



# INTRODUCTION AND PURPOSE OF THIS FRAMEWORK

For around 100 years, until its removal in 2008, the Milltown Dam generated power for the Bonner lumber mill and surrounding communities.

In 2008, as part of the Clark Fork River Basin Superfund Settlement, the water right associated with the dam was acquired by the State of Montana. Parties to the settlement intended that the State of Montana would use the Milltown water right to restore Clark Fork River Basin fisheries and enhance recreational opportunities along the river corridor.

When the 2015 Montana Legislature ratified the Water Rights Compact between the Confederated Salish and Kootenai Tribes (CSKT) and the State of Montana ("the Compact", Mont. Code Ann. §§ 85-20-1901, et seq.), the Milltown Water Right was changed from a privately owned hydropower right to a publicly held instream fishery right. For ease of enforcement, the original water right was divided into two separate rights: water right

**76M 94404-01**, for the Upper Clark Fork River Basin (not including the Blackfoot River), and water right **76M 94404-02**, which is specific to the

Blackfoot River Basin. Pursuant to the Compact, both rights are now co-owned by Montana Fish, Wildlife & Parks (FWP) and CSKT and both rights are enforceable on April 24, 2025.

This Implementation Framework provides basic information on the Milltown Water Rights recognized by the Compact, informs water right holders and the public about what to expect once the rights become enforceable and what water management options may be available. FWP and CSKT plan to engage with water users to develop water management and drought plans. Much of the information applies to both the Upper Clark Fork and Blackfoot drainages, but the focus is on the Upper Clark Fork. As noted below, in the Blackfoot CSKT and FWP intend to continue to work with the Blackfoot Challenge within the framework of its Drought Management Plan.

The purpose of the Milltown Water Rights is maintenance and enhancement of fish habitat in the Upper Clark Fork and Blackfoot rivers. Though adequate flow is important year-round, and the Compact recognizes minimum flows year-round, the most critical time is typically July through September when flows are at their lowest and water temperatures are higher. The combination of low flow and high stream temperatures can stress fish populations in the short term and have negative long-term impacts. Maintaining minimum flow levels during this period is critical to sustain the fisheries.

Pursuant to Mont. Code Ann. § 85-20-1901 Art.

III(D)(5), enforcement of the Milltown Water

Right is triggered if flows fall below the minimums

described in Appendix 31 of the Compact. The

Compact recognizes the following minimum flows

during late summer:

- 500 cubic feet per second (cfs) from August 3rd to September 26th on the Clark Fork River above Turah;
- 700 cfs from July 25th through April 5th of the following year on the Blackfoot River at Bonner.

Measurements for the Clark Fork River portion of the Milltown Water Right (76M 94404-01) are taken at the Clark Fork River at Turah Bridge Gage (USGS Gage #12334550). Measurements for the Blackfoot River portion of the Milltown Water Right (76M 94404-02) are taken at the Blackfoot River at Bonner Gage (USGS Gage #12340000). Both rights have a priority date of December 11, 1904.

### JUNIOR WATER RIGHTS SUBJECT TO A POTENTIAL CALL

Under Montana water law, a downstream water user with a senior water right that is not being fully met may demand that an upstream water user with a junior right cease using that right. This demand is known as a water right call.

Under the Compact, water rights in the following categories are potentially subject to call:

- Surface water irrigation rights with a priority date between December 11, 1904, and April 24, 2015;
- Groundwater irrigation rights exceeding 100 gpm with a priority date between December 11, 1904, and April, 24, 2015;
- Any water right with a priority date junior to April 24, 2015.

## NUMBER OF WATER RIGHTS JUNIOR TO THE MILLTOWN WATER RIGHTS

BASIN	<b>PRIORIT</b> Dec 11, 1904-April 24, 2015	TOTALS		
76E ROCK CREEK	154	49	203	
76F BLACKFOOT	384	366	750	
76G UPPER CLARK FORK	851	706	1557	
76GJ FLINT CREEK	164	168	332	
TOTALS	1553	1289	2842	

**Table 1:** Water Rights Junior to the Milltown Water Right by Basin and Priority Dates.

**Source:** DNRC Water Rights Query System.

Table <sup>1</sup> shows the number of water rights junior to the Milltown Water Rights by basin and priority date, not including stock or domestic claims without priority dates or claims filed under H.B. 110.<sup>1</sup>

The Upper Clark Fork Basin was legislatively closed to new water right appropriations on April 14, 1995. Accordingly, most in-basin water rights with priority dates junior to April 24, 2015, are groundwater certificates filed as exempt wells under **Mont. Code Ann. § 85-2-306.** These rights are limited to 35 gpm or less, not to exceed 10 acre-feet per year. These rights, if used for domestic or stock purposes are unlikely to be called.

