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MONTANA'S

Yellowstone River

NUMBER TEN

MONTANA GEOGRAPHIC SERIES

BY BILL SCHNEIDER

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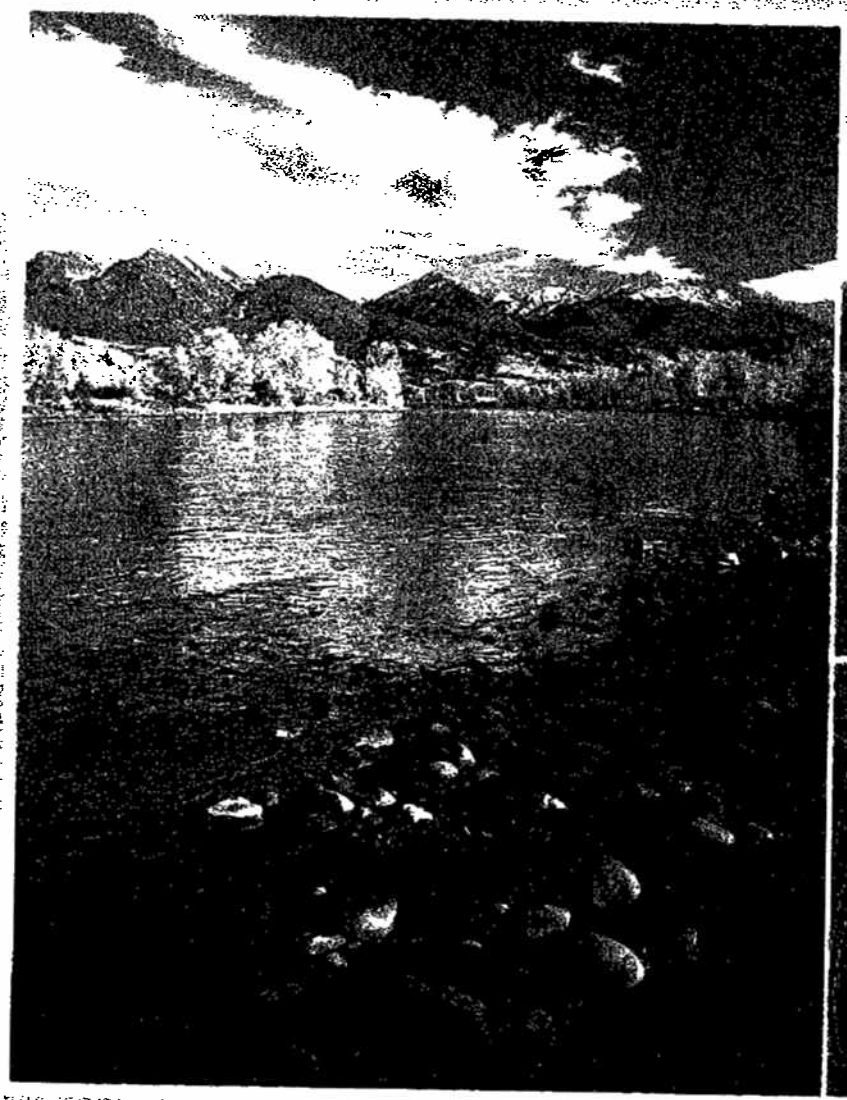
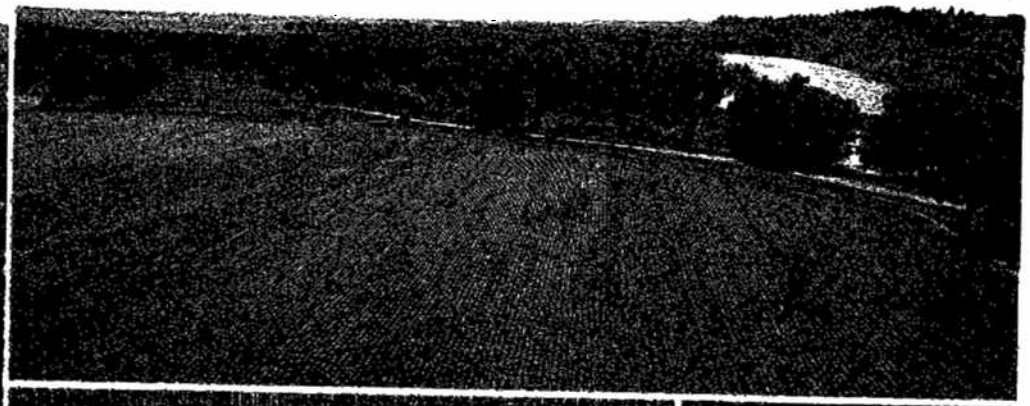
Yellowstone River





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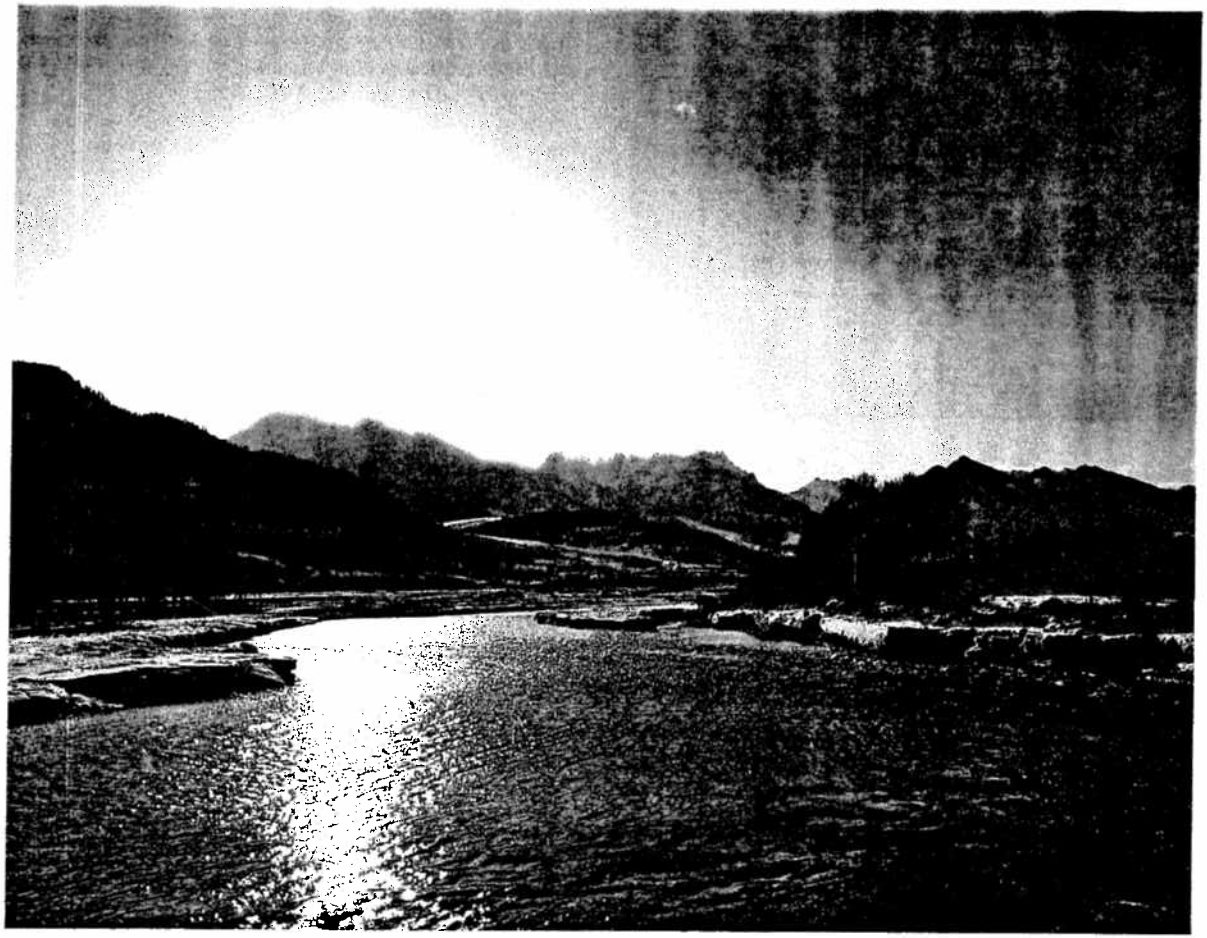
CHAPTER FIVE

Fortunately, some things never change

Preserving paradise

By Jim Posewitz



Awesome natural forces create great rivers. Accumulations of relatively trivial, unnatural forces destroy them.

