity in this drainage has concluded and numerous concerns have been resolved. FWP will

now evaluate the permanent conversion of these rights, but only after another season of detailed water measurement and data collection.

**Chamberlain Creek.** This small tributary stream in the Blackfoot River drainage has a 10-year renewable lease. The last approval was granted in 2007 and was to expire in late 2017. FWP has renewal renewed the water lease agreement for another 10-year period. This is the second renewal on the lease FWP submitted to DNRC an *Application for Renewal of the Temporary Authorization to Change*. DNRC is processing the application for public notice. The proposed expiration is in 2027. Pearson Creek is a related lease / project with the same water right holder.

**Hells Canyon Creek.** The original 20-year water conservation lease at Hells Canyon Creek was to expire on April 1, 2016. Beginning in the spring of 2014, FWP began negotiating with the three landowners that currently own a portion of the underlying rights, seeking a renewal of this lease. The landowners have expressed an interest in seeking improvements to their current irrigation systems. These improvements have the potential to increase water conservation and water use efficiencies.

These improvements will require additional engineering and financing. FWP proposed a temporary, three-year lease renewal. This short-term lease should provide the additional time it takes to fully investigate the potential options and financing of proposed development. If these upgrades can be secured, FWP plans to seek a longer-term lease agreement. Therefore, FWP sought and acquired a short-term, three-year lease agreement which expires on April 1, 2019.

**Pearson Creek.** Pearson Creek is a tributary to Chamberlain Creek. These two small streams join before flowing into the Blackfoot River. The combined flow joins the river within the next half mile. FWP leases on Chamberlain and Pearson Creek are with the same water right owners.

Like Chamberlain Creek, FWP seeks to renew the Pearson Creek water lease agreement for another 10-year period. The Application for Renewal of the temporary Authorization to Change has been submitted to DNRC. The agency is processing the application for public notice. This is the second renewal on the lease, with the last approval granted in 2007. The proposed expiration is in 2027.

#### **PERMANENT CONVERSION**

**Cedar Creek II** (former lease from Private Party). In 2008, FWP acquired water rights from Cedar Creek that were being leased by FWP under a 30-year lease. This lease is in addition to and supplemental to the Cedar Creek II water rights leased from the Forest Service.

With FWP's assistance, the Cedar Creek irrigation water source was replaced by a ground water well. With this new water source supplying the irrigation, the water right owner transferred ownership of the Cedar Creek water rights to FWP. In 2015, DNRC determined that FWP would need to file a new water right application to permanently change the water rights to instream flow even though the temporary change to instream flow had already been approved in 2004.

In April 2016, the Fish & Wildlife Commission authorized the agency to seek the permanent conversion of these leased water rights to instream flow. That same month, FWP submitted the new change application to DNRC.

In December 2016, DNRC notified FWP that the application was considered correct and complete and issued a Technical Report containing the information on which DNRC would base its Preliminary Determination. That same month, FWP commented on the Technical Report and provided a Plan of Operation that made minor adjustments to the proposed change to instream flow so that it would square with the Technical Report. In March 2016, DNRC requested and FWP agreed to waive the statutory timelines to provide DNRC time to work on the Preliminary Determination. As of November 2017, DNRC has yet to issue a Preliminary Determination.

#### **LEASES OR CONVERSIONS IN PROGRESS**

**Big Creek.** The existing 10-year and 20-year water leases on Big Creek, a tributary to the Yellowstone River near Emigrant, expire after the 2019 irrigation season. The 10-year water leases were previously renewed in 2009. Like other upper Yellowstone River tributaries, the focus of this water lease is to protect flow in Big Creek to provide for the successful spawning, incubation, emergence and outmigration to the Yellowstone River of Yellowstone cutthroat trout.

FWP is working with one lessor that desires to reconfigure their water rights including one water right presently leased by FWP. In 2018, FWP will request that the Fish & Wildlife Commission endorse a renegotiation of these water leases for which the leased water rights are not being reconfigured as well as potentially negotiate a new water lease to accommodate the reconfigured water rights.

**Cow Creek.** In 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 which has a resident brook trout population. FWP has worked with the water right owners to negotiate a resolution of water right ownership issues with the DNRC Trust Lands Division and to address issue remarks on the water rights. In 2017 the Water Court approved the resolution of the ownership and other issues. FWP has provided a proposal for how to proceed with the temporary change applications to the water right owner and will prepare the applications in 2018 for submittal to DNRC.