Of the 384 irrigation water rights identified in the Blackfoot Basin, 112 have already been subject to call under FWP's Murphy Right.<sup>2</sup>

#### **LIKELIHOOD OF CALL**

The historical record (Table 2, below) indicates that flows in the Upper Clark Fork rarely fall below minimum enforceable flow levels before August of a given calendar year. FWP and CSKT will monitor minimum enforceable flows throughout spring runoff and irrigation seasons, but the critical late summer period is most likely to require enforcement if flow drops below minimum levels. During low flow events, FWP and CSKT will encourage water conservation efforts aimed at minimizing stress to fish populations.

In the Upper Clark Fork, a call may be initiated on junior water rights if flows fall below the minimum enforceable flow during four out of five consecutive days. A call will be terminated once flows rise above the minimum enforceable flow rate for two out of five consecutive days. Table 2 shows the number of days in which call criteria were met between April 1st and October 31st of each year from 1985-2022. (For more detail see Appendix 1.)

	APRIL	MAY	JUNE	JULY	AUG.	SEPT.	ост.
TOTAL DAYS BELOW MIN.	25	17	27	98	306	268	49
TOTAL DAYS (1985-2022)	1140	1178	1140	1178	1178	1140	1178
PERCENT DAYS BELOW MIN.	2.19	1.44	2.37	8.32	25.98	23.51	4.16

**Table 2:** Total number of days with flows below required minimum (i.e., meeting Upper Clark Fork call criteria) at the USGS Clark Fork River at Turah gage for years 1985-2022.

<sup>&</sup>lt;sup>1</sup> H.B.110, passed by the Montana Legislature in 2017 provided Montana water users an opportunity to file claims on the use of domestic and stock water that had previously been exempt from a filing requirement. The deadline to file was June 30, 2019.

<sup>&</sup>lt;sup>2</sup> A law passed in the late 1960s authorized FWP to file instreamflow rights on blue-ribbon trout streams. Named for the sponsor of the legislations, FWP's "Murphy Right" on the Blackfoot River has a priority date of January 6, 1971. Minimum flows range throughout the year but are set at 700 cfs between July 15th and August 31st, then reduced to 650 cfs from September 1st through the end of the year.



## ENFORCEMENT PROTOCOLS

FWP and CSKT recognize that several of the tributaries present unique circumstances, and a one size fits all approach may not be appropriate to meet CSKT and FWP's objectives of maintaining and ultimately improving the fishery resource. In the long term, CSKT and FWP anticipate working with individual water users or groups of water users on alternatives to the following protocol. As explained below, those alternatives may include greater use of water commissioners or development of individual or sub-basin water management plans that could substitute for or reduce the likelihood of call. In the short term, as a starting point for enforcement, CSKT and FWP have developed the following protocol:

#### **BLACKFOOT RIVER BASIN**

CSKT and FWP intend to continue to work within the framework of the Blackfoot Challenge Drought Management Plan, where individual water users have developed their own management plans. Following one's individual plan shields a junior water right user from call of their junior rights or delays that call until flows in the Blackfoot River are well below the enforceable level of the Murphy Right.

#### **UPPER CLARK FORK RIVER BASIN**

#### FWP/CSKT JOINT CALL PROTOCOL FOR THE MILLTOWN WATER RIGHT IN THE UPPER CLARK FORK

This joint call protocol sets forth steps FWP and CSKT will take to coordinate efforts when making call in the Upper Clark Fork Basin. This protocol recognizes CSKT and FWP's respective rights to independently make call as set forth in the Compact, **Mont. Code Ann. § 85-20-1901(D)(5)**. However, through this protocol CSKT and FWP will make all reasonable efforts to ensure a unified approach to calling junior water rights.

This protocol is broken into five steps, each described in turn.



