

https://www.bozemandailychronicle.com/news/environment/changing-channels-park-county-ranchers-landowners-adapt-to-altered-yellowstone-river/article_39e92dc2-04b7-11ee-bb76-ab03d9165780.html

Changing channels: Park County ranchers, landowners adapt to altered Yellowstone River

Isabel Hicks Chronicle Staff Writer
Jun 16, 2023

Editor's Note

This story is one installment in a Chronicle series looking back on the historic flooding in Yellowstone National Park and southern Montana in 2022.



The Yellowstone River weaves through the Paradise Valley on Friday, June 9, 2023.

Isabel Hicks/ Chronicle

The Yellowstone River looks, and moves, differently than it did a year ago. The floodwaters that breached Paradise Valley farms, ranchlands and fishing access sites last June also changed the river channels, depositing silt on haygrounds and eroding acres of land along the Yellowstone.

As people continue repairs, the flooding has spurred conversations about where and how people should build along the river in the future.

“The river channels experienced a lot of changes. There’s new deposits, and new erosion and deposition zones, which change how landowners respond or what they’re used to seeing,” said Ashley Lowrey, administrator for the Park Conservation District and watershed coordinator for the Upper Yellowstone Watershed Group.

“Ranchers lost property that was eroded away, and others have large deposits where they didn’t before.”

Lowrey, whose work with the conservation district often involves planning for drought, said a lot of those efforts have been paused since last June as the county helps people rebound from flooding.

Many landowners did emergency repairs in the immediate aftermath of the flooding. But a year later, there’s still more work to be done, Lowrey said.

People have been rushing to do those repairs this spring before water levels get too high. Once the water reaches a certain level, it’s challenging to get into the river to do bank stabilization work or repair infrastructure, Lowrey said.

DeWitt Dominick, the 310 permit coordinator for the Park Conservation District, said there’s been a huge uptick this year in permit applications, complaints and violations. Anyone doing work that impacts area waterways likely needs a 310 permit.

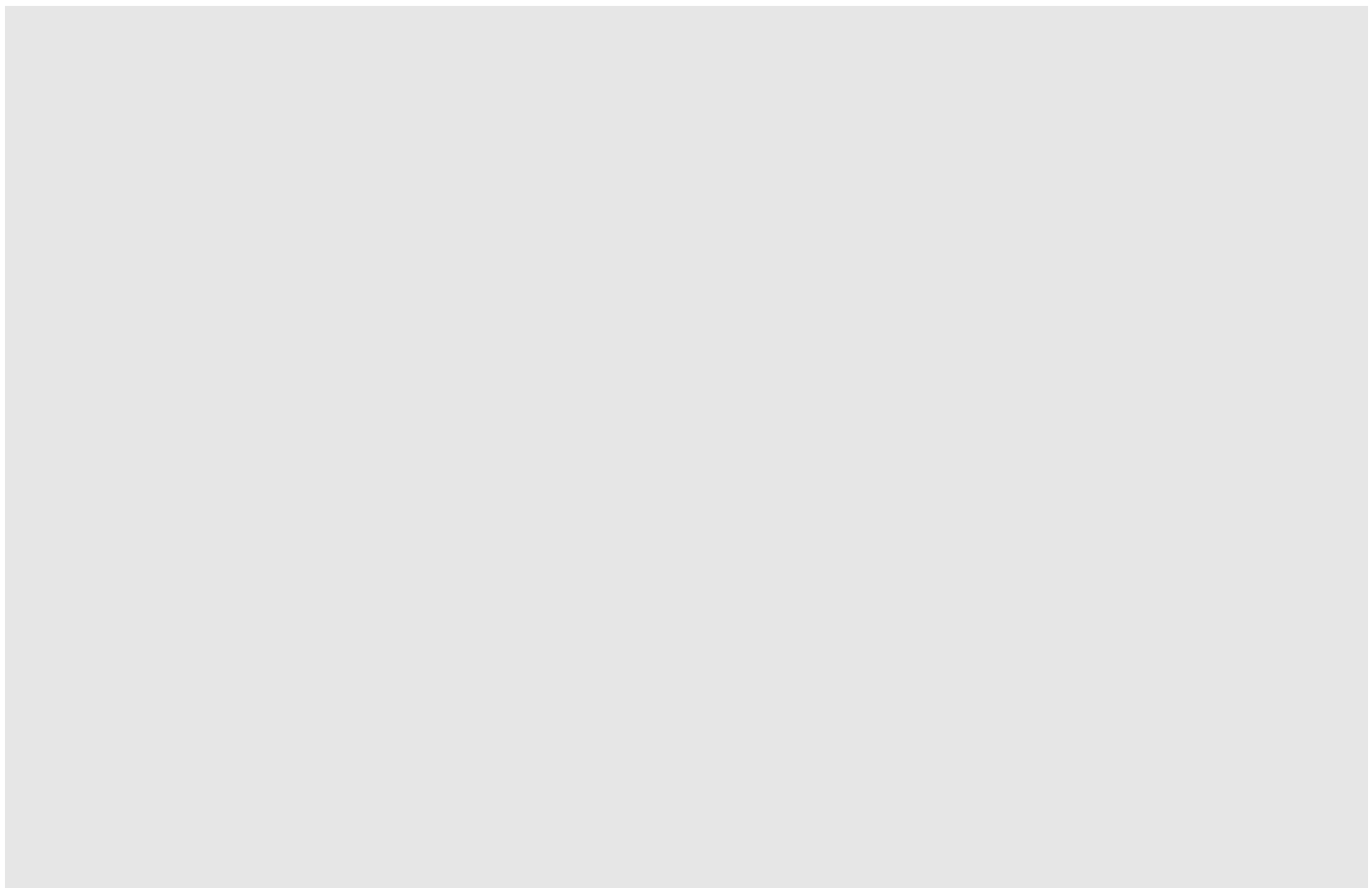
The permitting process can be difficult for landowners because it takes time, and some may have waited until the last minute to permit work they need done right away, Dominick said.