**Deep Creek.** (Two Projects) In February 2015, FWP entered a water lease on Deep Creek, a tributary to the Missouri River near Townsend. The focus of the lease is to provide adequate connectivity in lower Deep Creek to provide for the spawning and rearing of resident and migratory brown and rainbow trout. The 10-year lease with the City of Townsend will cost \$1,000 annually. Since the approval of the lease FWP has worked with the City to resolve issues with respect to the place of use and partial ownership of the water rights leased. The City has filed amendments to the water rights with the Water Court which received an objection in November 2017. FWP anticipates this objection will be resolved allowing an application to temporarily change the water right to instream flow to be submitted to DNRC early in 2018.

The Fish & Wildlife Commission approved a second water right lease for Deep Creek in August 2017. As compensation for this lease, FWP must provide replacement irrigation water from the Broadwater-Missouri Canal owned by DNRC and operated by the Broadwater-Missouri Water Users' Association. FWP has reached an agreement with the Association to pay for the transport of the water. FWP is currently working with DNRC to obtain the water under DNRC's existing water right either by contract or through a mitigation agreement as part of DNRC's fishery mitigation associated with their FERC license for the Toston Project.

**Little Belt Creek.** Little Belt Creek is a tributary to Belt Creek near the town of Belt. Little Belt Creek arises in the Highwood mountains flowing west. Little Belt Creek is home to brown and rainbow trout populations that have historically suffered from dewatering due to irrigation withdrawals. The owner of the most senior irrigation water rights approached FWP about leasing water rights. In October 2017, the Fish & Wildlife Commission directed FWP staff to attempt to negotiate a water right lease. The negotiations are currently underway.

**Mulherin Creek.** The 20-year water lease on Mulherin Creek, a tributary to the Yellowstone River near Corwin Springs, expires after the 2019 irrigation season. The focus of this water lease is to protect flow in Mulherin Creek to provide for the successful spawning, incubation, emergence and outmigration to the Yellowstone River of Yellowstone cutthroat trout. FWP staff will request that the Fish & Wildlife Commission endorse the negotiation of the renewal of the lease at their February 2018 meeting.

**Nevada Spring Creek.** (Two Projects). 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 were part of the Montana Water Court's ongoing Blackfoot River Basin Preliminary Decree (Basin 76F). Review of the claims defined inaccuracies in the Nevada Spring Creek water rights. Therefore, FWP objected to those water rights in the adjudication proceedings. 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.

During 2016 and through 2017 FWP has 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 2018.

Mill Creek and Willow Creek. Under a 2008 settlement agreement, the State of Montana Department of Justice accepted ownership of a number of Mill and Willow Creek water rights held by ARCO Environmental Remediation LLC. Historically these rights diverted irrigation 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) transferred management of these water rights to FWP. The intended fate of these rights is the conversion from an irrigation purpose 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 or conversion is sought through DNRC's change of use process.

Pine and Bear Creeks. Trout Unlimited approached FWP offering to donate two water rights, historically used for mining. FWP would then permanently change the water rights to an instream flow in Pine and Bear Creeks. Pine Creek is a tributary to Bear Creek at Jardine and Bear Creek is a tributary to the Yellowstone River near Gardiner. Like other streams in the upper Yellowstone where FWP leases water, the permanent change to instream flow is expected to benefit Yellowstone cutthroat trout. FWP completed an environmental assessment regarding the proposed acquisition and permanent change to instream flow in November 2017. FWP received no comments opposing the acquisition and permanent change to instream flow. In early 2018, FWP will recommend to the Fish & Wildlife Commission that they accept the donation of the water rights and direct FWP staff to file an application with DNRC to permanently change the water rights to instream flow.

**Teton River.** In 2017, FWP negotiated and the Fish & Wildlife Commission approved water right lease involving two groups of water rights on the lower Teton River. In November 2017, FWP submitted the two applications to DNRC to temporarily change the water rights to instream flow. The focus is to protect and restore instream flow in the lower Teton River. The leases will cost \$6 per acre-foot as delivered by the water commissioner.

The lower Teton River historically supported a diverse fish community of 28 warm-water species, including sauger, blue sucker and shovelnose sturgeon. Since the mid-1980s dewatering of the lower Teton River has increased resulting in a corresponding loss of species diversity in the river. USGS streamflow data for Teton River at its mouth shows that the river was dry for the entire month of August in 10 of the last 19 years and the entire month of September in 9 of the last 19 years. Recently and for the first time, the District Court appointed water commissioners to distribute water from the entire Teton River and its tributaries, insuring that water users on the lower river will receive the water they are due and making the leasing of water rights viable.