#### **ANALYZE UPPER CLARK FORK BASIN RIGHTS**

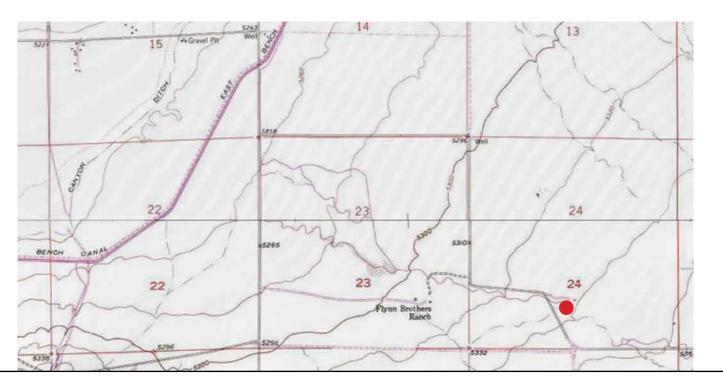
FWP and CSKT water staff will first review water rights in the Upper Clark and determine those legally eligible for call. In practice, not all eligible junior rights are likely to be called because some water rights have a more significant impact on streamflows than others. Additionally, some junior rights may be eliminated from consideration for call for reasons that include, but are not limited to, the following:

- COMMUNITY WATER MANAGEMENT AGREEMENTS: In some basins, watershed groups or
  community-based organizations have implemented water management or community drought
  response plans that take effect under low flow conditions. While no local water management
  agreements currently exist in the Upper Clark Fork, FWP and CSKT hope to establish water
  management agreements with junior water users in the Upper Clark Fork Basin. These water
  management agreements would include criteria that, if satisfied, would shield water right holders
  from call or potentially delay a call.
- WATER COMMISSIONERS: Under some circumstances, junior water rights will not be called while those rights are under administration by a court-appointed water commissioner. According to the Montana Water Court, the Upper Clark Fork Basin includes seven water distribution projects that are administered by five water commissioners. FWP and CSKT will not call junior water users that are within the jurisdiction of a water commissioner if FWP and CSKT have engaged in discussions with that water commissioner to ensure that the Milltown Water Right is being factored into the commissioners' determination of use priority. FWP and CSKT may make presentations about how the Milltown Water Right should be factored into water management decisions during DNRC Water Commissioner Training.

CIRCUMSTANCES WITH LIMITED CONNECTION TO RIVERS AND STREAMS: As noted above, CSKT and FWP will evaluate junior water rights to determine whether cessation of use would provide any benefit to the watershed. FWP staff may use aerial photographs to assess whether a call would result in water from a given right contributing to instreamflow. Local fisheries biologists will be consulted for additional input. For example, a right for a pond on a small stream that is rarely flowing during late summer is very unlikely to be called.

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**Fig.3:** Topographic map with junior water right diversion (red dot) on Sheep Creek above East Bench Canal



**Fig.4:** Aerial photograph showing same area as in Fig. 3



### **(2**)

#### STREAMFLOW MONITORING

Each year, when high flows begin to recede, FWP and CSKT Water Program staff will monitor the Clark Fork at Turah Gage **(USGS No. 12234550)** and compare the real-time data against the Milltown Water Right minimum enforceable level. This monitoring will be accomplished through the use of an FWP-created application that assesses current streamflow conditions in relation to FWP's instreamflow water rights. The application can also help identify junior rights implicated by low flow conditions and map the location of those rights.<sup>3</sup>

### 3

#### CONSULTATION AND CALL RECOMMENDATION

As noted above, calls may be made if average daily flows fall below the minimum enforceable level for four days in a consecutive five-day period. Once average daily flows in the Upper Clark Fork have fallen below the minimum enforceable flow for four out of five consecutive days (and weather forecasts indicate that stream conditions will not improve), FWP and CSKT Water Program staff will make a final determination of which water rights are eligible for call based on the considerations described above, and then follow the procedure described here:

- FWP's Water Program manager will contact and consult with the Fisheries Division administrator and/or designated division staff, the regional fisheries manager, and area fisheries management biologist. The Fisheries Division Administrator or designee will direct regional staff to prepare a statement or brief report on the potential fishery benefit of that call. If the report prepared by Fisheries supports the call, Fisheries and the Water Program Staff will jointly submit the call recommendation to the Director's Office.
- CSKT Water Program staff will provide their legal staff and Tribal Council with the call recommendation.



### FINAL CALL RECOMMENDATION AND REVIEW BY DIRECTOR'S OFFICE AND TRIBAL COUNCIL

If approved by FWP's Director and CSKT's Tribal Council, a call letter will be sent to affected junior water users. Because many water users hold both junior and senior water rights, the letters will clearly indicate which water rights are being called. The letter will provide the water right holder the option to mitigate their water use instead of simply shutting off.<sup>4</sup>



#### **EVALUATION AND REVISIONS**

At the conclusion of each season in which a call is made in the Upper Clark Fork in accordance with this protocol, representatives from FWP and CSKT will meet to evaluate the call process and determine whether revisions need to be made. Suggested revisions to this protocol will be provided to FWP and CSKT leadership for review and approval.

