

# WHO GETS THE WATER?

MARK HENCKEL

**HIGH AND DRY** Eight of the sixteen boat ramps on Montana's Fort Peck Lake (top) are now closed due to drought and water releases by the U.S. Army Corps of Engineers. Meanwhile, commercial barge traffic (above) in downstream states keeps chugging along.

# Montana and other upstream states want more of the Missouri River held in reservoirs for angling, boating, and fish populations.

Downstream states say they need the water for moving barges.

So far, the barges are winning.

BY ANDREW MCKEAN

**A** joke making the rounds in eastern Montana lately suggests that if boat ramps on Fort Peck get extended much farther, a person will be able to drive a car across the lake.

“The Highway Department will need to come up with route numbers for those ramps,” quipped one angler at a recent meeting to discuss low water at Fort Peck. This spring, the reservoir was 36 feet below normal full pool—the lowest since 1955, when the lake’s water was used to fill North Dakota’s newly created Lake Sakakawea, the next reservoir downstream on the Missouri River.

Building roads across the dry lake bed is no laughing matter for Darin McMurry. As the U.S. Army Corps of Engineers’ Fort Peck reservoir manager, McMurry is responsible for maintaining public access to the 100-mile-long reservoir. Over the last five years, the Corps has been extending, replacing, and relocating boat ramps as the lake level drops farther and farther from developed boating access points. This spring, McMurry directed the construction of a mile-long gravel road from the existing boat access at Hell Creek State Park to the nearest deep water. The new road, along with a 2-acre parking lot and concrete-slab boat ramp, will cost the Corps of Engineers roughly \$175,000. So far, “chasing” Fort Peck’s receding water with accessible ramps has cost nearly half a million dollars.

Why is Fort Peck’s water retreating so quickly? One major factor is Montana’s six-year drought, which prevents the Missouri from filling the reservoir to normal levels. But many Montanans who use or live near the lake say the drought’s damage has been worsened by bad water management. They say the Corps of Engineers stores and releases Fort Peck water to benefit Missouri River barge traffic and other politically powerful

interests far downstream at the expense of upstream anglers, boaters, and fish and wildlife populations—including several federally endangered species.

Due to Fort Peck’s chronically low water, weeds thrive on the exposed shoreline. Dust storms reminiscent of the “Dirty Thirties” blow in off the barren lake bed. More than anything, however, it’s the growing lack of lake access that’s causing consternation. At Crooked Creek, near the mouth of the Musselshell River, there is no longer even a lake to access. The marina there looks out on an expanse of mudflats, where last fall a herd of elk had to be rescued after becoming mired in the morass. The reservoir has receded 15 miles from the site’s boat ramp, which from the air looks like a gigantic bleached bone lying on the dry lake bed.

If anglers and other boaters can’t reach Fort Peck, they head someplace else—and carry their wallets with them. Business owners in towns surrounding the reservoir say the lack of access is harming their bottom line. Robert Twiford, who owns a sporting goods store in Malta, saw business decline by over 20 percent when the boat access at Fourchette Bay in Phillips County was closed in 2004 due to low water. Eight of Fort Peck’s sixteen access areas have been closed, and Twiford says that if many more shut down, his other business, a Glasgow boat dealership, will be in trouble.

## TAMING A HUNGRY RIVER

The Missouri’s widely fluctuating water has been giving people heartburn for more than a century. It was once dubbed “the hungriest river ever created.” Submerged timber snags in the shallow, ever-shifting current impaled steamboats. Powerful early spring ice jams and floods tore up banks, riverside crop land, and even entire communities along its 2,300-mile-long floodplain.

Though destructive for people along the river, the Missouri’s spring floods created wildlife habitat that sustained hundreds of fish, bird, and mammal species in the main channel, backwater sloughs, and across the floodplain. Many species, such as the pallid sturgeon, evolved in the seasonal ebb and flow of the river. Adults spawned when the river rose, and juveniles grew in slow-moving backwater nurseries. Frequent flooding also recharged river-bottom fields with nutrient-rich silt, making the Missouri one of the most agriculturally



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**ECONOMIC ENGINE** According to the U.S. Army Corps of Engineers, fishing and other recreation on Missouri River reservoirs generates \$87 million per year. The economic value of shipping gravel and fertilizer in downstream states? \$7 million.

fertile corridors in the world.