## **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 and therefore often very junior water rights. 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. All FWP's water reservations are found in the Yellowstone and Missouri river basins. To date all water reservations were developed through state-initiated, water planning processes. Through separate processes in the Yellowstone and Upper Missouri, Lower Missouri and Little Missouri river 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 to be used for instream flow. 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

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<sup>&</sup>lt;sup>1</sup> §89-801 RCM (1969)

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.<sup>2</sup>

# **CONCLUSION**

FWP will continue to administer its existing leases and pursue new leases where opportunities arise. In 2018, projects involving both temporary leases and 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.

Activities after *June 30*, *2019*, will be dependent upon legislative actions and decisions made during the next legislative session.

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<sup>&</sup>lt;sup>2</sup> §85-2-335 & 336 MCA

#### Attachment 1

TITLE 85. WATER USE

CHAPTER 2. SURFACE WATER AND GROUND WATER

## Part 4. Utilization of Water

- **85-2-436.** Instream flow to protect, maintain, or enhance streamflows to benefit fishery resource -- change in appropriation rights. (1) The department of fish, wildlife, and parks may change an appropriation right, which it either holds in fee simple or leases, to an instream flow purpose of use and a defined place of use to protect, maintain, or enhance streamflows to benefit the fishery resource.
- (2) The change in purpose of use or place of use must meet all of the criteria and process outlined in **85-2-307** through **85-2-309**, **85-2-401**, and **85-2-402** and the additional criteria and process described in subsection (3) of this section to protect the rights of other appropriators from adverse impacts.
- (3) (a) The department of fish, wildlife, and parks, with the consent of the commission, may lease existing rights for the purpose of protecting, maintaining, or enhancing streamflows to benefit the fishery resource.
- (b) Upon receipt of a correct and complete application for a change in purpose of use or place of use 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 change in appropriation right may file an objection as provided in **85-2-308**. A change in appropriation right may not be approved until all objections are resolved. After resolving all objections filed under **85-2-308**, the department shall authorize a change of an existing appropriation right for the purpose of protecting, maintaining, or enhancing streamflows to benefit the fishery resource if the applicant submits a correct and complete application and meets the requirements of **85-2-402**.
- (c) The application for a change in appropriation right authorization must include specific information on the length and location of the stream reach in which the streamflow is to be protected, 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 changed to instream flow is the amount historically diverted. However, only the amount historically consumed, or a smaller amount if specified by the department in the change in appropriation right authorization, may be used to protect, maintain, or enhance streamflows below the point of diversion that existed prior to the change in appropriation right.
- (e) A lease for instream flow purposes may be entered for a term of up to 10 years, except that a lease of water made available from the development of a water conservation or storage project may be for a term equal to the expected life of the project but not more than 30 years. All leases may be renewed an indefinite number of times but not for more than 10 years for each term. Upon receiving notice of a lease renewal, the department shall notify other appropriators potentially affected by the lease and shall allow 90 days for submission of new evidence of adverse effects to other water rights. A change in appropriation right authorization is not required for a renewal unless an appropriator other than an appropriator described in subsection (3)(i) submits evidence of adverse effects to the appropriator's rights that has not been considered previously. If new evidence is submitted, a change in appropriation right authorization must be obtained according to the requirements of **85-2-402**.
- (f) The department may modify or revoke the change in appropriation right authorization up to 10 years after it is approved if an appropriator other than an appropriator described in subsection (3)(i) submits new evidence not available at the time the change in appropriation right was approved that proves by a preponderance of evidence that the appropriator's water right is adversely affected.

