

Confining the Yellowstone

One of America's greatest trout rivers is becoming a victim of its own wildness. The Yellowstone is the ultimate American trout river. At least, it used to be.

Article by Hal Herring.

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Free flowing along its entire length, the Yellowstone carries high mountain water 670 miles across the plains of Montana to its junction with the Missouri, just across the North Dakota line. At the peak of spring snowmelt, the upper Yellowstone is an awesome sight. Banks collapse, cottonwoods topple, willows are torn away. New channels appear, old ones become sloughs or oxbows where waterfowl breed and big hookjawed cutthroats and brown trout hunt silently. It is an ancient equation of destruction and renewal.

But part of this classic cycle is now creating problems for the increasing numbers of people who own land along the Yellowstone. In an effort to protect property from the annual floods, the U.S. Army Corps of Engineers has issued hundreds of permits for placing riprap and other bank stabilization projects that confine the river to its channel. Many believe that this confinement may be destroying the river's famous trout populations and ruining its ability to support waterfowl and wildlife.

In the summer of 1998, fisheries biologist Joel Tohtz of the Montana Department of Fish, Wildlife, and Parks surveyed major trout species in the Yellowstone River near Livingston and discovered a disturbing absence. Trout numbers were down 60 percent, and the decline was a general one—there were simply very few fish, of any age class, in this traditionally very productive stretch of the river.

Tohtz concluded that the the large number of riprap and dike projects in the area could be responsible for the decline in trout numbers. “That is a particularly unstable and heavily populated stretch of the river, and there are a lot of riprap projects in place to prevent flood damage to homes and businesses. The result is that the river there performs more like a

downspout than a natural system.” Where normally the river would simply overflow its banks into the floodplain, the confined power of the Yellowstone creates what Tohtz calls a “firehose effect” that can scour the channel down to bedrock, strip away banks, and fill pools with gravel.

Rob Hazelwood, senior staff biologist of the U.S. Fish and Wildlife Service, has long been convinced that the stabilization projects were affecting the overall health of the river. “We already knew that confining the river destroys wetlands and wildlife habitat. Nobody knows what it does to fisheries.”

There is another complication. “The Yellowstone has a given amount of power,” says Missoula hydrologist Bruce Anderson. “If the river is confined upstream or across from you, that power may well be redirected at your property, forcing you to consider a riprap project of your own.”

In late 1998, Montana Governor Marc Racicot appointed a study group to investigate what can be done to both address the concerns of landowners and preserve the Yellowstone. Says John Bailey, head of the The Yellowstone Task Force and owner of the Livingston flyfishermen's mecca, Dan Bailey's Fly Shop: “We have to lessen the need for riprapping by lessening development in the floodplain,” he said. “But who has the right to protect their ground and who doesn't?”



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