



Aerial view of the recently restored “Across from Schneider’s Island” entrance

A MEMORABLE YEAR

The 2024 season will go down as a memorable year for the Bighorn River. In this newsletter you will read how an average water year supported healthy river flows, strong hatches and great fishing opportunities that benefited both boat and walk-wade anglers. You’ll also read that while trout populations are recovering from the historic river flows experienced in 2023, trout health remains excellent with more trout of greater size being observed and caught than in years past.

On the conservation side, there is also much to celebrate. BHRA completed the mechanical excavation stage of its Side Channel Reactivation Project – an effort that reconnected 9 Bighorn side-channels back to the main river. Completion of this work, which is drawing national attention, concludes the reactivation phase of the multi-year, multi-channel project with focus now turning towards monitoring the outcomes of reactivation success.

Will the restored channels maintain connection to the river? Will they function at minimum river flows? What age-class of trout are using them, and during what time of year? Over the next five years, BHRA is committed to answering these questions while maintaining our commitment to robust long-term monitoring of the resource. For now, we celebrate the 4.58 miles of river miles added to the trout fishery, with more to be shared with you in the upcoming BHRA Annual Report.



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RAISING \$55K FOR THE BIGHORN!**



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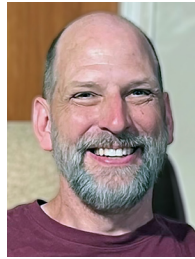
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2024 YEAR IN REVIEW

A successful wild trout experience on the Bighorn River is dependent on the environmental factors that impact it, decisions of the agencies that manage it, and the expectations of the anglers who fish it. While 2024 was a great year for flows, hatches and fishing, we did see impacts of the 2023 high water event on fish populations, despite angler catch rates being higher. Below are summaries of the 2024 season from the water operations, fisheries management and guide/angler perspectives provided by our working partners from the Bureau of Reclamation (BOR), Montana Fish, Wildlife & Parks (MFWP) and local fishing anglers.

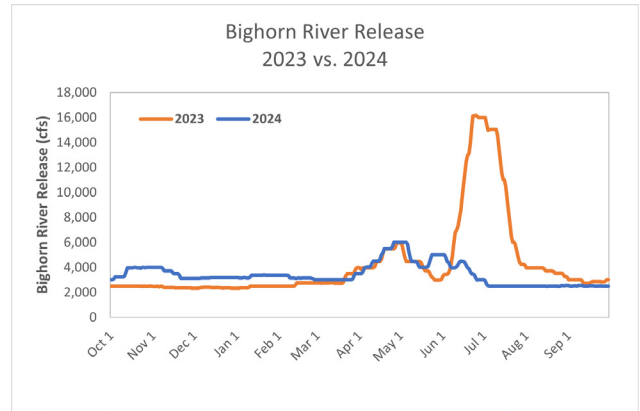
BIGHORN RIVER FLOWS & OPERATIONS



Clayton Jordan,
Supervisor, Bureau of Reclamation

After the significant runoff year experienced in 2023, the average water year of 2024 was welcomed by dam managers and stakeholders alike. While conditions were not ideal from start to finish, major fluctuations in precipitation did not result in large deviations from expected operations.

Coming off the high-water year of 2023, the hydraulic conditions in the basin in early 2024 were wetter than average with substantial October precipitation saturating conditions as the winter months approached. In response, river releases increased to 4,000 cfs early in the water year, before decreasing to 3,400 cfs in January, where they stabilized (+/- 20 cfs) by the end of February. In April, river flow increased to 6,000 cfs for an eleven-day period that included a flushing flow on the Shoshone River. In May, releases were adjusted downward to 4,000 cfs based on lower runoff forecasts and below average snow accumulation. However, above average precipitation in May required flows to increase back to 5,000 cfs.



June turned out to be a particularly dry month in the basin, with inflows lower than expected. In response, river releases progressively decreased from 5,000 cfs at the beginning of the month to 3,000 cfs at the month's end. By early July, a steady release of 2,500 cfs was released into the river until early October.