- (g) The priority of appropriation for a lease or change in appropriation right under this section is the same as the priority of appropriation of the right that is changed to an instream flow purpose.
- (h) Neither a change in appropriation right nor any other authorization is required for the reversion of a leased 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 change in appropriation right authorization under this section may not object to the exercise of the changed water right according to its terms or to the reversion of a leased 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 required under this section.
- (4) (a) The department of fish, wildlife, and parks shall complete and submit to the department, commission, and water policy committee established in **5-5-231** a biennial progress report by December 1 of odd-numbered years. This report must include a summary of all appropriation rights changed to an instream flow purpose in the last 2 years.
- (b) For each change in appropriation right to an instream flow purpose, the report must include a copy of the change authorization issued by the department and must address:
  - (i) the length of the stream reach and how it is determined;
- (ii) critical streamflow or volume needed to protect, maintain, or enhance streamflow to benefit the fishery resource;
  - (iii) the amount of water available for instream flow as a result of the change in appropriation right;
- (iv) 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
  - (v) methods used to monitor use of water under each change in appropriation right.
- (5) This section does not create the right for a person to bring suit to compel the renewal of a lease that has expired.
- (6) (a) From May 8, 2007, through June 30, 2019, the department of fish, wildlife, and parks may change, pursuant to this section, the appropriation rights that it holds in fee simple to instream flow purposes on no more than 12 stream reaches.
- (b) After June 30, 2019, the department of fish, wildlife, and parks may not change the appropriation rights that it holds in fee simple to instream flow purposes on any stream reaches.
- (7) After June 30, 2019, the department of fish, wildlife, and parks may not enter into any new lease agreements pursuant to this section or renew any leases that expire after that date.

History: En. Sec. 6, Ch. 658, L. 1989; amd. Sec. 1, Ch. 740, L. 1991; amd. Sec. 1, Ch. 175, L. 1993; amd. Sec. 8, Ch. 370, L. 1993; amd. Sec. 457, Ch. 418, L. 1995; amd. Sec. 9, Ch. 487, L. 1995; amd. Sec. 73, Ch. 545, L. 1995; amd. Sec. 2, Ch. 123, L. 1999; amd. Sec. 8, Ch. 85, L. 2005; amd. Sec. 5, Ch. 448, L. 2007; amd. Sec. 42, Ch. 19, L. 2011; amd. Sec. 12, Ch. 122, L. 2015.

#### Attachment 2

Title 85. Water Use

Chapter 2. Surface Water and Ground Water

Part 4. Utilization 0f Water

**85-2-407.** (*Temporary*) **Temporary changes in appropriation right.** (1) Except as provided in **85-2-410**, an appropriator may not make a temporary change in appropriation right for the appropriator's use or another's use except with department approval in accordance with **85-2-402** and this section.

- (2) Except as provided in subsection (9), a temporary change in appropriation right may be approved for a period not to exceed 10 years. A temporary change in appropriation right may be approved for consecutive or intermittent use.
- (3) An authorization for a temporary change in appropriation right may be renewed by the department for a period not to exceed 10 years. There is no limitation on the number of renewals the appropriator may seek. Renewal of an authorization for a temporary change in appropriation right requires notice to the department by the appropriator. Upon receipt of the notice, the department shall notify other appropriators potentially affected by the renewal and shall allow 90 days for submission of new evidence of adverse effects to other water rights. A temporary change authorization may not be renewed by the department if it determines that the right of an appropriator is adversely affected, except for an appropriator described in subsection (7) or a right identified in a written consent to approval filed pursuant to **85-2-402** in connection with a temporary change.
- (4) (a) During the term of the original temporary change authorization, the department may modify or revoke its authorization for a temporary change if it determines that the right of an appropriator is adversely affected, except for an appropriator described in subsection (7) or a right identified in a written consent to approval filed pursuant to **85-2-402** in connection with a temporary change.
  - (b) An appropriator, other than an appropriator identified in subsection (7), may object:
  - (i) during the initial temporary change application process;
  - (ii) during the temporary change renewal process; and
  - (iii) once during the term of the temporary change permit.
- (5) The priority of appropriation for a temporary change in appropriation right is the same as the priority of appropriation of the right that is temporarily changed.
- (6) Neither a change in appropriation right nor any other authorization right is required for reversion of the appropriation right to the permanent purpose, place of use, point of diversion, or place of storage after the period for which a temporary change was authorized expires.
- (7) A person issued a water use permit with a priority of appropriation after the date of filing of an application for a temporary change in appropriation right under this section may not object to the exercise of the temporary change according to its terms, the renewal of the authorization for the temporary change, or the reversion of the appropriation right to its permanent purpose, place of use, point of diversion, or place of storage. Persons described in this subsection must be notified of the existence of any temporary change authorizations from the same source of supply.
- (8) If a water right for which a temporary change in appropriation right has been approved is transferred as an appurtenance of real property, the temporary change remains in effect unless another change in appropriation right is authorized by the department.
- (9) If the quantity of water that is subject to a temporary change in appropriation right is made available from the development of a new water conservation or storage project, a temporary change

in appropriation right may be approved for a period not to exceed 30 years unless a renewal is obtained pursuant to subsection (3). (Terminates September 30, 2023--sec. 8, Ch. 243, L. 2017.)