The gradual demise of rivers is almost tradition in this country. The Colorado, a river once strong enough to carve the Grand Canyon, no longer has enough strength to flow all the way to the sea, as it had for eons. The Columbia, with a discharge into the Pacific Ocean twice that of the Nile into the Mediterranean, now lies sick with ecological maladies sufficient to cause several species of Pacific salmon to be reviewed for classification as endangered species. The Missouri lies silent, more than half of it flooded by huge reservoirs built in the name of flood control, power generation and navigation. The Arkansas now goes dry so regularly that farmers raise corn in the river channel.

The list goes on. Many rivers of America's industrial heartland simply lug toxic compounds to the sea. Ohio's Cuyahoga River, among the most polluted, once caught fire.

It is different along the Yellowstone. It is different today. It was different yesterday. It will be different tomorrow.

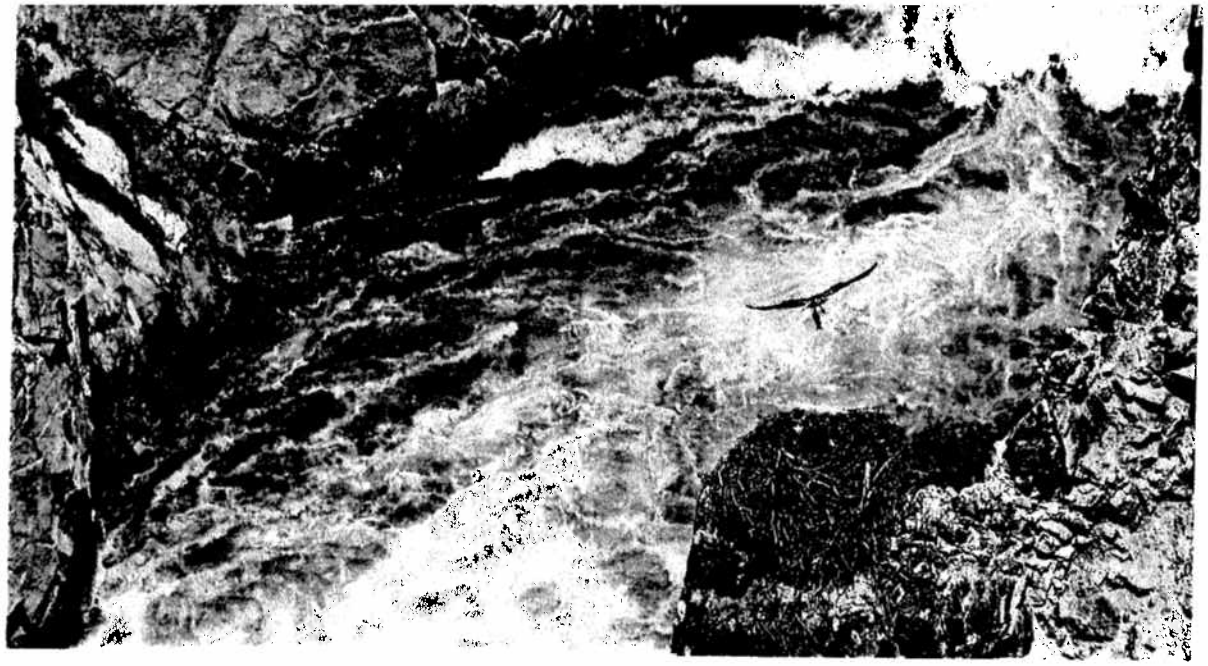
It is different because people care enough for this river to give it space. They accept from it the amenities it offers naturally. They accept it just as it is.

That it is different along the Yellowstone is no accident. An enormous amount of human energy has been expended to preserve this river. The Yellowstone has faced the same threats facing other great rivers, but it has survived. How it survived is now part of Montana's heritage, and this story should be an important chapter in history.

The Yellowstone, like most western rivers, rises in the snow-capped high country of the northern Rockies. Like other rivers, it gathers strength from a myriad of tumultuous tributaries and then heads out across the semi-arid northern plains. But unlike many of the other rivers, the Yellowstone makes it through.

Along the way, the Yellowstone is used, abused a bit, coveted a lot, argued about endlessly, physically assaulted occasionally, but it makes it. For the past

The wild Yellowstone with the Absaroka-Beartooth Wilderness as a backdrop. TOM DIETRICH.



hundred years, it has made it because it was strong. Today, it makes it because society has decided that this river has a right to survive.

When the West was won, most rivers were lost. Early settlers correctly identified water as critical to almost every human venture in the semi-arid West. Every western state made it easy to divert and, in essence, deplete rivers. When rivers shriveled and dried, few westerners cared. No tears were shed for the river. Western river law and philosophy was propelled by a simplistic slogan—"use it, or lose it." And "using it" meant taking water out of the river.

While it was a time of unity of purpose, water allocation was not in a state of harmony. Water arguments, water disputes, even water wars were common. Westerners fought over water, and governments fought over water. These fights were not over how to use water, but rather who would dominate water use.

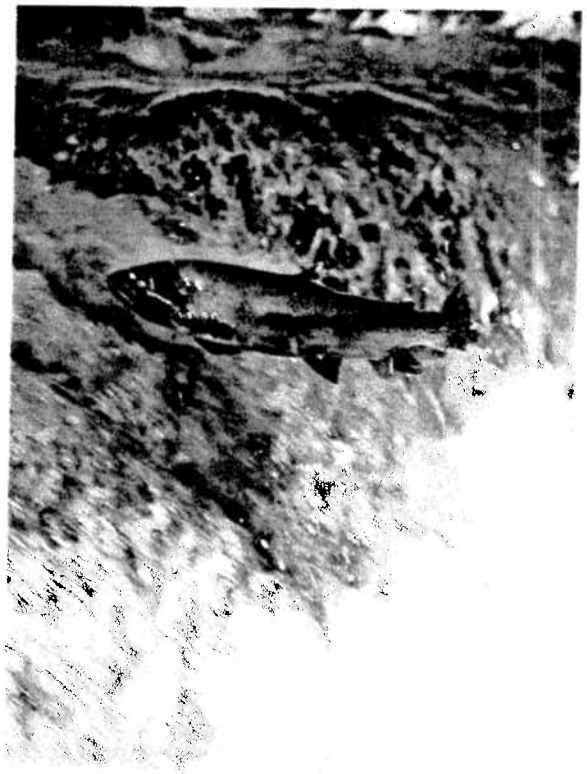
The abuse extended beyond depletion of rivers. Channels were dredged, straightened, filled. When water flowed, it carried waste and sewage. When it did not flow or did not flow enough, dams were built.

As early as 1902, dam-builders identified a site south of Livingston as a suitable place to impound the Yellowstone. A small railroad siding gave the dam site and the proposed dam its name—Allenspur. Three decades later (August 24, 1931), the Corps of Engineers held a hearing in Billings to discuss what they called the "Lower Canyon Project." And the first battle for the Yellowstone began.

