

# Spring Newsletter

# 2018

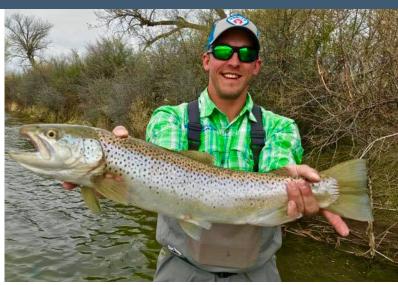
### United in the Fight for Change

Anne Marie Emery, Executive Director

On all river systems, the health of the river, its wild trout populations, and recreational opportunities are directly dependent on flow releases. On undammed systems, the timing, duration and magnitude of releases is determined solely by Mother Nature which, depending on snow melt timing and precipitation, can vary from year to year. On dammed systems like the Bighorn, precipitation is determined by Mother Nature, but adjusted in terms of storage, discharge and delivery by the Bureau of Reclamation (BOR), who has the ability to store the deliverables of Mother Nature to achieve needs of irrigation, flood control and hydro power production.

Dams work to curtail the unpredictability of nature through reservoir elevation management. In dry years, dams act conservatively, reducing outflows and storing water to ensure operational objectives can be met. In high water years, reservoir elevations are drawn down to allow for capture of high inflows, so that needs downstream of the dam are not compromised with flooding. Yet, nature is unpredictable, and occasionally events occur that result in undesirable outcomes, even with the buffer of dams. In those years we depend on BOR to adjust, compromise and learn. On the Bighorn, the occasional high water event has evolved into a decade long trend, and we are still waiting for BOR to adjust.

Since December, the Bighorn Alliance has committed its time and resources to a public campaign to demand changes to flow management practices out of Yellowtail Dam. This effort, which has united fisherman, agriculturalists, ranchers, land owners, businesses and public officials has resulted in a powerful and collaborative grass roots effort that is collectively promoting awareness and initiating change to current water management practices that have failed to adjust to a decade of high water. Through the distribution of a campaign video and economic report, the Alliance has garnered support from Governor Steve Bullock, Senator Jon Tester and the Montana Fish and Wildlife Commission who have each submitted letters of concern to the Bureau of Reclamation, encouraging the federal agency to make necessary revisions to operating criteria to prevent further damage to downstream resources.



Impressive Brown caught on the Bighorn this May. Photo courtesy of Eagle Nest Lodge.

Alliance pressure coupled with political support has rendered positive actions from the Bureau of Reclamation that are evident from actions taken by the agency this year, especially when compared to last year. Despite a lower snowpack than 2017, all basin reservoirs began evacuating water much earlier in preparation for higher than average inflows. This action, in addition to recent inflow forecasts decreasing by 125,000 acre feet, equates to 2018 being a high, but more manageable water year. However, the fact remains that reservoir elevations continue to remain at "average" levels despite "above average" precipitation and inflows which is cause for concern should we experience a major weather event.

A more promising action brought forth through this campaign is the initiation of a comprehensive review of the Yellowtail Dam operating criteria. This review, which includes BOR, the Alliance and various stakeholders, recently conducted a statistical analysis of operating criteria to compare dam operations (continued on page 3)

#### **Current River Stats**

- River Flows 8,000 cfs
- Reservoir Level 75% full



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### **Upcoming Events**

- June 22nd -**Bighorn Carp Tournament** 

- July 7th -**Wild Trout Society Social** 



# **Looking Forward**

## Message from the President

What a year for the Bighorn River Alliance. The information contained in this newsletter will give you a glimpse of everything we are accomplishing, as well as what we have ahead of us moving forward. None of this work would have been possible without the support of our general membership as well as the Wild Trout Society, and I want to thank everyone who is committed to the Alliance and our cause. Much more needs to be done to ensure the Bighorn is protected and nourished, so please make sure to renew your membership, whether it is a general membership, a business membership, or a Wild Trout Society membership- it all matters. We will continue to keep you informed and updated as we continue our efforts with the Bureau of Reclamation, and begin new conservation efforts through our new research initiative. From all of the board of directors, thank you. We will see you on the River!