- **85-2-407.** (Effective October 1, 2023) **Temporary changes in appropriation right.** (1) Except as provided in **85-2-410**, an appropriator may not make a temporary change in appropriation right for the appropriator's use or another's use except with department approval in accordance with **85-2-402** and this section.
- (2) Except as provided in subsection (9), a temporary change in appropriation right may be approved for a period not to exceed 10 years. A temporary change in appropriation right may be approved for consecutive or intermittent use.
- (3) An authorization for a temporary change in appropriation right may be renewed by the department for a period not to exceed 10 years. There is no limitation on the number of renewals the appropriator may seek. Renewal of an authorization for a temporary change in appropriation right requires notice to the department by the appropriator. Upon receipt of the notice, the department shall notify other appropriators potentially affected by the renewal and shall allow 90 days for submission of new evidence of adverse effects to other water rights. A temporary change authorization may not be renewed by the department if it determines that the right of an appropriator, other than an appropriator described in subsection (7), is adversely affected.
- (4) (a) During the term of the original temporary change authorization, the department may modify or revoke its authorization for a temporary change if it determines that the right of an appropriator, other than an appropriator described in subsection (7), is adversely affected.
  - (b) An appropriator, other than an appropriator identified in subsection (7), may object:
  - (i) during the initial temporary change application process;
  - (ii) during the temporary change renewal process; and
  - (iii) once during the term of the temporary change permit.
- (5) The priority of appropriation for a temporary change in appropriation right is the same as the priority of appropriation of the right that is temporarily changed.
- (6) Neither a change in appropriation right nor any other authorization right is required for reversion of the appropriation right to the permanent purpose, place of use, point of diversion, or place of storage after the period for which a temporary change was authorized expires.
- (7) A person issued a water use permit with a priority of appropriation after the date of filing of an application for a temporary change in appropriation right under this section may not object to the exercise of the temporary change according to its terms, the renewal of the authorization for the temporary change, or the reversion of the appropriation right to its permanent purpose, place of use, point of diversion, or place of storage. Persons described in this subsection must be notified of the existence of any temporary change authorizations from the same source of supply.
- (8) If a water right for which a temporary change in appropriation right has been approved is transferred as an appurtenance of real property, the temporary change remains in effect unless another change in appropriation right is authorized by the department.
- (9) If the quantity of water that is subject to a temporary change in appropriation right is made available from the development of a new water conservation or storage project, a temporary change in appropriation right may be approved for a period not to exceed 30 years unless a renewal is obtained pursuant to subsection (3).

History: En. Sec. 1, Ch. 435, L. 1991; amd. Sec. 3, Ch. 322, L. 1995; amd. Sec. 4, Ch. 381, L. 2001; amd. Sec. 1, Ch. 433, L. 2001; amd. Sec. 1, Ch. 122, L. 2003; amd. Sec. 5, Ch. 85, L. 2005; amd. Sec. 6, Ch. 243, L. 2017.

#### **Attachment 3**

Title 85. Water Use Chapter 2. Surface Water and Ground Water Part 4. Utilization of Water

- **85-2-408.** Temporary change authorization for instream flow -- additional requirements. (1) The department shall accept and process an application for a temporary change in appropriation rights to maintain or enhance instream flow to benefit the fishery resource under the provisions of **85-2-402**, **85-2-407**, and this section. The application must:
- (a) include specific information on the length and location of the stream reach in which the streamflow is to be maintained or enhanced; and
- (b) provide a detailed streamflow measuring plan that describes the point where and the manner in which the streamflow must be measured.
- (2) (a) A temporary change authorization under the provisions of this section is allowable only if the owner of the water right voluntarily agrees to:
- (i) change the purpose of a consumptive use water right to instream flow for the benefit of the fishery resource; or
- (ii) lease a consumptive use water right to another person for instream flow to benefit the fishery resource.
- (b) For the purpose of this subsection (2), "person" means and is limited to an individual, association, partnership, or corporation.
- (3) In addition to the requirements of **85-2-402** and **85-2-407**, an applicant for a change authorization under this section shall prove by a preponderance of evidence that:
- (a) the temporary change authorization for water to maintain and enhance instream flow to benefit the fishery resource, as measured at a specific point, will not adversely affect the water rights of other persons; and
- (b) the amount of water for the proposed use is needed to maintain or enhance instream flows to benefit the fishery resource.
- (4) The applicant is not required to prove a lack of adverse effect for any water right identified in a written consent to approval filed pursuant to **85-2-402** in connection with a change application.
- (5) The department shall approve the method of measurement of the water to maintain and enhance instream flow to benefit the fishery resource through a temporary change authorization as provided in this section.
- (6) Only the owner of the water right may seek enforcement of the temporary change authorization or object under **85-2-308**.
- (7) A temporary change authorization under this section does not create a right of access across private property or allow any infringement of private property rights.
- (8) The maximum quantity of water that may be changed to maintain and enhance streamflows to benefit the fishery resource is the amount historically diverted. 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 to benefit the fishery resource below the existing point of diversion. (Subsection (4) terminates September 30, 2023--sec. 8, Ch. 243, L. 2017.)

