17th Annual Yellowstone River Cleanup

Float day - 6 Drift boats, 12 Canoes, 1 Kayak



Our river research crew had a motto this summer "Don't return to the boat empty handed!" Even after many years of tire removal, we collected a record 390 tires this year compared to 719 over the previous 16 years. The game changed this year with our jet boat which allowed us to remove far larger tires (max 355 lbs).





Kalon Sheldon and Lucas Madplume – Just another day on the river with 21 tires.

Our focus on tires is not just out of an aesthetic concern, though that is important if we want Montana to remain known as a great place for outdoor recreation. A recent paper in Science (<u>Tien et al. 2020</u>) found that tire micro particles from road wear and old degrading tires contain a compound called 6PPD-quinone. This chemical is used to prevent oxidation in tires, but is now known to be toxic to fish. We have located more than 10 mining tires that weigh over 3,500 lbs. but have yet to find a solution for removal.



In addition to tires and old rusty metal, we often find large mats of baling twine. Baling twine is particularly harmful as osprey and other birds use it as a nest liner, which can entangle and kill their young (Seacor et al. 2016). Renee Seacor is an RMC grad and early River Cleanup participant.



Much of what is collected is what we consider "legacy trash," related to the historic use of cars or large mining tires for bank armoring (now illegal). However, the picture above is evidence that there are still some bad actors out there that use the river as their local trash dump. Another site contained over 100 tires.



Drift boats are the workhorses of the cleanup float day. We can always use more help.



17th Annual Yellowstone River Cleanup Statistics

Our current area of coverage is from Reed Point to the Bighorn River

2023 Volunteers = 74

Total of **36 volunteers on the river** = 360 hrs.

Total of <u>38 volunteers on shore based teams</u> x 4 hours = 152 hrs. {Rocky Mountain College, Undammed Distilling Co. MT Retired Smoke Jumpers, Billings Clinic Foundation, ZooMontana, Our Montana, Yellowstone River Park Association}

Special Project Days = 690 hrs.
Project coordination = 70 hours
Volunteer age range 12-86 years old

Total volunteer hours = 1,272

Total value of volunteer hours (based on state rate) = \$35,616

2023 Trash Details (lbs.)

Float Day = 10,210 lbs.

Pre and Post Float project sites = 40, 153 lbs.

390 Tires New Record – Mostly collected by the turtle research team from RMC Total Pounds of Trash to Landfill (primarily weight of tires) =31,402 New Record Total Recycled Metal = 19, 020 lbs.

Items of Curiosity: Two motorcycles, large culverts, many shoes, small aluminum RV (with sink, fridge, stove, propane tank), two freezers (one full of toxic chemicals), one washing machine, many large mining or tractor tires.

Total Weight Removed from the River in 2023 = 50, 422 lbs.

New Record

Cumulative Impact (17 years)

The annual river cleanup project started with six people and three canoes and has grown to 50-75 people

32 organizations have participated

Total Volunteer Hours = 9,888

Total Value of Volunteers= \$214,283

Total Recycled Material (mostly metal) = 158, 830 lbs. An average car at the scrap yard weighs 3,500 lbs. We have removed the equivalent of 45 cars worth of metal in 17 years.

Total Pounds of Trash = 71,721 lbs.

Total Tires = 1,109

17 Year Total Weight Removed = 230, 551 lbs.

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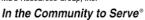






























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