Apparently, it wasn't much of a fight. The first dispute over the Yellowstone came and went with little left for historians to pick through. Damming the river lacked a constituency, primarily because water shortages were not yet a part of life along the Yellowstone and revenue from power generated by such dams could not, at the time, come close to covering construction costs. The Allenspur project would surface repeatedly through the years. In the mid-1940s, the Bureau of Reclamation took over the lead role, and in the early 1960s, the Bureau made a significant effort to promote dam construction.

At about the same time, stream abuse was attracting attention from the Montana Department of Fish and Game. Department inventories revealed that Montana's anglers overwhelmingly preferred fishing in streams instead of lakes, and high-quality streams were rapidly disappearing. The loss of such streams simply had to be arrested.

This conclusion was reached during research in the later 1950s and early 1960s. At this time, Montana did not have a single law addressing the destruction of streams. The first Earth Day celebration was still a decade away, and "damn environmentalist" was still just that—two words. If somebody needed water, they took it.



Left: Osprey with a fish approaching its nest along the Yellowstone River.

Above: Cuthroat trout struggling up the Yellowstone River in Yellowstone Park to spawn.

MICHAEL S. SAMPLE.

Protecting stream channels came first

Two Department of Fish and Game employees in Billings, Lloyd Cassagranda and Perry Nelson, began formulating a plan that would, in time, become the most agressive and successful stream preservation program in the nation. Cassagranda and Nelson saw stream preservation as having three basic ingredients—preserving physical stream channels, providing clean water and protecting instream flows. In the 1960s, not one of these three necessities was achievable under Montana law.

Preserving the physical stream channel became, out of necessity, the first priority. Working for clean water and instream flows was meaningless without a protected stream channel. If channels were kept intact, water could be cleaned up or instream water rights secured. Once the channels were destroyed, restoring a river became a remote possibility. And out of the three goals, this one seemed achievable at the time.

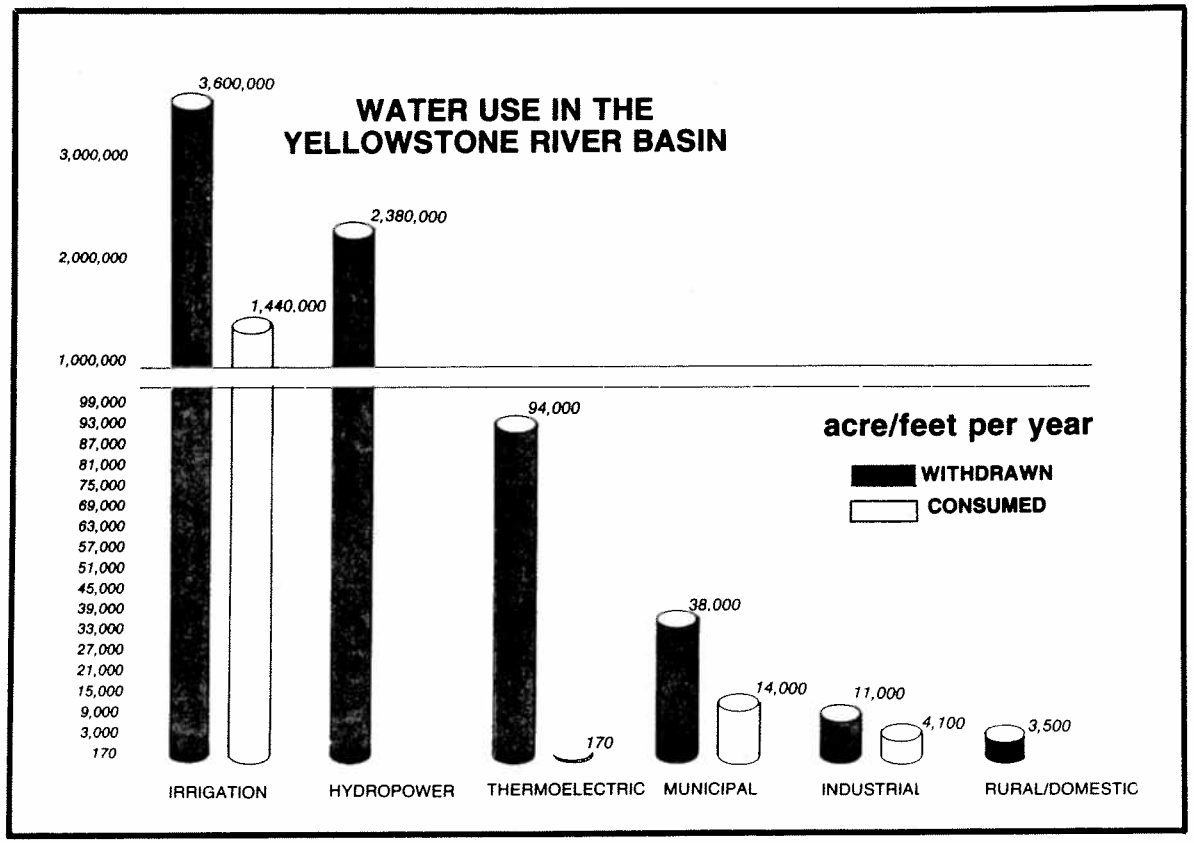
The interstate highway construction program was just getting underway, which emphasized the need to act quickly. In mountain country, interstate highways follow rivers, and engineers consider rivers easier to push around than work around.

With the decision to first seek protection for stream channels, Cassagranda and Nelson launched an effort that eventually grew into a force capable of changing society's philosophy of water use.

Cassagranda and Nelson began pushing for a Stream Preservation Act to protect stream channels. They first went to the Billings Rod and Gun Club for support, but much to their chagrin, they discovered that the rod and gunners weren't enthusiastic about taking on this cause. They then turned to the Billings Jaycees, where they received a warm reception.

The Jaycees were immediately captured by the cause and the challenge of a statewide legislative project. The Billings Jaycees' president, Harrison Fagg, was among the most supportive. Later, Fagg would serve several terms in the Montana Legislature and become a Republican leader of the House of Representatives. Throughout his public service, Fagg would remain true to stream preservation in general and the Yellowstone River in particular.

The Billings Jaycees succeeded in getting their state organization to adopt the project as a common goal. Soon, the youthful service organization had the entire state aware of the problem and its solution: a stream preservation act.



Harry Mitchell, a Great Falls Jaycee, became one of the primary lobbyists for the Montana Stream Preservation Act, and in 1963, former Governor Tim Babcock signed into law, the first stream preservation act of its kind in the nation. Mitchell was later elected to the Montana Senate, where the Great Falls Democrat distinguished himself as a conservationist and became particularly effective in legislating mined-land reclamation laws.

While the new Stream Preservation Act was being implemented, Montana conservationists turned to the second crucial goal: water quality. Montana had a water quality law, but it was neither workable nor enforceable.

Les Rusoff, a University of Montana law professor, drafted amendments to strengthen the law. With the help of Montana Wildlife Federation lobbyist Don Aldrich, the amendments were introduced in the 1969 legislature. Although corporate lobbyists worked diligently to defeat or weaken the amendments, Rusoff, a quiet scholarly man, successfully and factually countered all arguments, and the legislature added strengthening amendments to Montana's water quality law.

A year later, Montana celebrated the first Earth Day. Ahead lay the last and biggest challenge, securing instream flows for fish, wildlife and recreational purposes.

Next, water for fish and wildlife

In the West, men fight each other over women, but they kill each other over water.

Clearly the biggest battle for preserving Montana streams, and particularly the Yellowstone River, was for securing an instream allocation of water that would simply flow downstream for the benefit of fish, wildlife and recreation. Throughout the 1960s, conservationists repeatedly went to the legislature seek-

ing amendments to Montana water law to allow instream water rights. Existing water law required that to gain a water right, a user had to divert water from the stream. The Legislature had repeatedly turned back attempts to change this provision.