There have been some high profile violations of people doing work without a permit, which can result in a fine or that work being undone, he added.

This spring, most repairs have involved riprap placement, rock resentment and bank stabilization, and bridge and culvert replacements.

Overall, the conservation district is trying to educate landowners about how the river moves, Dominick said. If possible, people should move infrastructure away from the river banks to avoid damages.

“It’s a hard pill to swallow, but for some people, their land is just not going to look like the way it did before,” Dominick said.





A shed is upturned from flooding next to East River Road south of Emigrant on Wednesday, June 15, 2022.

Samuel Wilson/Chronicle/Report for America

As Park County becomes more developed, the river has less room to move, and more structures to damage in flooding.

Going forward, there needs to be more awareness and accountability for responsible development in a river system that people know will flood again, Dominick said.

Officials are using the flooding aftermath as a roadmap to improve their response in the future.

Last June, the Park Conservation District, Park County Emergency Management, Montana Fish Wildlife and Parks, and the U.S. Army Corps of Engineers formed a technical team to streamline support to landowners.

That work involved helping landowners identify repairs needs and the required permits to do that work. The group is also provided recommendations for rebuilding and preparing for additional flooding in the future.

“Part of the reason driving that is that after the flood, landowners didn’t really know who to contact,” Lowrey said. “So it’s an effort, at least, to attempt to solidify and coordinate response efforts.”

The Upper Yellowstone Watershed Group is also sharing a comprehensive document they made for landowners about post-flood repair considerations and how to be more prepared for future disasters. Lowrey and her partners have tried to share the resource widely, she said.

The document, which is publicly available online, details the Yellowstone River’s

channel migration zone and how the river channel has shifted since 1950.

It advises landowners to not build infrastructure within the channel migration zone if possible, or to do bank stabilization with vegetation or rip rap to decrease damage to structures.

Landowners should do a cost benefit analysis when planning repairs or for future flooding, the document said.

In an analysis, people should weigh costs of bank stabilization — permits, installation, maintenance, transporting materials, and ecological impacts — with the value of the land or infrastructure they are trying to protect. People can also consider the amount of time involved in past permitting processes.

“This analysis does not have to be overly technical. Even generating a pros and cons list of potential solutions can be beneficial to inform the next steps,” the document said.