Heading into the 2025 water year with a dryer than average October, the winter release rate for the Bighorn River is projected to remain between 2,150 and 2,550 cfs. Current river releases are 2,210 cfs, where it is anticipated they will remain until January. As in years past, USBR will communicate regularly with the BHRA and basin stakeholders to keep all abreast on forecasts, current conditions and anticipated operations.



FISHLOG SHOWS INCREASED C

Despite FWP trout per-mile estimates being slightly down from 2023, BHRA FishLog data shows that more trout were caught in 2024 than in 2023, an encouraging sign for the fishery and the Bighorn angling experience. In total (between the months of May – October and from data collected

THE BIGHORN FISHERIES



Demi Blythe,
FWP Fisheries Biologist

Montana Fish, Wildlife & Parks (MFWP) has conducted standardized sampling on the cold-water section of the Bighorn River since 1992. These data are used to assess annual changes and long-term trends in brown trout and rainbow trout populations. We performed our annual spring survey downstream of the Three Mile Access Site in April of 2024. For trout greater than 7-inches long, the estimated total trout-per-mile at 1,069 (676 brown trout and 447 rainbow trout per mile, Figure 1). Both brown and rainbow trout were observed to be healthy with excellent body condition. We completed the Mallard's Landing Fishing Access Site (Mallard's Section) survey in October and observed brown trout and rainbow trout numbers slightly lower than last year, but similar to the five-year average (2019–2023). In the Mallard's Section, we estimate there are a total of 831 trout-per-mile (572 brown trout and 264 rainbow trout-per-mile, Figure 2). Excitingly, we observed evidence of good recruitment for both trout species based on the number of fish smaller than 6-inches. Overall, the 2024 surveys went well, and we captured many large, memorable (brown trout – 23" to 25"; rainbow trout – 25" to 27.5") fish.

Although the 2023 high flow event had some effect on the Bighorn River wild trout population, our estimates show that declines are within a normal range of variation based on over 30-years' worth of data, suggesting an overall stable trout population. We also observed signs of a stable population during this year's surveys, which includes multiple size classes of brown trout and evidence of rainbow trout recruitment. However, population dynamic factors such as growth, recruitment, and mortality for both trout species in the Bighorn River are incomplete. Moving forward, MFWP plans to collect information to better understand these factors that control population variability to create specific management goals. Starting in spring 2025, MFWP will implement the use

of small PIT tags (passive integrated transponders- essentially small scannable tags) to gain additional insight on growth, movement, and mortality of wild trout in the Bighorn River. PIT tag data will help MFWP, partnering agencies and the Bighorn River Alliance, implement effective long-term conservation activities, like the current side channel habitat enhancement, managing angling pressure, and informing streamflow requirements.

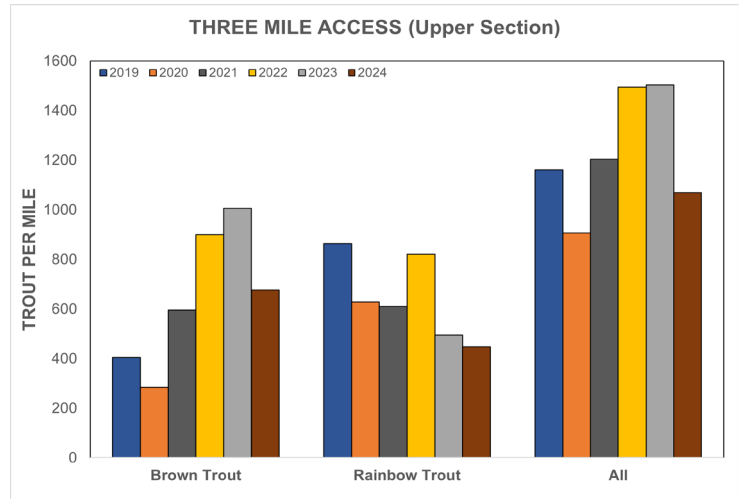


Figure 1. MFWP trout per-mile estimates from 2019-2024 for the upper section of the Bighorn River.