In 1969, James Murphy, a state representative from Kalispell, forged a compromise that allowed the Department of Fish and Game to file on unallocated water in portions of 12 streams, including the Yellowstone River upstream from the Boulder River which joins the Yellowstone at Big Timber. By 1971, DFG had filed for water on all sections of the streams included in Murphy's compromise, but the water allocation issue was still unresolved. While the sections of these 12 streams were important, most streams still remained subject to total depletion. Among the vulnerable streams was the Yellowstone from Big Timber eastward.

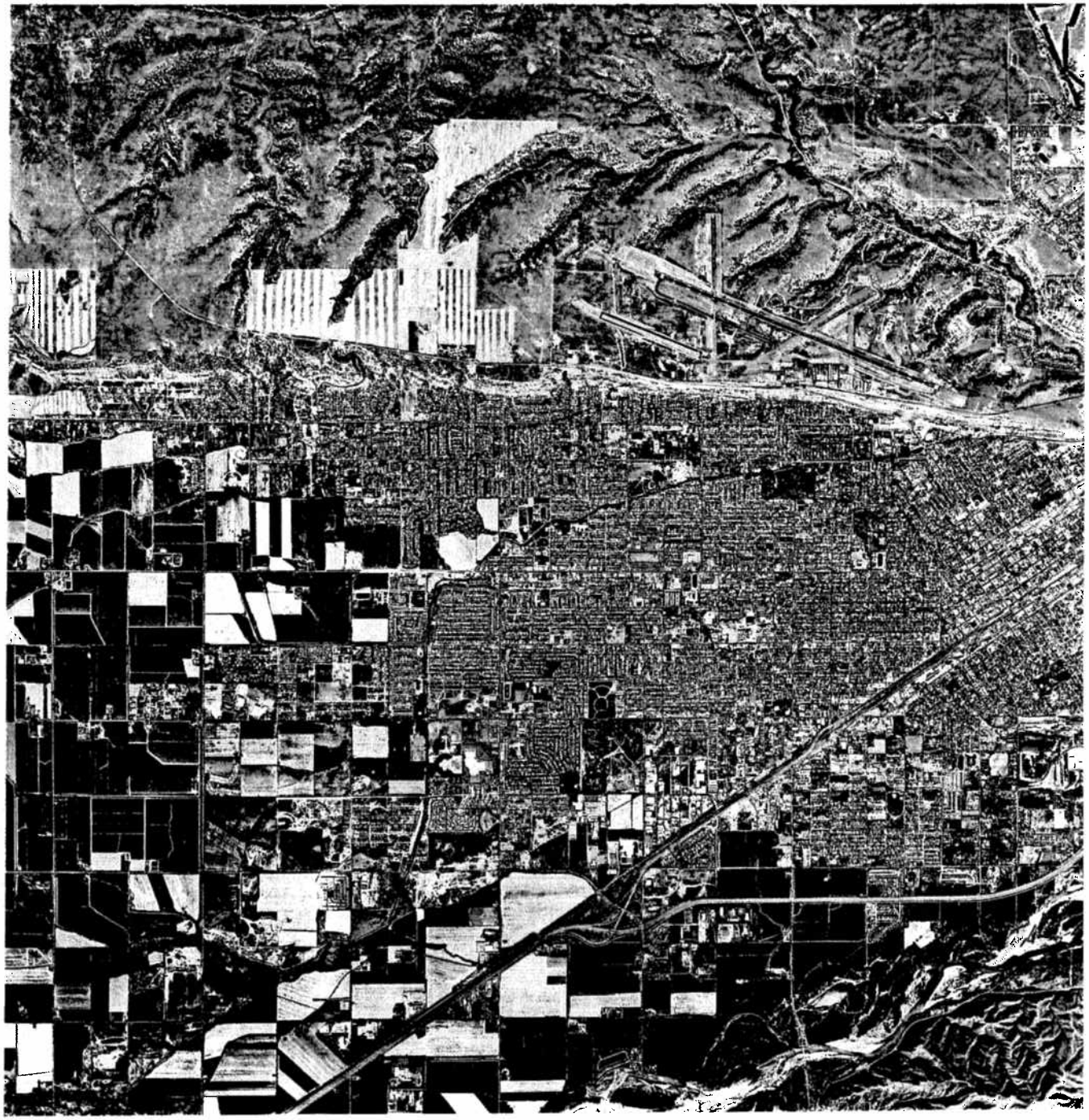
Instream flow debate heats up

Following the 1971 legislature, Gary Wicks, director of the Department of Natural Resources and Conservation (DNRC), appointed an interim committee to review the entire structure of Montana water law. Wicks also appointed Ted Doney as staff legal counsel for the committee.

Instream flows for fish,wildlife and recreation were on the committee's agenda. The committee, however, resisted the concept of allowing water-use permits for instream-flow purposes. The committee did not want individuals to be able to hold permits and obtain rights for water left in the stream.

In searching for an alternative, Doney stumbled across the concept of "reserving waters" in an old piece of legislation that had failed several years earlier. Basically, reserving waters involved authorizing government agencies to apply to the Board of Natural Resources and Conservation, a citizen board that sets policy for DNRC, for reserving water for either instream or future uses.

Wicks and Doney presented this concept to the committee and stressed the opportunity for consumptive water users to reserve water for their anticipated future needs. He did not stress the opportunity for instream water rights. The committee was enthusiastic



Infrared aerial photo of Billings. Red indicates dense vegetation such as irrigated fields south and west of town. Blue and white indicate areas of little vegetation such as heavily developed commercial districts.
U.S. GEOLOGICAL SURVEY.

about the new approach—water reservation. Thus, the opportunity for agencies to reserve water for in-stream flows moved forward in the shadow of the opportunity for consumptive users to reserve water for their anticipated or imagined future needs.. Given the water use paranoia of the time, the concept of taking care of these future water needs had tremendous appeal.

The committee's work, a proposed new Montana Water Use Act, was presented to the 1973 legislature, where it eventually won approval along with a host of other environmentally oriented bills. For the environmentalists, 1973 was the vintage year, and the new water use act was perhaps the most significant new law of that session. The new water law changed fundamentally and perhaps forever the way rivers are depleted or protected. This new law put to rest a water-use system that virtually guaranteed the depletion of rivers and replaced it with a system that allowed stream-flow advocates to compete for the water that was left.

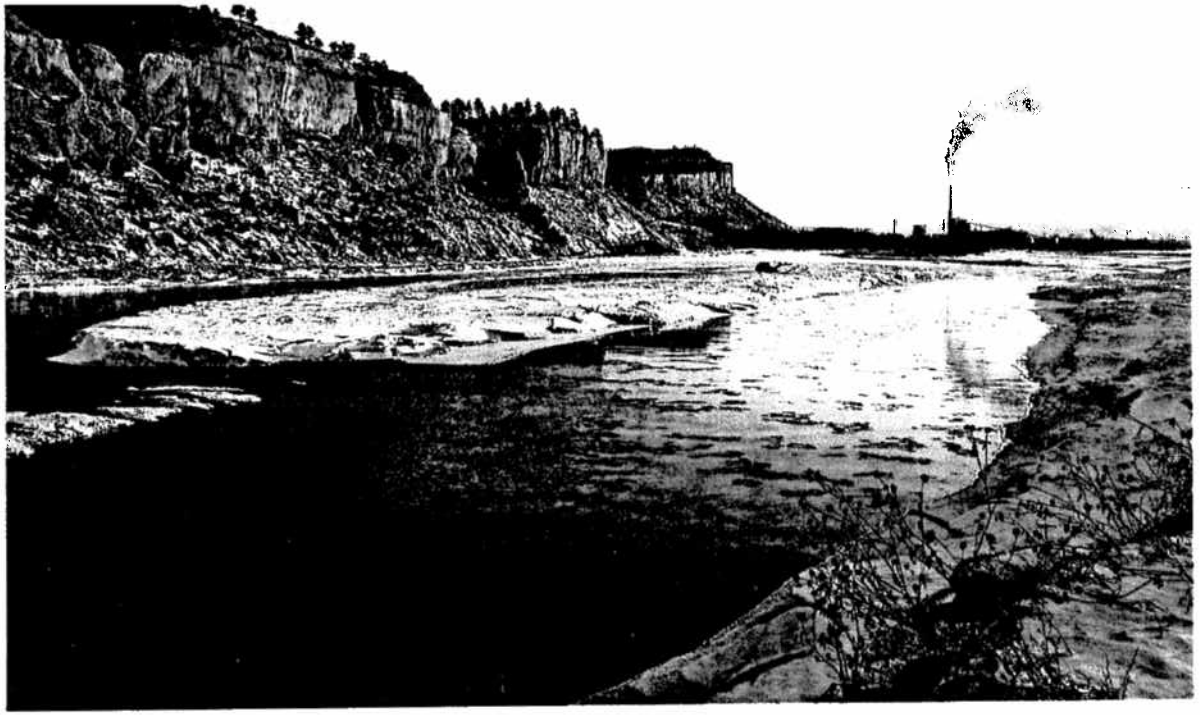
The new law changed the allocation system. Prior to its passage, anybody who wanted water simply diverted it from the stream channel and put it to their own use. While filing an official notice that that use might be helpful, it was not necessary. If this water use interfered with another user, everybody went to court to fight it out. The first user had the best legal right, but the person highest on the ditch or creek had a clear advantage.

