Wake-up call

This past August FWP took the unprecedented step of closing a 183-mile stretch of the Yellowstone River to all recreational activity. We made the decision after learning that a parasite had killed tens of thousands of mountain whitefish. Tissue samples showed that the deaths were caused by an infestation of parasites that overwhelmed the gills of the fish. Because we didn't know the extent of the infestation and what other factors were at play, we closed the Yellowstone until we could learn more about what was happening to the river and its fish populations.

We recognized at the outset that our decision would cause economic hardship to motels, restaurants, guides, outfitters, and rafting companies in Livingston and Gardiner. But our job at FWP is to protect the Yellowstone and Montana's other treasured trout rivers. We had no other responsible option.

We have to do what we can to help fish and wildlife be as resilient as they can.

Most people agreed with our decision. A survey by the *Livingston Enterprise* found that 93 percent of respondents supported the closure.

Parasitic infestations rarely occur in wild, healthy fish. But it appears that the combination of low flows, which crowd fish into pools, and warm water on the Yellowstone this summer increased stress on the fish and created environmental conditions that allowed the parasite to thrive. That created what Eileen Ryce, the head of FWP's Fisheries Division, calls a "perfect storm" for the parasite to thrive. She notes that in addition to killing fish outright, the parasite can also cause proliferative kidney disease in trout and salmon.

Fortunately, as water temperature cooled in September and sightings of dead whitefish declined, we were able to reopen the river.

The Yellowstone closure is a wake-up call to Montana that diseases, invasive species, and environmental changes like warming water threaten the state's fish and wildlife. Fish populations are under siege by zebra and quagga mussels, didymo, New Zealand mud snails, and whirling disease. Wildlife face chronic wasting disease, West Nile virus, epizootic hemorrhagic disease, and brucellosis.

FWP, other agencies, and conservation nonprofits monitor these diseases and invasives and work both to curb their spread within the state and prevent them from crossing state borders. But people are so mobile nowadays that it's only a matter of time before, for instance, chronic wasting disease begins to show up in Montana deer and elk. The disease is now in Wyoming, South Dakota, North Dakota, Saskatchewan, and Alberta. We're almost surrounded.

Montana will also likely face more river closures in the future. Low flows and warmer water weaken coldwater fish, making them susceptible to disease. Climatologists predict lower snowpack and less rain in the decades to come. Closures like we saw this summer could become the new normal.

It pains me to make these dire predictions. But it's part of FWP's responsibility to warn the public and prepare them for possible changes in fish and wildlife populations and related recreation.

Fortunately, we have seen some hopeful signs. Whirling disease, for instance, while still a problem, has not been as deadly to trout as many scientists and anglers feared. In fact, it appears that Madison River rainbows that survived the die-offs in the late 1990s were able to pass their resilient genes on to ensuing generations. Today the rainbow population on the Madison is back to pre–whirling disease levels.

But we can't rely solely on the natural resiliency of fish and wildlife. We must do what we can to help them be as resilient as they can. That's why FWP monitors fish and wildlife populations and inspects dead birds, mammals, and fish—to get out ahead of problems before they become severe. It's why we impose summer hoot owl restrictions and fight to maintain adequate river flows to prevent fish from getting stressed. Why we inspect watercraft and promote "Clean, Drain, Dry."

And why, when conditions require, we have to temporarily close a river.

—**M. Jeff Hagener**, Montana Fish, Wildlife & Parks Director

MONTANA FWP