The first large-scale project to manage the river was Fort Peck Dam, completed in 1937. The dam was built to create jobs, end spring flooding, provide water for irrigation, and produce electricity. In the 1950s and ’60s, the Corps built five more dams in North Dakota, South Dakota, and Nebraska, which pool the Missouri into a series of reservoirs and allow careful regulation of its flow to the river’s confluence with the Mississippi at St. Louis.

The Corps outlines its management of

the river in a document called the Missouri River Master Water Control Manual. Commonly known as the Master Manual, it was last revised in March 2004 after an acrimonious 15-year battle among various states and interests in the Missouri River basin that still continues. Upstream states, mainly Montana and the Dakotas, want to keep more water in their reservoirs for recreation and as a hedge against drought. Downstream states, mainly Missouri, demand that the reservoirs release water to float commercial barges that carry gravel and fertilizer and to maintain municipal water supplies. Also weighing in are states in between that rely on the river for municipal waterworks and crop land irrigation. And the U.S. Fish and Wildlife Service and other conservation agencies and organizations are concerned about river habitat for fish and wildlife, including the federally endangered pallid sturgeon, piping plover, and least tern.

## NO AGREEMENT

Richard Opper thinks it's possible to find a fair compromise among the Missouri River basin's diverse interests, but his attempts to do so left him disillusioned about the process for governing the river's water. Currently head of Montana's Department of Environmental Quality, from 1998 to 2004 Opper was director of the Missouri River Basin Association, a coalition of Missouri River states and Indian tribes. During his tenure, Opper nearly achieved the Holy Grail of water management. In 1999 he led negotiations that would have given each state and interest a portion of their preferred amount of water. This collaborative agreement—states in the basin would conserve water in years of drought and then benefit proportionally in years when water was abundant—was scrapped when the state of Missouri left the negotiating table. As a result, Montana and other upstream states contend the revised Master Manual continues to favor downstream interests.

*Andrew McKean is the FWP regional information and education officer in Glasgow.*

Opper maintains that politics motivated Missouri's departure. The politically connected barge industry scrapped the compromise, threatened by measures that would have reduced the number of months it could use the river during drought years.

Opper says the state of Missouri uses the navigation industry as a tool to keep more water in the river downstream. "As long as navigation is being served, since it's the big water user, all of the Missouri's other uses, primarily municipal and industrial, are also being served," he explains.

The 15-year collaborative effort wasn't completely for naught and may benefit Missouri River management over the long haul. For example, says Opper, the revised



Master Manual contains provisions for holding back some water in the reservoirs during times of drought, something the Missouri River Basin Association recommended. "Had Missouri gone along with this in 1999, we could have had an additional five years of conservation that would have saved several million acre-feet of water," Opper says. In addition, he points out, the navigation season was reduced last year and may be shortened further in 2005.

## \$7 MILLION VS. \$87 MILLION

Even with the shortened navigation season, upstream interests maintain that navigation still receives a disproportionate amount of the Missouri's water.

"It's hard to understand how the dwindling economic impact of navigation could outweigh the tremendous business surrounding

recreational use," says Wayne Nelson-Statny, a senior fisheries biologist for the South Dakota Department of Game, Fish and Parks and a critic of the Corps's water regulation policy. Nelson-Statny points to the Corps's own estimates that the Missouri River navigation industry, which has seen its shipping tonnage decline by more than 50 percent since 1977, generates just \$7 million annually in economic benefits. Yet the recreation industry is worth more than ten times that. In 1994, the Corps estimated economic benefits of Missouri River impoundments, primarily from walleye and other sport fishing, at \$87 million.

Paul Johnston, a spokesman for the Corps's Omaha District office, says his agency apportions water according to eight congressionally authorized dictates: flood control, hydropower generation, irrigation, navigation, water supply, water quality, recreation, and fish and wildlife. "It's important to note that these are not listed in any particular order," says Johnston. In other words, the Corps is not placing any one value of the Missouri's water, such as irrigation or navigation, over another, such as recreation.

Try telling that to Don Pfau, a Lewistown sporting goods store owner and longtime participant in river basin issues. He says the Corps clearly favors downstream navigation over upstream recreation.