The new law required anybody wanting to use water to apply for a water-use permit. Change had come, fundamental change. For those working for stream preservation, the opportunity to obtain in-stream flows was available—not just on 12 streams but anywhere where there was unallocated water.

The passage of the Water Use Act of 1973 followed by exactly 10 years the passage of the Stream Preservation Act of 1963. In one decade, the legal framework for effective stream preservation was completely assembled and ready for use. Protection of physical stream channels would be given additional legislative attention in 1975, but for now, the goals identified by Cassagranda and Nelson were on course.

Industrial demand threatens river

During the early 1970s, Montana found itself contending with resource issues of unprecedented magnitude. The nation was searching for alternative sources of energy to make up for perceived shortages. One alternative was returning to the use of coal, and Montana had coal. Lots of it.



Industrial use, the Corette Power Plant along the Yellowstone River Billings. MICHAEL S. SAMPLE.

The extent of the energy potential of Montana, Wyoming and North Dakota was dramatically thrust on the national scene with the publication of the North Central Power Study. The study, eventually buried by adverse reaction, served as an initial rallying point for conservationists. For the first time, the public had a chance to view the full scope of the region's energy potential. The study, prepared by the Bureau of Reclamation in conjunction with 35 major utilities, suggested 42 coal-fired power plants, 21 in Montana. These 21 plants had a projected output of 69,000 megawatts in Montana.

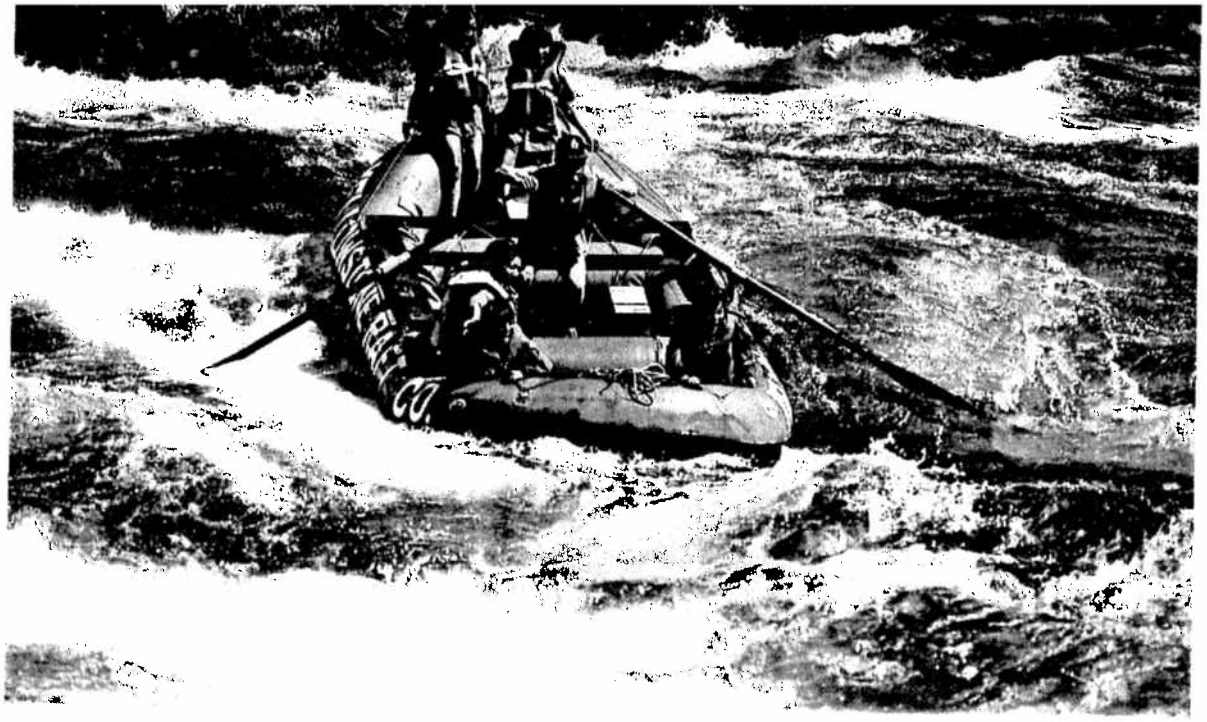
More relevant to the Yellowstone was the Bureau of Reclamation's companion study, the Montana-Wyoming Aqueduct Study, which addressed the subject of supplying water to cool this accumulation of coal-burning power plants. The only source of water was the Yellowstone River and its tributaries, and the aqueduct study suggested diverting 2.6 million acre-feet to satisfy this projected need.

The Bureau based its calculations and comparisons on average flows of the river and concluded 2.6 million acre-feet amounted to about one-third of the river's flow. But when the calculations were figured on expected occasional low flows, they showed that the river's flow would be reduced by 81 percent during a dry year.

Essentially undammed rivers, like the Yellowstone, have good years and bad years. High and low extremes in flow definitely occur. Thus, a 2.6 million acre-feet depletion would have been the end of the free-flowing Yellowstone. At this level of depletion, shortages would be inevitable, and the most likely solution would be Allenspur Dam.

As the public attempted to digest these extraordinarily high projections of water use and energy production, the Northern Plains Resource Council was created. The rancher/farmer-oriented conservation group soon discovered that industry was gathering water rights at an incredible pace. By late 1971, many large energy companies like Tenneco, Conoco, Shell, Utah International, and others already filed for 1.17 million acre-feet, had been granted options on 0.71 million acre-feet, and had requests pending for 1.48 million acre-feet per year.

The probability of the energy industry actually claiming and diverting all this water was slim. Nonetheless, the sheer magnitude of these figures and the potential threat they posed to the river and its ex-



Recreation use, floating the Yankee Jim Canyon. MICHAEL S. SAMPLE.

isting users set off an alarm. Something had to be done—now.

Since the new Water Use Act was still a few years away, advocates for the river, including the Department of Fish and Game, turned their attention to gathering the information necessary to counter a proposal to build a dam at Allenspur. The eventual depletion of the lower river would create support for a dam on the upper river to store high spring flows for use during dry summer months. This was a far-too-familiar pattern in the West.

Consequently, DFG sent one of its first ecological planning teams into the upper Yellowstone to begin gathering information about what was perceived as an inevitable battle over Allenspur Dam. Fortunately, that battle never had to be fought.

