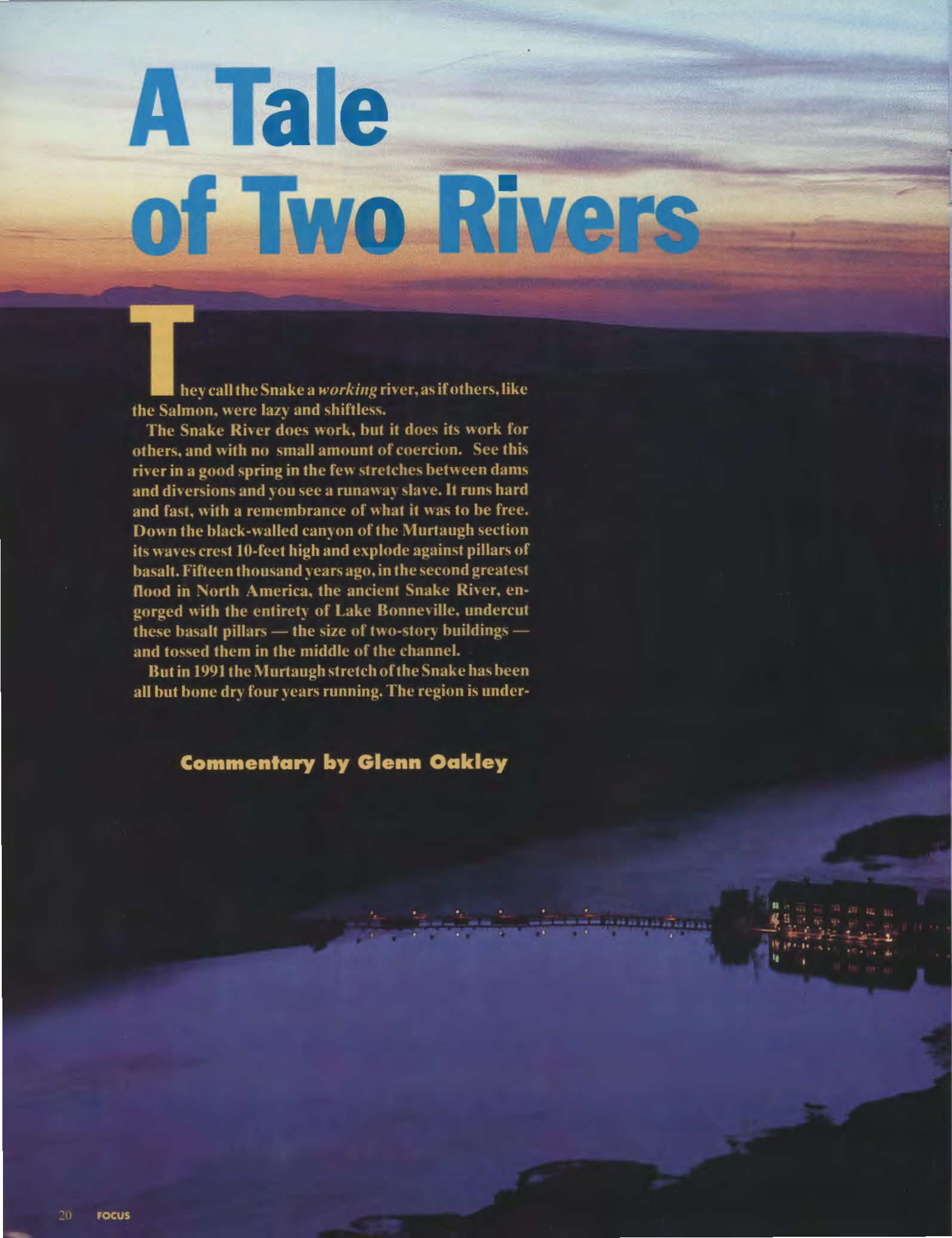
A Tale of Two Rivers

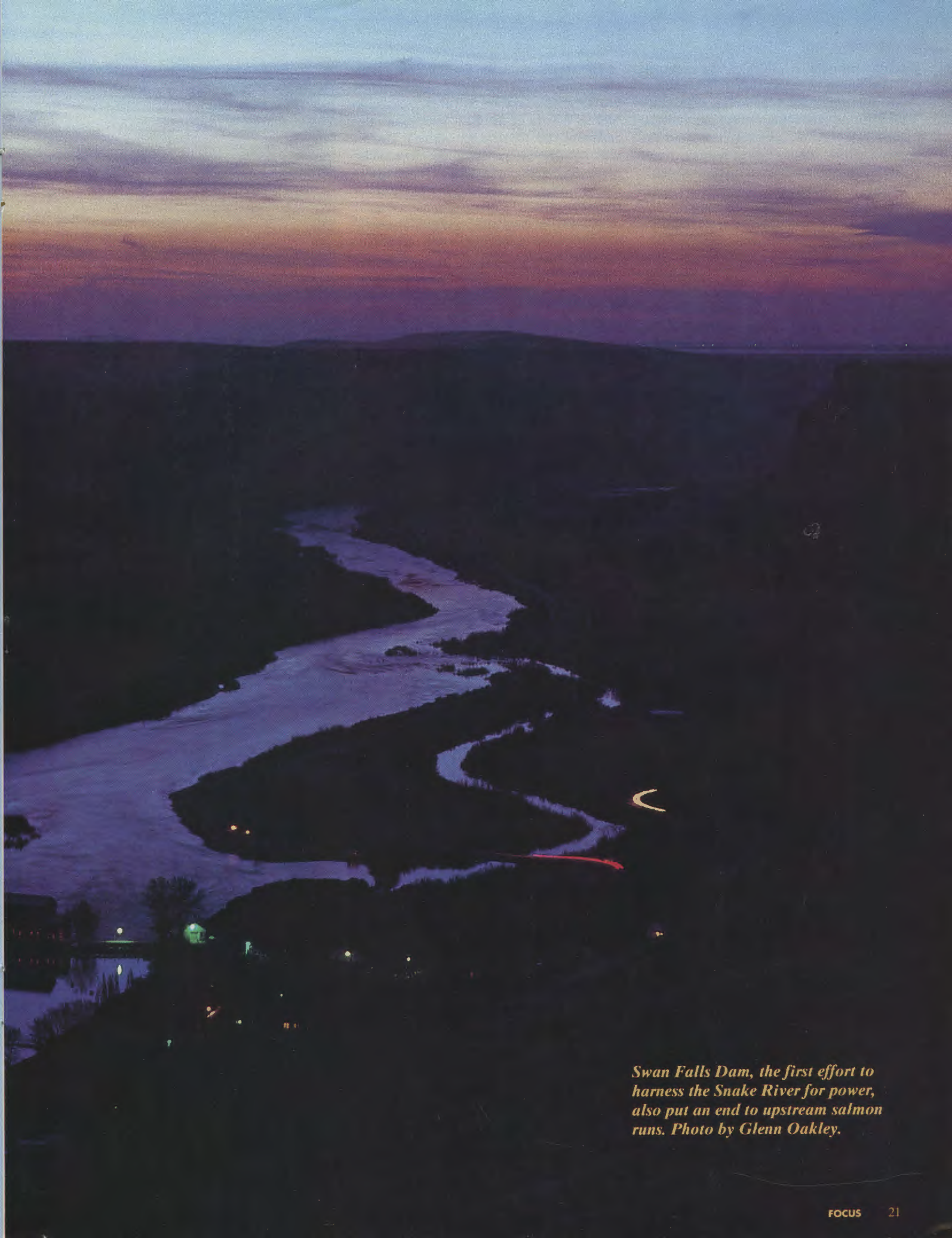


They call the Snake a *working* river, as if others, like the Salmon, were lazy and shiftless.