Bighorn Alliance president Rick Gehweiler

#### Spring Membership Raffle

Your membership with the Bighorn River Alliance is the backbone of our work and progress. Please consider renewing your dues to help us continue our work to preserve and protect the Bighorn River. Renew your membership and return your raffle tickets before June 22nd to be included in our exclusive membership raffle. If you have already renewed for the year, simply return your tickets and you will be entered into the drawing to win the below items!



Sage X Series Rod 4 PC-5 WT- 9'0 L Retail Value: \$900



Sage Spectrum LT Stealth Reel Retail Value: \$350

# **#SAVE THE** HORN

## View our Campaign **Materials**

- Save the Bighorn Video
- **River at Risk Economic Report**
- **Press Releases and Podcasts**
- **Letters from Elected Officials**

www.bighornriveralliance.org Click On Save the Bighorn

#### NPS Hires New Superintendent

After over a year with no permanent superintendent hire, the National Park Service (NPS) has hired Mike Tranel to serve as full time superintendent of the Bighorn Canyon National Recreation Area. Tranel, who grew up on Montana and Wyoming ranches not far from Bighorn Canyon, will directly oversee the two-state recreational area. Scheduled to begin in May, Tranel will bring a NPS voice that has been missing from current water management discussions. We look forward to welcoming him to the area and introducing him to the Bighorn River.

#### Emerald Shiners, A Bighorn Forage Fish

If you have been on the Bighorn River this spring, you have likely noticed large numbers of small forage fish that Bighorn trout are feeding heavily on. These fish, known as emerald shiners are native to Montana, but historically were not found in Bighorn reservoir after it filled. In the mid 1990's, Wyoming Game and Fish introduced the species into Boysen reservoir as a forage species for other fish. By 1997, huge schools of emerald shiners started to show up all over the reservoir. After a successful production year last year, emerald shiners are currently entering the river through the spillway, where downstream wild trout are actively feeding on them. Adding a streamer shiner imitation to your fly box is highly recommended.

# Our Work

#### Continued from page 1

of the following time periods: 2010-2017, 1993-2009 and 1967-1992 to determine if and how operational changes between pre-criteria and post development criteria have impacted power generation, flood control, river flows and reservoir levels.

To date, this review has revealed what the Alliance has stated for years: BOR has grossly under-predicted their April through July inflow forecasts. In fact, BOR has under forecasted winter inflows six out of the seven years the forecast equation has changed, with 57% of their April 1st forecasts being outside of their minimum/maximum forecast plans. In 2017 alone, the agency under forecasted run off by 1 million acre feet, near the entire capacity of Bighorn Reservoir. The result of this massive forecast error equates to nearly a decade of sustained high flows on the Bighorn River which impacts recreation, erosion rates and flooding, costing downstream stakeholders millions of dollars.

"In 2017 alone, the agency under forecasted run off by 1 million acre feet, near the entire capacity of Bighorn Reservoir."

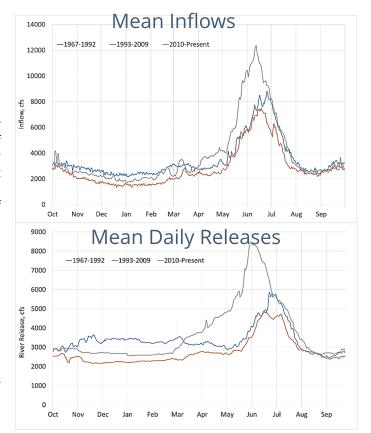
From the graphs shown (right) it is clear that the Bighorn basin has experienced higher water events during the 2010-present period. As a result, river releases have also been higher. However, reservoir elevations during this same period are also higher, meaning that less storage space is being made available than previous time periods to capture and buffer the effects of these events on the downstream river. This indicates that 2010 changes to operating criteria, which resulted in higher spring reservoir elevations, are not sufficient to handle high water years. This needs to change.