Time for new strategy

When the ice broke up in early 1973, it signaled more than a new season for the river. It also heralded a new strategy for the river's advocates. It was no longer necessary to myopically focus on opposing dam construction. Now, because of the new Water Use Act, the river's patrons could, for the first time in Montana's history, direct attention to stopping its depletion. Suddenly, it was a new ball game. It was now possible to generate an offense in a conservation battle.

The opportunity to make a claim for enough water to meet the ecological and recreational needs was at least legally possible. The prospect of developing this new game plan was tempting and exciting, but also intimidating. Developing an application for the flow reservation for the entire river system presented a formidable challenge.

Directing attention to the upper river and the prospect of fighting a dam meant focusing on only 50 miles above Livingston in the Paradise Valley, the area which would be inundated. Approaching the entire Yellowstone as an aquatic ecosystem meant taking on a project to understand, describe and defend a free-flowing river 670 miles long, fed by almost 70 significant tributaries and home of at least 50 fish species. Those contemplating a new strategy in 1973 realized that the Department of Fish and Game did not even possess the technology to sample the lower river. The department had never addressed stream flows as they affect some species. The department had never considered how stream flow affects waterfowl, beaver, or other wildlife. And finally there was no new source of financing. All that was available was the opportunity to do something never done before—to preserve a major river, the last of its kind.

Even with these problems, DFG immediately began work on the first application for reservation of flows. It was put together in a few months using available information. Instead of being supported by detailed biological facts, this application relied primarily on the amount of water necessary to keep the channel and gravel bars covered at least ankle deep. It was assembled because of the belief that something had to start the process before all the pending industrial applications could be approved or additional applications be allowed to accumulate that would have priority over the in-stream water rights. Fortunately, this first application was never needed.

The moratorium changed everything

For a three-year period, 1973-1975, the Montana Legislature met annually. And the 1974 session again took up the subject of intense interest in Yellowstone River water. This time, the proposed solution was a moratorium on any major appropriation of water from the Yellowstone River until March 10, 1977. Under the provisions of the moratorium, all applications that claimed a diversion of over 20 cubic feet per second or stored more than 14,000 acre-feet were suspended until March 10, 1977. In other words, no more large industrial applications.

This three-year moratorium gave Montana a chance to let the reservation process work. This process was expected to determine not only instream needs of the river, but also future needs of agriculture, municipalities and other traditional water users. The purpose was to reserve flows for those needs before the river was over-claimed by industry. The moratorium was an unprecedented move, and it set the tone for the events to follow.

Ironically, it was the energy industry's reaction—or perhaps, over-reaction—to energy shortages of the late 1970s and the upcoming crisis everybody expected that "saved" the Yellowstone. Excessive applications for Yellowstone River water apparently created a panic atmosphere among Montanans and made legislation like the moratorium and water use act more likely.

Immediately after the moratorium legislation passed, industry threatened a legal challenge. So the Department of Fish and Game filed its first application for reservation of flow, just in case the courts overturned the moratorium. In that event, the depart-

Flood irrigation, by far the heaviest consumptive use of Yellowstone River water. TOM DIETRICH.

ment would at least have the opportunity to fight for an instream flow, even though the application may not have been as good as it should have been or as strong as it eventually became.

The March 1974 application requested reservation of flow for the mainstem of the Yellowstone from the confluence of the Clark's Fork of the Yellowstone to the North Dakota border. Given the circumstances, the Department of Fish and Game decided to rely on the earlier filing under Murphy's compromise to protect the blue ribbon river above Big Timber. The middle river, from Big Timber to Laurel, wasn't covered under either filing.

The application asked for seven million acre-feet to be reserved in the main Yellowstone, made no mention of the tributaries, and relied on an unspecified impact of depletion on fish and wildlife resources. The application was a mere 10 pages long and was never really debated—mainly because legal action against the moratorium never materialized. This was another fortunate turn of events for the Yellowstone River, as the applications probably would not have held up under close scrutiny.

By passing the moratorium, the 1974 legislature had given everybody breathing space and virtually mandated that the Yellowstone River be allocated through the reservation of flows provision of the Water Use Act passed by the previous legislature.

In the spring of 1974, back out on the river, Fish and Game biologists now had time to address the technical and logistical problems standing between them and the information they needed to develop a defensible application. It would not be good enough to argue the simple logic that fish and wildlife need water. Those responsible for water allocation wanted to know how much water was needed and the consequences of various degrees of depletion.

The answers were out there in the river. The answers were hidden in 40,000 cubic feet per second of roaring, muddy spring runoff near Glendive. They were also hidden beneath surging spring flows of the Tongue River at Miles City. . . waiting quietly with the nesting geese near Forsyth. . . written along the banks of the impounded Bighorn River. . . locked in the genetic codes of cutthroat trout living near tributary streams upstream from Livingston. . . and concealed in a thousand more places along the river. The answers had to be found and put into a credible, defensible application.

The legislature had decreed that all contenders for the river's water take their best shot, and they had only three years to do it. The Department of Natural Resources and Conservation set November 1, 1976 as the deadline for actual filing of applications for reservations of flow.

When the ice broke in the spring of 1974, the scramble for answers was on. The clock was ticking.

Now, a desperate need for facts

The Department of Fish and Game divided the river into ecological components and initiated research projects that probed the river system's algae, aquatic insects, fish populations, waterfowl, fur bearers, nongame birds and recreational use. The basic hydrological forces that physically shape the river's channel were also studied.

Funding was as creative as the biology. Funds came from companies interested in Yellowstone water and in the region's energy potential—Intake Water Company (a subsidiary of Tenneco), Utah International, Colorado Interstate Gas, Panhandle Eastern Corporation—and from federal agencies—Bureau of Reclamation, Environmental Protection Agency and Fish and Wildlife Service.

With the help of these funds, all major ecological aspects of the river were covered—with one exception. No attention was going to the basic building blocks and fundamental producer in the food chain, algae. To fill the gap, Dr. Loren Bahls, a botanist with the Montana Environmental Quality Council, worked as a volunteer to analyze 240 algae samples and substantially broaden knowledge of the Yellowstone River.

Like the native cutthroat, the river otter is a sure sign of a wildness and high water quality.
TOM MURPHY.