"Montana is providing 70 percent of the water to float those barges," Pfau says. "What do we get in return? We're told to pray for rain. Meanwhile we have stores in Circle and Jordan and across eastern Montana shutting down. When the Fort Peck [fishery] is cooking, it's a huge economic engine. But when it's down, the whole economy is down."

In addition to boat access, Fort Peck's low water is also harming the main reason those accesses exist—Fort Peck's renowned fisheries. Populations of minnows, yellow perch, and other fish that spawn on flooded shoreline vegetation are declining. So are the walleyes, salmon, and northern pike that feed on those forage species.

"The drawdown has caused a general decline in productivity, especially with

northern pike and perch,” explains Mike Ruggles, Montana Fish, Wildlife & Parks biologist for Fort Peck. “There’s no vegetation for them to spawn on, so we are now seeing very few young pike, which we need to become the larger pike of the future that anglers want to catch. Because they’re shoreline spawners and foragers, pike are a real indicator species of the habitat we’ve lost as the lake level drops.”

The low water level has also hampered FWP’s ability to capture adequate numbers of Fort Peck’s spawning walleyes, which biologists use as an egg source for rearing walleyes and stocking the fish in other Montana lakes. Another casualty is the pallid sturgeon, a federally endangered species in the Missouri River below Fort Peck Dam. Bill Wiedenheft, FWP regional fisheries manager in Glasgow, explains that before the dam was built, the river created sandbars and other sturgeon habitat during spring floods. The flow of warm river water also nourished aquatic insects and other sturgeon food. With periodic flooding now replaced by a steady flow of clear, cold water from the dam’s base, sturgeon have lost those historic habitats.

Wiedenheft has urged the Corps to conduct a test in which it would periodically send large volumes of warmer, muddier water over Fort Peck’s spillway, mimicking historical spring flows.

“Then we could see if pallids and other native fish benefit,” he says. “If they did, then one key to the recovery of pallid sturgeon might be to manage Fort Peck as a more natural system, with high spring flows and lower summer and fall releases. But we can’t do a spillway test until the lake fills.”

When that will happen is anyone’s guess. Eventually, rain and snow will restore the lake to its normal level. But that eventuality is being delayed by the Corps, which continues to release water for irrigation, municipal uses, and navigation downstream. According to Opper, the federal agency should be storing water in the upstream reservoirs, just as people save money in case of emergency.

“If you have a short drought and you don’t need to draw on your savings, you’re okay,” he says. “But if you have a long recession—or drought—and you spend your sav-

ings, you don’t have anything to fall back on. That’s what’s happening on the Missouri River. The downstream states bet we would have a relatively short drought.”

As a result, he explains, the upstream reservoirs haven’t held back the water the downstream states may soon desperately need.

“The issues that downstream states really care about—cooling water for power plants and water for municipalities and navigation—may end up without adequate water because they bet short-term self-interest over long-term conservation,” Opper says.

If Missouri and the other downstream states lose that bet, Montana and the Dakotas won’t have much sympathy. They have been suffering a water shortage on Missouri River reservoirs for years. Ruggles notes that people not familiar with Fort Peck may not understand the significance of water levels being down 5 or 10 feet in a year. “But every foot it drops can expose another 100 or more feet of weeds and mudflats and draws the water that much farther from the boat ramps,” he says.

Even worse is that each decline in Fort Peck’s water level delays recovery. “Every foot we now lose to downstream use means

we need that much more water just to get to where we were last year,” he says. “Much less back to where we want to be.”

Scientist that he is, Ruggles takes a long view of the situation. Rains will return, and he’s hopeful that downstream needs will abate, allowing upstream reservoirs to fill.

“When our water starts coming up, we’re going to cover a lot of vegetation,” Ruggles says. “We’re going to grow a lot of minnows, and we’ll have some phenomenal walleye and pike production. But to get there, the Corps has to keep more water in Fort Peck than it’s letting out.” 🐻

**IN SCARCE SUPPLY** In addition to barges and walleyes, the Missouri River’s water is also essential for cooling power plants, supplying municipalities, and irrigating crops (lower left). Of concern to conservationists is the critical importance of natural flows to maintain habitat for the federally endangered pallid sturgeon (below). Eventually, the rains will return, but until then, people using Fort Peck and other upstream reservoirs can do little but watch the water recede ever farther from shore (bottom).



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