<sup>&</sup>lt;sup>3</sup> Currently, FWP's Instreamflow Application is only available to FWP staff on an internal website. In the future, FWP plans to coordinate with CSKT on the development of a joint, public-facing web application for purposes of administering the Milltown Water Right.

### LONG TERM WATER MANAGEMENT OPTIONS

As noted, the protocol described above is proposed as a starting point. Possible alternatives to making call are discussed here.



#### WATER COMMISSIONERS

Under FWP's existing Call Protocol an important consideration when evaluating potential for call is whether a water commissioner has been appointed in the subject basin. The process for appointing a water commissioner is set forth in **Mont. Code Ann. § 85-5-101**. Water commissioners may be appointed if there is a demonstrated need, which can be established by basin water right owners filing a petition with the district court. Although commissioners are often appointed to administer water usage on smaller streams, there are basin-wide enforcement projects that utilize water commissioners in several Montana river basins including the Musselshell and Teton.

Under this alternative, FWP and CSKT would work with water users to petition local district courts to appoint one or more water commissioners in the Upper Clark Fork.



#### **SUBBASIN WATER MANAGEMENT PLANS**

Under this alternative, CSKT and FWP would work with water users in a basin or sub-basin to develop streamflow and temperature objectives for an individual stream reach or tributary. At the same time, CSKT and FWP would work with individuals or groups of water users in those subbasins to develop water management plans and projects with the goal of improving streamflow and habitat conditions. If flow and temperature objectives are met, participating water users in that sub-basin would be excused from call or call would be delayed. CSKT and FWP note that there may be no specific time frame to accomplish a water management plan. However, until the water management plan objectives, as established through a collaborative process, have been met, junior water right users may be susceptible to call.

An important step in this process is establishing flow and temperature objectives for a given subbasin. One tool for this effort would be the minimum flows identified in FWPs Wetted Perimeter studies from the 1970s and '80s. Wetted Perimeter studies measure available fish habitat at a stream's riffle section under different flow conditions. This approach identifies both a minimum flow that achieves fish habitat objectives, and a sub-minimum flow rate at which habitat outcomes significantly decline.

Water users may meet these agreed upon targets through a combination of approaches. Reaching a target may be as simple as water users identifying water use priorities and agreeing to cut back on diversions of both senior and junior water. Successful implementation may also involve greater use of technology –such as soil moisture measuring devices and changes in management– to ensure soils absorb adequate moisture early in the season when water is more plentiful.

### OTHER APPROACHES TO SUB-BASIN WATER MANAGEMENT PLANS

The following are examples of alternative approaches to apply in a tributary water management plan. These approaches are not exclusive.

#### **NATURAL WATER STORAGE**

Traditionally, 'water storage' has meant confining water behind a human-made dam structure. Recently, high expense, lack of suitable locations, and extensive mitigation requirements have rendered the building of new, large-scale reservoirs unlikely. However, some water is naturally stored in riparian areas, floodplains, and wetlands. There, the land absorbs water during spring run-off and holds it in the shallow aquifer. The water is then slowly released back to the river over the drier summer months.

This process occurs naturally in intact river systems where a river can access its floodplain. On land where stream-floodplain connectivity has been compromised, restoration projects that reconnect the floodplain and regenerate riparian vegetation can reestablish natural storage as a viable water management procedure. Wetlands adjacent to creeks can also be restored using approaches like beaver dam analog structures which have the potential to promote the same water-storing functionality as the floodplain.

These natural storage solutions are relatively inexpensive to implement and maintain compared to traditional reservoir infrastructure. Implementing these nature-based strategies may enhance late-season streamflows in the Clark Fork tributaries and the main stem, as well as provide broader ecological services, such as providing wildlife habitat, protecting water quality, and mitigating flood events.

Importantly, these natural storage approaches are site-dependent because of local differences in soils and topography. Depending on the site, return flows may go to the main stem of the Clark Fork instead of contributing to specific tributaries.

Irrigation practices such as use of unlined ditches or flood irrigation can function similarly to floodplains and wetlands in the sense that unconsumed water is temporarily stored in a shallow aguifer and often returns to surface water sources. However, statutory restrictions on periods of diversion and beneficial uses can limit these practices' viability as a water storage strategy in Montana. For example, water may not be diverted outside of the period of diversion established by the right. Furthermore, water must be diverted for the use listed on the right (e.g., irrigation). It is also important to note that the broader benefits to riparian and wetland habitat associated with natural water storage are often not achieved unless the riparian buffer or floodplain are concurrently preserved or restored.