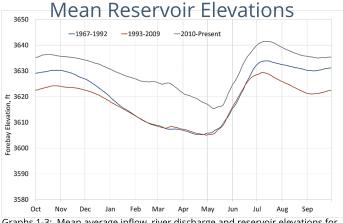
In July, the Alliance will meet further with the technical work group to discuss ideas for possible criteria changes, based on advanced modeling program results. Results from both the statistical analysis and modeling efforts will define proposals to improve operating criteria with potential changes being decided on by November.

As the only organization specifically dedicated to protecting the Bighorn River and its fishery, we are hopeful that our efforts will result in changes that will benefit all stakeholders by returning the shared risk of high/low water years between upstream and downstream users.

#### BHRA Launches Research Initiative

The Bighorn River Alliance Research Committee, chaired by Dr. Jim Chalmers, is excited to announce a new research initiative aimed at increasing the current knowledge base of the Bighorn River and the ecosystem it is a part of, with the goal of ensuring the long term health of the river. To assist with the design and focus of this effort, the Alliance has retained a core of respected scientists with extensive knowledge and experience in the Yellowstone Basin whom will work with the Alliance as part of a technical advisory committee to design a broad outline for a 10 year research plan that will be presented to stakeholders and members by late summer. To help direct research directives, the technical advisory committee is currently working with Rocky Mountain College and various environmental scientists to compile an annotated bibliography on all research that has been conducted on the Bighorn River. This bibliography, which will be completed by the end of May, will build





Graphs 1-3: Mean average inflow, river discharge and reservoir elevations for the time periods 1967-1992 (blue), 1993-2009 (red) and 2010-present (black).

upon our understanding of what work has been done, as well as serve as an important reference moving forward.

The overall objective of this ambitious research initiative is to create a long term monitoring base that is essential to understanding the interdependences with the Bighorn ecosystem and the way in which they may respond in the future to the external impacts of both natural and human causes. Through this understanding, policy and management practices can be implemented and pursued to promote the long term health of the system. The Alliance views this initiative as an essential activity for the fulfillment of our mission to preserve and protect the Bighorn River. We will keep you updated on its development.

# Bighorn River Day and Carp Tournament

Benefit for the Bighorn River Alliance



## FRIDAY, JUNE 22ND, 2018 Fort Smith, Montana

#### Schedule of Events

Carp Tournament \$40 per team

9:00 AM Registration opens at Ok-A-Beh Marina 10:00 AM-4:00 PM Big Lips Carp Tournament

#### Benefit Dinner and Fundraiser

6:30 PM Reception and silent auction

7:00 PM Benefit Dinner. \$20 per person.

Sponsored by Wild Idea Buffalo.

7:30 PM Awards Presentation

8:00 PM Silent auction closes. Membership and boat raffle drawing!

To register for the Carp Tournament, and to learn more, please visit: WWW.BIGHORNRIVERALLIANCE.ORG

















# Win an ADIPUSE drift boat!

#### Bighorn River Day and Carp Tournament

Join us for a day of Bighorn celebration and participate in Montana's oldest carp tournament while supporting cold water conservation efforts of the Bighorn Alliance! On Friday, June 22nd the Alliance will host the 2018 Bighorn Carp Tournament on Bighorn Lake followed by a buffalo burger celebration and silent auction, all to benefit the work of the Bighorn River Alliance. If you would like to register for the tournament, donate an item to our silent auction, or learn more visit:

www.bighornriveralliance.org or contact us at info@bighornriveralliance.org or 406.606.2353

- Stay Connected to BHRA Online! -



Congratulations to our Fall Raffle Winners!

**Pat Evans** 

**Steve Holick** 

**Doug Unruh** 

Michael White

Thank you to all who participated in this raffle and to our prize sponsors Bighorn Angler, Yeti & Patagonia