The Snake River does work, but it does its work for others, and with no small amount of coercion. See this river in a good spring in the few stretches between dams and diversions and you see a runaway slave. It runs hard and fast, with a remembrance of what it was to be free. Down the black-walled canyon of the Murtaugh section its waves crest 10-feet high and explode against pillars of basalt. Fifteen thousand years ago, in the second greatest flood in North America, the ancient Snake River, engorged with the entirety of Lake Bonneville, undercut these basalt pillars — the size of two-story buildings — and tossed them in the middle of the channel.

But in 1991 the Murtaugh stretch of the Snake has been all but bone dry four years running. The region is under-

Commentary by Glenn Oakley



Swan Falls Dam, the first effort to harness the Snake River for power, also put an end to upstream salmon runs. Photo by Glenn Oakley.

going a drought, and the river, of all things, is last in line for water rights. Upstream of the Murtaugh stretch the Milner Dam stops the river dry, funneling its waters off in the Northside and Southside Canals. Often, the only water continuing down the Snake River channel is that which seeps through cracks in the concrete dam.

Such is the lot of a working river.

With dams and diversions, irrigation ditches and high-lift pumps, the people of Idaho have put the Snake River to work. Cities and towns cluster along it like beads on a chain — Idaho Falls, Blackfoot, Aberdeen, Burley, Twin Falls, Glenns Ferry, Payette, Lewiston.

To be sure, Idaho would not be what it is without the manipulation of the Snake. The dams provide cheap electricity, which has attracted some industries to the state. And irrigation, also encouraged by cheap electricity rates, has made Idaho an agricultural giant in potatoes, seed crops, sugar beets and mint.

But if the Snake is a working river, it is a shamefully overworked river. In fact, from a river's perspective, it can barely work at all.

A river's work is carrying snowmelt in spring flood, flushing salmon and steelhead to the sea, cleaning and refilling sandbars, carrying the sediment of mountains. Our work for the Snake has superceded those tasks.

The Snake River is controlled like plumbing, responding less to snowmelt in the Tetons than to air conditioners in Seattle.

Salmon and steelhead are blocked completely by the Hells Canyon dams, and the Lower Granite and Goose Harbor dams on the Snake in Washington begin the killing of salmon smolt as they try to reach the sea — and finish the killing of adult salmon as they try to return to their headwaters.

The sandbars along the Snake through Hells Canyon are all but gone. "Sandbars are relatively stable features," explains Monte Wilson of the BSU geophysics department, "but the sand in them isn't. There's sand coming and going all the time." The sand is still going away — whenever Idaho Power releases a great deal of water in response to electricity demand elsewhere. But there is virtually no sand coming. The sediment from the mountains — including what should be the sandbars of Hells Canyon — is filling up the reservoirs behind the dams.

Oxygen levels have fallen so low in the reservoirs that last year 28 rare sturgeon died of suffocation in Brownlee Reservoir. The Snake receives effluent from trout farms in the Hagerman Valley, fertilizer-laden irrigation return water from surrounding farms, unadulterated excrement from feedlots and dairies along its banks, and the miscellaneous by-products of towns.

These nutrients in the slow-moving, warm Snake River have led to the proliferation of what one environmental assessment report charmingly referred to as "putrefied mats of floating algae scum." This algae has grown so thick that in order to get horses to ford the river at Three Island State Park — for a historical re-enactment of the Oregon Trail crossing — the park manager has had to clear a path through the green muck with a front-end loader.

Now consider the Salmon River. The Salmon is one of those rare things in Idaho

Right: Each year, thousands float the wilderness reach of the Salmon, a stretch of river once slated for roads, dams and logging. Below: Sand once covered the boulders on this Hells Canyon beach. The Hells Canyon dams now trap sand that would rejuvenate the dying sandbars.

CHUCK SCHEER PHOTO

GLENN OAKLEY PHOTO

and the rest of the world — a non-working river. In fact, it is one of the few rivers that still does work the way a river is meant to.

Its origins are surprisingly similar to the Snake's. The Snake is born beneath the Tetons, the Salmon below the Sawtooth and White Cloud mountains. Both headwaters could compete for the most beautiful place in America.