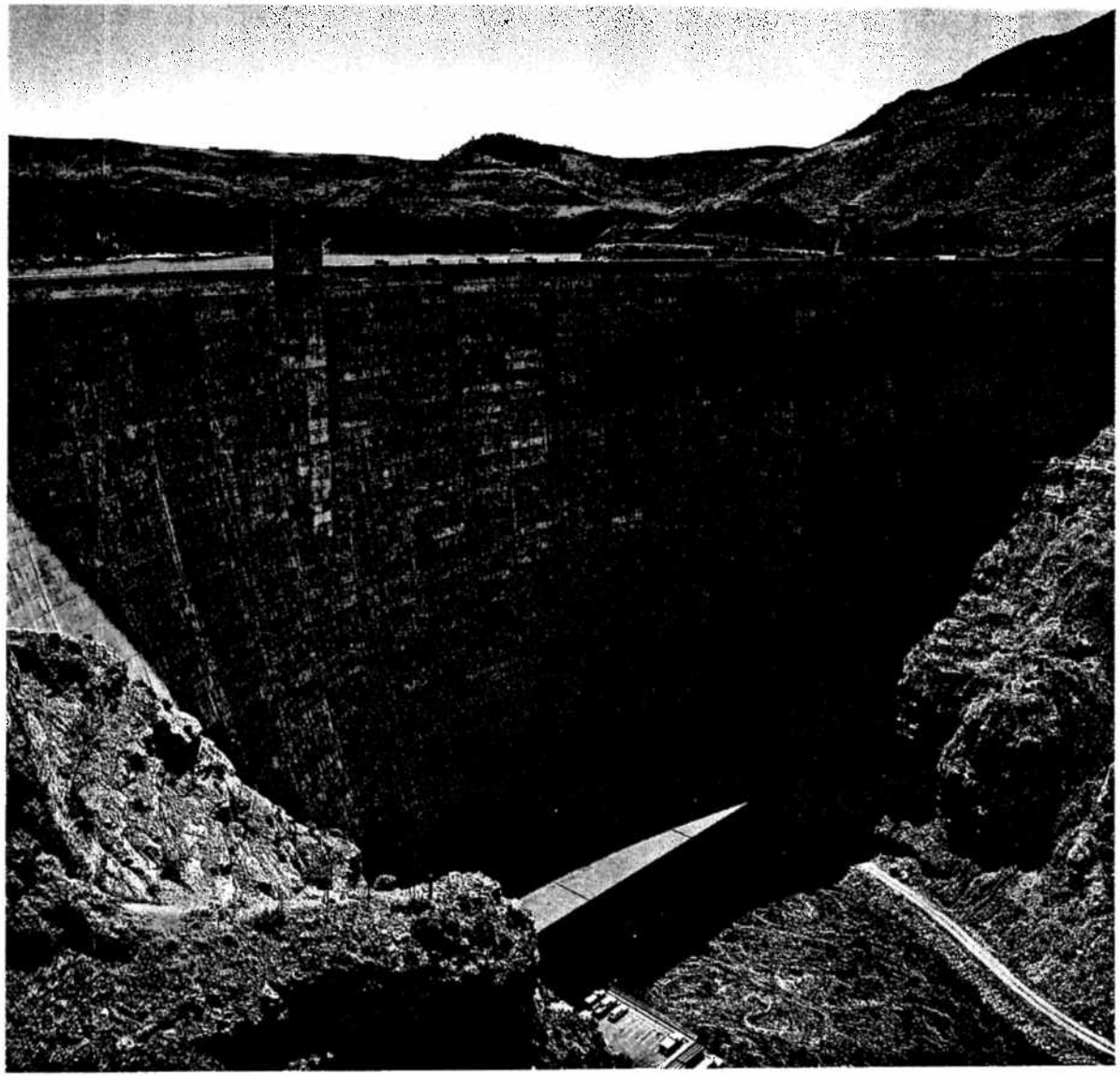
In addition to these specific projects, permanent Fish and Game staff began working on the Yellowstone project. Many other department projects went on hold while biologists and administrators contributed what they could to this special effort.

Those three years—1974, 1975 and 1976—were good years out on the river. Volunteers, government agencies and multi-national corporations worked together with the same goal—justice for the last real river. The legislatively imposed three-year moratorium had a lot to do with it, giving the issue the focus and significance it deserved. There would be no major allocations until Montana's needs and the river's requirements were addressed.

In addition to the department's work to prepare a reservation of flow application for fish, wildlife and recreation, other water users were working on similar applications. Conservation Districts were looking at future irrigation needs and opportunities. The Department of Health and Environmental Sciences was evaluating the relationship between flows and water quality. Cities and towns were projecting future municipal water requirements. Some government agencies were evaluating potential industrial needs and off-stream storage reservoirs to accommodate those future needs. And everybody preparing such applications had one thing in common—the November 1, 1976 deadline.

As the biologists probed, they gradually uncovered clues to the rhythms that made the river work. As bits of information began to accumulate, the Department of Fish and Game application began to take shape.

Early spring flows (March and April) were specifically linked to island security needed by Canada geese using the middle and lower river. May, June and July proved to be particularly crucial months for the river. High flows stimulated the paddlefish spawning run in the lower river and called other fish species into the proper tributary at the proper time for spawning. The high spring flow also carved the



Yellowtail Dam on the Bighorn River. Of the Yellowstone's major tributaries, only the Bighorn and Tongue have such impoundments. TOM DIETRICH.

stream channel, molded islands and cleansed the streambed. Hydrologists call this force the "dominant discharge," and it became part of the department application. As these needs were recognized and included in the application, the amount of water believed to be required for instream flows swelled like a spring freshet.

During the midsummer, instream-flow requirements were dictated by the amount of water needed to provide rearing habitat for young fish and for keeping enough water on riffles to sustain the production of aquatic insects, crucial links in the river's food chain.

During winter months (December to February), the river normally experienced its lowest flows and not surprisingly, its period of greatest stress. The Fish and Game reservation sought to protect the average flow of record during this critical season to ensure that future depletions would not compound the stress already so prevalent during winter months.

Even before researchers finished their work, it was apparent that the application would be much larger than originally anticipated. In fact, it came to 8.2 million acre-feet measured at the gauge at Sidney—close to the 8.8 million acre-feet average annual flow.

This caused some consternation among those preparing the application, but it shouldn't have. Through a very indirect method, biologists discovered the obvious. The natural communities of the Yellowstone River had evolved with these normal flow conditions, and that's what they needed to survive.

Obviously, such a large application would be controversial, and some doubted whether Department of Fish and Game should ask for the full amount required to sustain a stable, free-flowing aquatic system. Doubters asked how such a large application could possibly be sustained through a long political process. But then, how could the biologists defend an application based on political pragmatism rather than biological facts?

This internal debate was actually quite short. At 4:30 p.m., November 1, 1976, Liter Spence, then water resources supervisor for the Department of Fish and Game, hand carried No. 1781, "Application for Reservation of Water in the Yellowstone Basin," to the Department of Natural Resources and Conservation. The 300-page document contrasted sharply with the 10-page application submitted in March, 1974.

The water preference battle

An enormous amount of work had been accomplished in a remarkably short time. The application presented the position the Department of Fish and Game would assume and defend for the next two years.

The application included the entire mainstem of the Yellowstone and 61 tributaries. Although there were many applications for water reservations, this application became the focus of perhaps the most wide-ranging resource allocation debate held in modern times. The debate would have many platforms—formal public hearings, the legislature, the national media, local editorial pages, and street corners all across Montana.

The main canal of the Huntley Irrigation Project, the first such project funded by the federal government.
TOM DIETRICH.

After the deadline for applications, attention of the applicants turned to the public hearing process to prepare an official record to submit to the Montana Board of Natural Resources and Conservation for their decision. Since the three-year moratorium had only three months remaining and since it was virtually impossible to conclude the process in the remaining time, an extension was sought from the 1977 legislature.

The character of the 1977 legislature was significantly different than that of 1974 when the moratorium passed. The influence of conservationists had definitely faded. Compounding the problem was the amount of water requested by the application, now a matter of record and one of substantial concern.

The 1977 legislative session was intense. The Fish and Game application was described as absurd, irresponsible, outrageous, and in other less complimentary terms. One perceptive legislator related that he began worrying when he saw how much confidence the department displayed in its application.

Nonetheless, the process needed an extension to give the Board of Natural Resources and Conservation time to hold hearings, develop the record and make the decision. A bill to extend the moratorium for two years easily passed the House of Representatives. Meanwhile, over in the more conservative Senate, William Lowe (R-Billings) introduced a bill that would completely undermine the concept of reservation of instream flow.

Lowe wanted a system allowing some water users preference over others. In the list of users, fish and wildlife were last. This meant any other user could claim water previously awarded for fish and wildlife purposes. Thus, no matter what instream flows the Board of Natural Resources and Conservation awarded to fish, wildlife and recreation, any other users could later take the water—whenever they needed it—by virtue of their higher preference. This bill quickly passed the Senate.

Then, Montana had a political stand-off. The Senate sat on the moratorium extension bill until the House agreed to give serious consideration to the preference bill.

The House formed a Water Preference Subcommittee. In that subcommittee, Jack Ramirez (R-Billings), an attorney, carried the preference bill, and his chief adversary was Willy Day (D-Glendive), an irrigator and rancher.

