



CHRIS BIANCHI

THE MADISON'S FUTURE AFTER FAILURE

BY KRIS MILLGATE

Mentally put yourself in a high-elevation river on a hot day. Feel cold current with your fingertips. Hear the breeze that's as consistent as the bugs. Smell wild trout finning under the flow. Next, position your feet in a steady stance, let out line and raise your rod. Now throw flies at untamed fish. Hold that

thought like so many other anglers do. You're on Montana's Madison River.

"You get attached to rivers," said Kelly Galloup, owner of Galloup's Slide Inn. "And this river is among the most used rivers."

Galloup's connection with the Madison was immediate, moving him to its banks in Cameron, Mont., in 1979. The river is in his blood and in his business, so when a dam failure starved fluid from of the fishery, the future

management regardless of the issue," says Mike Duncan, Montana Fish, Wildlife & Parks fisheries biologist. "We're going to have to get a little more proactive and more creative about how we work on things, but I don't think we're close to the point of taking a step back and looking at using hatchery fish to supplement our rivers."

Galloup stays on the Upper Madison for its stable fishery. It's relatively remote too, his other reason for staying. When

In late November 2021, that one customer walked in with an alarming question.

"How come the river is shut off?" Galloup recalls. "It was gone. There were pooling areas and there were 50 fish stuck in those things."

Two hundred people showed up to help stranded fish. When anglers, guides, state staff and energy employees arrived, they didn't have fly rods. They had buckets.

"I'm driving there and I keep saying to myself, 'I don't want to even see the river. It's going to be too sad,'" says John Frazier, Simms Fishing public relations manager. "I hit the Lower first. It looked better than what I thought it would. I keep going up. Okay, not as scary, but then I get up into the zone and it was such a bad situation."

Most adult fish moved as water disappeared, but smaller fish and recently spawned brown trout eggs didn't. They were out of water in the 1.5-mile stretch between Hebgen Dam and Earthquake Lake. A gate on the dam's intake broke, closing the door on supply. That gate is part of a dam originally built in 1915 and rebuilt in 2017.

"We definitely know we can improve," says Jeremy Clotfelter, NorthWestern



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skipped a beat for fish and for him.

He said: "The thought of the river being injured was more than business."

THE FISHERY

The Upper Madison is a world-famous, blue-ribbon, trout stream known for prolific bug hatches and 3,000 wild fish per mile. Montana hasn't used hatchery stock since 1974.

"I don't see a time coming in the near future to where we would reconsider the approach to the wild fisheries

it's two degrees in winter, no one is on the water but Madison locals, outnumbered by Yellowstone National Park visitors in summer. Yet despite angling pressure, the resource is reliable.

"You get out there and it's so alive," Galloup says. "It doesn't get hot. Drought doesn't effect it as much. It's stable and it's beautiful."

THE FAILURE

Galloup's fly shop is busy in summer, but only sees one customer per week in winter.

Energy hydro operations director. "We know certainly what failed, but we need to understand why and how so that we can mitigate that into the future."

THE FUTURE

Hebgen Dam has a future on the Madison because of climate change. It's at the top of the watershed on Hebgen Reservoir, often the coldest place in the country. Madison Dam is 50 miles downstream of Hebgen at Ennis Lake, the top of a warming stretch. Earthquake



SIMMS FISHING

Lake, created by a 7.5 magnitude rum-
bler in 1959, is between the two dams.
Quake bottlenecks runoff, but it isn't
plugged with a manmade dam like the
ones operated by NorthWestern Energy.

Madison Dam generates power.
Hebgen Dam doesn't. It stores water
for forecasted use giving fish priority.
What's in Hebgen ends up in Ennis
but not before it cools the Madison
with releases from the deep, and chilly,
depths of Hebgen Reservoir.

Upper Madison is high, fast and
cold, losing elevation as it goes. Lower

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Madison is flat, slow and warm, gain-
ing heat with every passing year. Once
the Upper dumps into Ennis, it's
beneficial as pulse flows for the Lower.
NorthWestern released 64 pulses of cold
water into Lower Madison in summer
2021. That's double the previous high of

34 pulses in one year since the program
started in 2001.

Trout like 55-degree water. The
Lower dabbles in 80 degrees on sum-
mer afternoons. Pulse flows are acti-
vated when that happens. It happened
earlier than ever and lasted longer than
ever in 2021.

“The blue ribbon fishery we have
in the Madison wouldn't exist with-
out Hebgen,” says Andrew Welch,
NorthWestern Energy hydro license
compliance manager. “Those fish are
supported by the consistent, cool water
coming out of Hebgen.”

Hebgen is the dispensary of cool
water for the rest of the system below,
turning the watershed into an unusual
case of keep a dam to keep a fishery. That
fishery includes thousands of brown
trout eggs in the river when channels
ran dry. They're still in the river, but
how many survived won't be known for
two years when they're large enough to
be captured during surveys.

Dams will still be in place when those
surveys are done and fish counted will
still be wild if the state sticks to its no
stocking policy. It plans to, just as the
power company plans to keep moving
water from one reservoir to another
while cooling the Madison as other
waterways are warming.

The Madison and all those who love it
have a harsh reality to reckon with: The
thing that hurt fish in winter is the same
thing that helps fish in summer. 🐟

*Outdoor journalist Kris Millgate is based in Idaho
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even catches them when she doesn't have a camera,
or a kid, on her back. My Place Among Fish,
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