Note: Natural water storage projects, proposed changes in irrigation practice, water conveyance, wetland restoration or mitigation project must be carefully evaluated to determine if water right changes or new water rights are needed and compliant with Montana water law.

#### **VOLUNTARY WATER LEASING**

Some water right owners have the option of entering into a lease agreement with a non-governmental organization (NGO) or state agency as a strategy for leaving more water instream. These agreements are negotiated with the landowner and they vary in scope. Typically, irrigators choose to lease one or more water rights for all or part of the irrigation season. The beneficial use of the water right may be temporarily changed to instreamflow as part of the agreement, but it must go through the standard water right change process, which includes a technical assessment of historic use. Water right holders (irrigators) may choose to negotiate an agreement directly with an NGO and may choose to divert less water for irrigation without changing the beneficial use on the right. However, failing to change the purpose of a water right may result in those irrigators forfeiting their right to make call on upstream junior users.

#### ASSESS AND SUPPORT WATER STORAGE OPPORTUNITIES

#### 1. NRDP Efforts to Examine Storage in the Racetrack Creek Subbasin

In 2022, the Upper Clark Fork Streamflow Group identified a series of existing headwaters storage facilities with the potential to increase storage capacity. The specific sites that were selected were in the Upper Racetrack Subbasin and included facilities located on Albicaulis, Alpine, Bowman (Upper, Middle, and Lower), Big Pozega, and Little Pozega Lakes. Montana's Natural Resource Damage Program (NRDP) contracted with Hydrometrics to study the possibility of restoring these storage projects. Of the sites studied, Big and Little Pozega were identified as having the greatest potential for restoration. NRDP intends to further evaluate the feasibility and benefits of reconstructing these storage facilities.<sup>5</sup> Similar efforts to assess headwaters storage options in other subbasins may be pursued if resources allow.

#### 2. Silver Lake Pilot Studies

In 2017, 2019, and again in 2021, Montana Trout Unlimited and NRDP negotiated terms with Butte-Silver Bow County to release water from Silver Lake into Warm Spring Creek. These releases were intended to determine the efficacy of providing colder water and increased flows to Upper Clark Fork tributaries.

In 2017 these releases took place between August 31 and September 13 for a total of 900 acre-feet. In 2019, these releases took place between August 6 and August 27 for a total of 1,571 acre-feet. In 2021, the release occurred between August 2 and September 20 for a total of 3,120 acre-feet.

These releases resulted in a marked improvement in flows and temperatures in the Upper Clark Fork with measurable flow and temperatures effects as far downstream as Deer Lodge on the mainstem Clark Fork River.