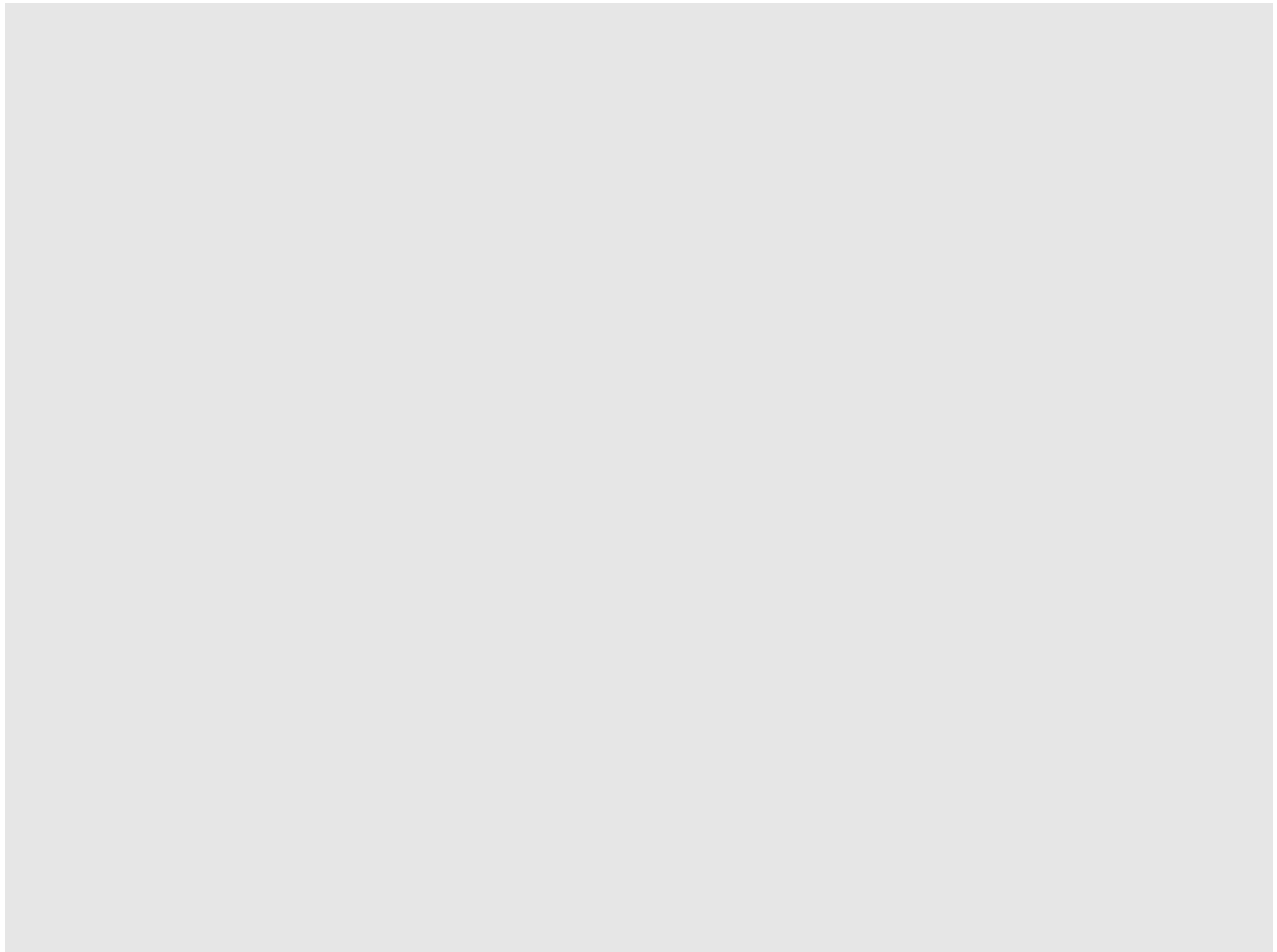
There are some damaged areas that still need repairs, but landowners are trying to find funding solutions before they can do that work.

There was an immediate disbursement of relief funding from the state and federal government right after the flooding, but that money isn’t available anymore, Lowrey said. The money had to be allocated by a certain date that wasn’t widely known. Landowners who still need support are having to look to local nonprofits, or shoulder repairs themselves.

There’s also a need for an evaluation of damaged public infrastructure, Lowrey said, like road crossings, bridges, culverts and irrigation headgates. That evaluation is something local officials and the Montana Department of Transportation are working on.

Montana Fish, Wildlife and Parks has chronicled damage to fishing access sites and is working on necessary repairs.

The Mallard's Rest and Brogan's Landing fishing access sites are still closed because of flood damage, said FWP spokesperson Morgan Jacobsen.



A bank of the Yellowstone River near Mallard's Rest is cut away on Thursday, May 25, 2023, due to flooding in 2022.

Samuel Wilson/Chronicle

Mallard's Rest, which is located south of Livingston off U.S. Highway 89 at a hairpin bend of the Yellowstone River, needs a new entry road because of erosion damage, Jacobsen said. FWP plans to build a new road following an environmental assessment process this summer.

Further upstream, FWP is looking at a more complicated fix for Brogan's Landing. The

high waters knocked out almost the whole access road, leaving a drop-off down to the river.

Jacobsen said FWP is looking at finding another parcel along the river where they can build a new access. That could mean buying land or making an agreement with a landowner or the U.S. Forest Service to replace that access point.

Other fishing accesses along the Yellowstone gathered a lot of debris and sediment but were generally cleaned up within a month after the flooding, Jacobsen said.

As Park County continues to deal with the fallout, officials hope to learn from the situation and improve their response and support mechanisms in the future.

“I think the one benefit is that next time, there will hopefully be a more coordinated response within our community. We’ve all learned a lot in this process,” Lowrey said. “And hopefully, that would be the same for some federal and state funding mechanisms to come down in a more coordinated way.”

Isabel Hicks is a Report for America corps member. She can be reached at 406-582-2651 or ihicks@dailychronicle.com.

MORE INFORMATION





When the water recedes: The historic floods of 2022 in Yellowstone National Park and Park County, and what came next

Isabel Hicks