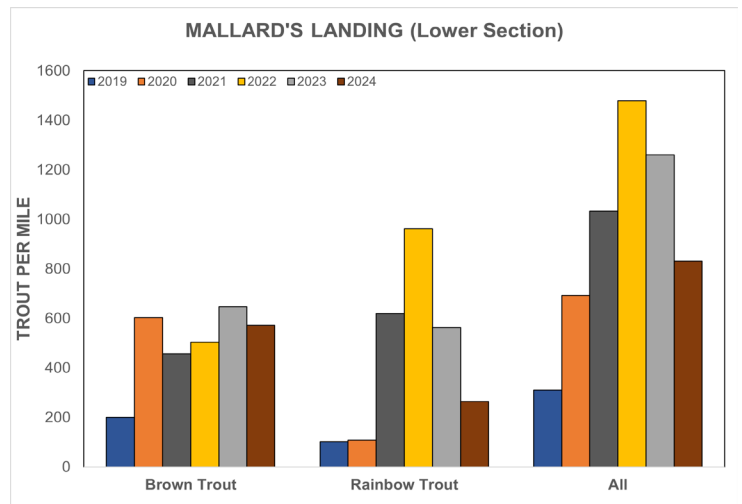


Figure 2. MFWP trout per-mile estimates from 2019-2024 for the lower section of the Bighorn River.

CATCH RATES

from 3 Bighorn guides) a total of 1,566 trout (951 brown trout; 615 rainbow trout) were caught. This is an increase from 2023 when 1,106 trout (569 brown trout; 537 rainbow trout) were caught during the same period. Daily average catch rates per-angler, per-day also improved from 7 fish per-angler in 2023, to 9 fish per-angler in 2024, with most trout caught (of both species) being of the 15 - 18-inch range!



THE FISHING ON THE BIGHORN



**John Sindland,
Guide & BHRA Board Chair**

What a difference a year makes. After a challenging 2023 season, we can all agree that 2024 could not have gone any better. The wade fishing, boat fishing, nymphing, dry flies and streamers all had their moments and then some. Most importantly, the fish were in tremendous shape – healthy, large and beautifully colored.

The best Blue-Winged Olive fishing was probably in March. The hatch started earlier than in years past, with the fish rising from Afterbay all the way downstream to Mallards. In April and May, the river continued to fish well despite higher-than-average flows. While these flows somewhat diminished the dry-fly game, they ignited the nymph fishing which remained good throughout the summer.

The big event of the summer was the PMD fishing – which was heavy and long. Also of note were the Tan and Black Caddis, Yellow Sallies, and Tricos. While not

nearly as good as the PMD's they made for some great fishing.

In conversations with long-time outfitters and guides Mike Craig, Curt Collins and Steve Hilbers, all believe 2024 contained some of the best fishing they've ever seen. Personally, I think it was outstanding, but I also realize that fly-fishing preferences have changed over the years and amidst anglers. Back in the 1990's, when I started fishing the Bighorn River, the primary focus was wade fishing with dries, nymphing hatches and streamers. Today, that method has seemingly shifted with more folks opting for the boat indicator experience - a style that is more accommodating to novice anglers or those not comfortable with wading.

Regardless of how fishing style has changed, 2024 was a very good year for the river and its anglers. The flows could not have been better, and the completion of the multi-channel side channel reactivation effort brings great promise. It's very exciting to look into the future and potentially see the impact this restoration work will have on our fisheries. My hunch is it will be a good one.

BHRA RECIPIENT OF USFWS GRANT

Federal funding has been awarded to BHRA by the USFWS Great Plains Fish Habitat Partnership program, in support of annual side channel monitoring on the Bighorn River. A total of \$65K will be available for the BHRA to use

over the next three years to support monitoring of restored channels over time. Monitoring will include geomorphic evaluations, discharge monitoring and habitat surveys to help BHRA and partners evaluate long term channel success and stability.



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All gifts \$50 or more receive a custom BHRA Christmas ornament commemorating each of the nine reconnected side channels.

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