From its headwaters below Galena Summit, the Salmon courses 400 miles through Idaho, heading east, then doubling back on itself before finally flowing into the Snake north of Hells Canyon. For all its length, the Salmon is undammed — one of the longest undammed rivers in the United States.

Furthermore, for much of its journey the Salmon is not even followed by a road, much less bordered by cities. The River of No Return happens to drain one of the most rugged and mountainous regions in the United States, making irrigated farming, road building and settlement not only difficult but financially unrewarding.

Still, it is almost by chance that the Salmon is not dammed or roaded or logged its entire length. "The Salmon lucked out several times," says Boise writer and river guide Cort Conley.

The Civilian Conservation Corps was building a road up the river from Riggins and down the river from the town of Salmon when World War II interrupted the digging and blasting, notes Conley. Similarly, the railroad was "committed to running a route through the canyon," he says.

In the 1920s the U.S. Forest Service proposed logging the river canyon and floating the logs out on the river. The Forest Service decided the river was too rough for rafting logs, however, and abandoned its plans, says Conley.

The U.S. Army Corps of Engineers in 1962 had identified at least three dam sites on the Salmon: Crevasse Dam, which would be located 13 miles upstream of Riggins; the Freedom Dam, which would be located 17 miles downstream of Riggins; and Lower Canyon, located one-half mile upstream of the Salmon's confluence with the Snake.

Gary McMichael, acting chief of the Corps of Engineers planning division in Walla Walla, Wash., says, "By the time the lower Columbia and Snake rivers were pretty well filled up with dams, there was this anti-dam movement in the '60s. ... People said we have enough dams, we don't want any more. Assuming we kept marching on down the road building dams, we would have gotten to the Salmon."

Conley says in the late 1970s "I saw Corps of Engineers trucks below [Vinegar Creek, 15 miles upstream of Riggins] doing studies there."

Today the Salmon is visited by thousands of tourists and river runners, precisely because it is a wild, beautiful, undammed river. As if it needed an economic justification to exist, the Salmon does provide a solid, reliable, renewable source of jobs through outfitting and guiding and the general recreation business.

Its waters and those of its tributaries are the last chance for the wild salmon of Idaho. And its naturally regulated watershed provides a clear, clean, steady supply of water to downstream users.

In spring runoff it rages, flushing out and replenishing its wide, white beaches, and scaring the hell out of rafters and kayakers.

But still it is the Snake that holds the title of working river. "It is a working river," says environmental consultant Ed Chaney. "That doesn't mean you have to destroy it. Quite the contrary; we ought to show it a little more respect because it is so valuable to us."

Most people would now agree that the failure to dam, road and log the Salmon River was a blessing. But most people are equally willing to accept the notion that the Snake River must be sacrificed for the well-being of the state — that there is no way to rectify the damage done.

It seems strange that engineers who figured out how to construct such monumental projects as the Hells Canyon dams cannot figure out a way to redesign the dams to allow salmon smolt to pass through, or solve the problem of nitrogen supersaturation, which kills fish whenever water is spilled over the dams.

Wilson notes that a new dam on the Yellow River in China was built with a sediment bypass structure. Could such a thing possibly be adapted to the Hells Canyon dams, releasing the pent-up sand to the barren beaches below?

And it seems nothing short of incredible that individuals would be allowed to pollute such a public resource as the Snake River.

The argument against remedying these obvious problems is always money: *"Well, sure. We* could *do that, but it would cost so much ..."* These arguments assume there is no cost to continue doing nothing. But of course there is a cost.

The cost is borne by the salmon, which are becoming extinct; by the river which is suffocating its own fish in places; by the people who can no longer work or play in a clean, healthy river.

Not so long ago the general attitude was to do unto the Salmon what had already been done to the Snake — put it to work. Today, it would seem a loftier goal to use the Salmon as a model and goal for the Snake River — to bring the health of the Snake River closer to that of its naturally working sister, the Salmon.

The Snake may be a working river, but it does not work for free. □