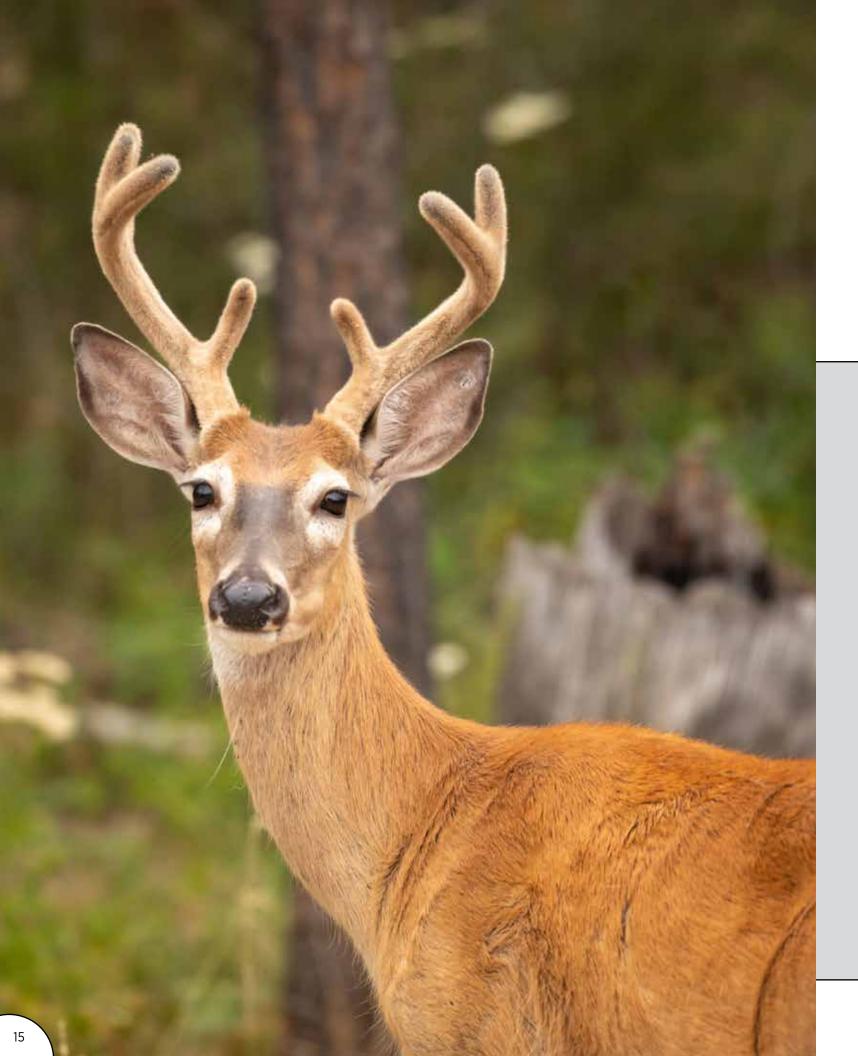
## CONCLUSION AND NEXT STEPS

CSKT and FWP sincerely appreciate your review of this document, and we look forward to engaging with water users. As noted above, the Compact acknowledges that each entity is entitled to administer the Milltown Water Rights as they see fit. However, FWP and CSKT developed this Framework with the goal of making joint decisions on enforcement of the Milltown Water Rights. Joint administration will be more effective and will provide the individual water user with more predictable outcomes.

The Implementation Framework is a starting point – one that we believe is important to have. However, we look forward to discussions with water users about possible alternatives for individuals, tributary watersheds or sub-basins. We encourage you to tell us if you are interested in discussing water management and drought response and share any ideas you have.

**Read more online** 

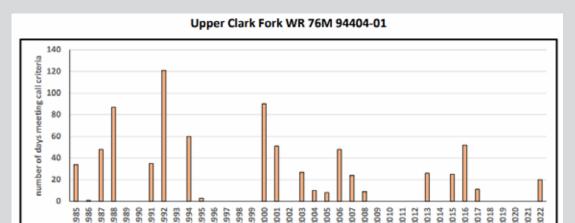
<sup>&</sup>lt;sup>5</sup> Upper Streamflow Group meeting on May 10, 2023, Presentation Titled, "Headwater Storage Update". Brian Bartkowiak. Montana Natural Resource Damage Program.



#### **APPENDIX 1**

Graph and table showing the number of days that met call criteria between April 1st and October 31st of each year for the 1985 – 2022 Period.<sup>6</sup>

#### UPPER CLARK FORK WR 76M 94404-01



		cumulative	Rank			cumulative	Rank			cumulative	Rank
	# days	water, in af,	driest to		# days	water, in af,	driest to		# days	water, in af,	driest to
year	call	to offset call	wettest	year	call	to offset call	wettest	year	call	to offset call	wettest
1985	34	6062	9	1998	0	0	34	2011	0	0	38
1986	1	154	21	1999	0	0	24	2012	0	0	17
1987	48	1847	5	2000	90	14366	2	2013	26	2181	8
1988	87	13566	3	2001	51	3867	12	2014	0	0	27
1989	0	0	13	2002	0	0	20	2015	25	2140	7
1990	0	0	16	2003	27	918	14	2016	52	3552	6
1991	35	1842	18	2004	10	716	10	2017	11	322	26
1992	121	16926	1	2005	8	95	22	2018	0	0	36
1993	0	0	28	2006	48	4754	11	2019	0	0	25
1994	60	8222	4	2007	24	827	19	2020	0	0	25
1995	3	73	30	2008	9	24	33	2021	0	0	15
1996	0	0	32	2009	0	0	29	2022	20	1138	23
1997	0	0	37	2010	0	69	31				

Figure and Table illustrating number of days meeting call criteria for April 1 - October 31, 1985 thru 2022 period

Upper Clark Fork water right abstract 76M 94404-

Clark Fork River at Turah (USGS gage 12334550)

<sup>&</sup>lt;sup>6</sup> Graph and Table developed by Seth Makepeace of the CSKT and presented to the Watershed Restoration Coalition (WRC) on April 11, 2023.