History: En. Sec. 1, Ch. 322, L. 1995; amd. Sec. 6, Ch. 85, L. 2005; amd. Sec. 7, Ch. 243, L. 2017.

Attachment 4. FWP Instream Flow Leasing History, as of November 2	Attachment 4.	FWP Instream Flow	Leasing History, as o	of November 2017
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				Ad	ctive Leases		
SOURCE	RIVER BASIN	STATUS	LESSOR	LEASE TERM/EXP.	PRIORITY OF RIGHT	QUANTITY LEASE	PERIOD OF USE
Big Creek I	Yellowstone	Active		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 land trust in perpetuity)	a April 15 - October 15
Big Creek II	Yellowstone	Active		10 years May 1, 2019	June 30, 1873 (1 <sup>st</sup> right on stream)	10.0 cfs	May 1 - November 1
Cedar Creek I	Yellowstone	Active	FWP purchased right from private ranch	30 years June 9, 2033	May 29, 1894 (4 <sup>th</sup> 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 II	Upper Yellowstone	Active		10 years September 20, 2025 <sup>3</sup>	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
					October 7, 1915 – UT Long Creek - 41A 110697-00	Month To POD Blw P	)
Long Cr tributary to Upper Red Rock River Missouri	Active		December 31, 20206	October 15, 1888- Long Creek -41A 110699-00 October 15, 1888 – UT Long Creed - 41A110700-00 August 25, 1893 – Long Creek / Divide Creek- 41A110701-00	July 7 cfs 5.49 c	July 1 p Sept 15	
		,			Aug. cfs 2.77 c		
					3	Sept. 3 cfs 1.8	
Mulherin Creek	Yellowstone	Active		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		20 years <sup>4</sup> Apr. 1, 2016. Renewed for three years expiring Apr. 1, 2019	December 31, 1884 (1 <sup>st</sup> 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

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<sup>&</sup>lt;sup>3</sup> The Cedar Creek lease with the USFS was set to expired on September 20, 2015. The lease was renewed. ON April 14, 2016, DNRC issued a renewed Authorization. The renewal is for an additional 10 years with the expiration in September 2026. This is the second lease renewal (???? Andy is this correct?) <sup>4</sup> Initial Lease included conservation elements and was for a 20-year period with authorization expiring in April 2016. Lease was renewed for a three-year period with current expiration on April 1, 2019.

Attachment	t 4. FW	P Instre	eam Flow Le	easing History	, as of November 2017		
Chamberlain Creek <sup>5</sup>	Blackfoot	Active	Individual	10 years April 1, 2017 Applications for renewal are in process	October 10, 1911	½ the flow up to 25 cfs	April 1 - October 31
Pearson Creek	Blackfoot	Active	Individual	10 years April 1, 2017 Application for renewal are in process	October 10, 1911	Up to 8 cfs	April 1 - October 31
Cottonwood Creek	Blackfoot	Active	FWP	10 years October 18, 2026 <sup>6</sup>	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 October 31, 2021	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 (term	inated, 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.

<sup>&</sup>lt;sup>5</sup> Applications for Renewal for both Chamberlain and Pearson Creeks have been submitted and are under review at the drafting of this report <sup>6</sup> Initial Lease included conservation elements and was for a 20-year period with authorization expiring in 2016. Lease was renewed for a 10-year period with current expiration on October 18, 2026.

Attachment 4. FWP Instream Flow Leasing History, as of November 2017							
Tin Cup Creek <sup>7</sup>	Bitterroot River	Inactive	Six individuals	Met statutory limit on renewal. (5-year renewal March 28, 2005)		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	October 25, 1901	4.0 cfs	May 1 – October 15 May 1 – October 15 May 1 – October 25

<sup>&</sup>lt;sup>7</sup> 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.