As soon as the preference bill reached the House, it was besieged by an endless array of alternatives, amendments, and reconsiderations. At 7 a.m., March 25, 1977, the Water Preference Subcommittee convened to take action on the measure. Representative Ramirez offered amendments that would retain a modified preference system and establish an absolute minimum flow for fish, wildlife, recreational and water quality purposes—and then only after domestic and agriculture applications had been met. After a long debate, the subcommittee approved the amendments and sent the bill to the floor with a 6 to 5 vote.

At 2:30 p.m., the bill came to the floor of the House for debate. The proponents quickly moved to pass the bill, and Day made a substitute motion to kill it. After a lengthy debate, however, the House voted 80 to 12 to kill the bill. The victory was substantial, but short-lived.

Coors barley elevator near Worden. TOM DIETRICH.

At 5:45 p.m., the bill's proponents made a motion to reconsider the bill by segregating it for the purpose of offering amendments. When the votes were tabulated, however, the House had tied 47 to 47 on this motion, effectively killing further consideration of the bill.

But it didn't die. On April 7, Republicans caucused to solidify their support for water preference. When the House convened that day, another motion was made to reconsider the bill, and this time, it passed 54 to 44. Only one Republican, Werner Bertelsen of Ovando, opposed the motion. A few Democrats voted with the Republican block, and the water preference debate resumed.

New amendments abandoned the preference system and specified that the legislature could, on a two-thirds vote, modify any reservation grant the Board of Natural Resources and Conservation made. Again, the debate was heated and lengthy. When the smoke cleared, however, the House defeated the amendments 46 to 50. One of the few Republicans to cross over on this crucial vote was Harrison Fagg, the man who convinced the Montana Jaycees that Montana needed a stream preservation act 15 years earlier. This vote was the death knell for water preference and set the stage for upcoming decisions on instream flows in the Yellowstone.

The debate on the water preference bill was undoubtedly one of the most crucial debates ever held concerning the future of Montana's rivers. And out of the battle, Willy Day emerged as the most respected legislator on water resource issues and a true friend of the river that for years had nourished his crops.

Meanwhile, back in the Senate, the extension of the moratorium was not having an easy time. The Senate trimmed the moratorium extension back to nine months. A conference committee named to work out the differences between the Senate and House versions of the extension bill came up with an amendment to allow the courts to extend the moratorium, but not beyond January 15, 1979. With this compromise reached, the 1977 Legislature retired from the water allocation battlefield, and water users interested in Yellowstone River water returned to the reservation process.

The public enters the fray

The Department of Fish and Game recognized, early on, the need to develop and solidify public support for reserving substantial amounts of water for fish, wildlife and recreation. The application itself was fairly technical, but the decision ultimately would be made by the politically appointed Board of Natural Resources and Conservation. No such board is oblivious of the public consensus.

If the public clung to the traditional attitude that rivers are for diversion and consumption, the applications would be in trouble. If, however, Montanans could be convinced that flowing water and fish and wildlife had value, the reservation applications would have a chance. The applications asked a lot; the public had to understand why. Thus, the Department of Fish and Game started the wheels of a major public-information effort rolling. The department had been re-organized in the early 1970s in a manner that made it easier to launch such an information program. Its information function was now located in what was called the Environment and Information Division. The environmental section of this division had taken the lead in developing the reservation, so it was a relatively simple task to coordinate the information effort.

Fish and Game had the ability and personnel to launch such a tremendous effort. It had a well-distributed magazine, *Montana Outdoors*, a film-production unit, and seven regional information officers.

All information personnel were quickly mobilized. In 1976, the production of a documentary film was initiated, and work began on a special issue of *Montana Outdoors*. The regional information officers went to work writing news columns, giving presentations at various clubs, developing slide shows and other public information work all directed at one golden idea—preserving the last great river, the Yellowstone.

On February 1, 1977, the department held the first formal news conference in its history. At the conference, held in Billings, Fish and Game Commission chairman Joseph Klabunde, Department of Fish and Game director Robert Wambach, and others made statements in support of the reservation application and announced release of the documentary film, *The Yellowstone Concerto*, and a special issue of *Montana Outdoors*. The department was, without doubt, pouring its entire public information effort into the issue of preserving the Yellowstone River.

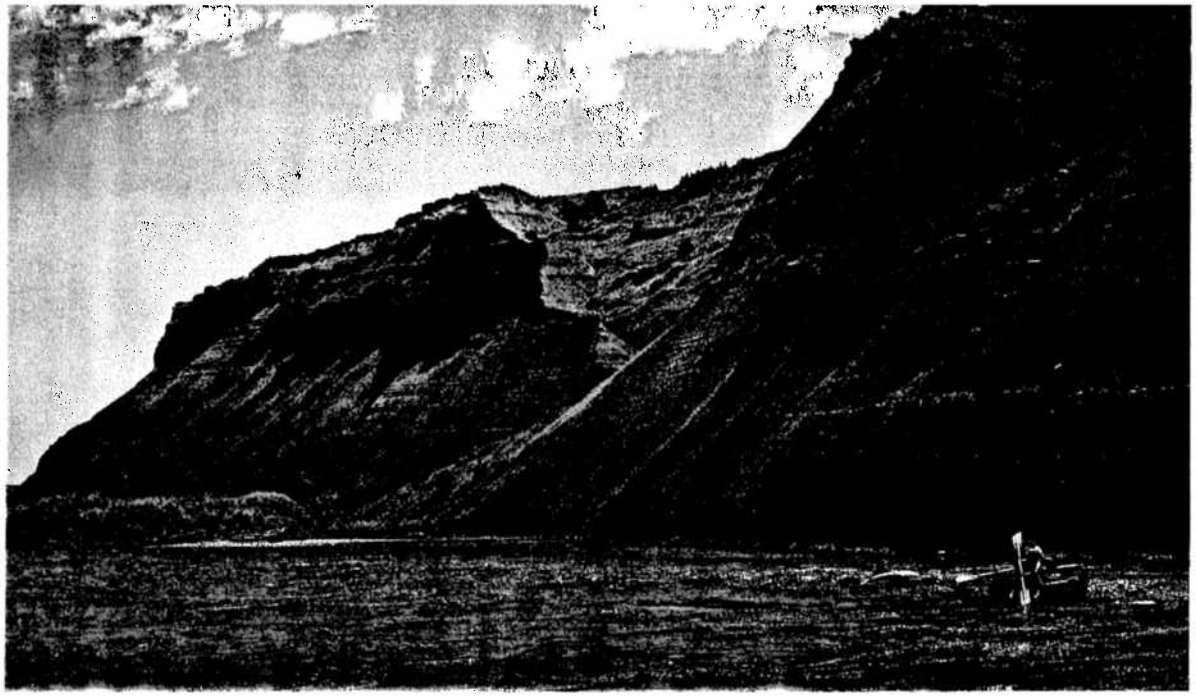
The Yellowstone Concerto concentrated on an emotional appeal to preserve the free-flowing Yellowstone. *Montana Outdoors* summarized factual material supporting preservation of the river and topped it off with an emotional appeal. Both the film and magazine were tremendously successful.

This public information effort actually helped change the complexion of the entire debate. The Yellowstone River began evolving an "untouchable" status. It was no longer a question of whether the river should be preserved. Of course, it should be. Now, it was only a question of whether the reservation of flow process was the best method to preserve it.

For the department personnel and others working for the Yellowstone, the spring of 1977 was chaotic. A major public information campaign was in full swing; the legislature was debating water preference and moratorium extensions. And biologists were wrapping up their field studies and preparing for the hearings scheduled for August. The department application, filed six months earlier, rested in Department of Natural Resources and Conservation offices where those who opposed it examined every detail looking for flaws as they prepared for the same hearings.

In August, Fish and Game biologists set up quarters at Eastern Montana College in Billings to defend their application, under rigorous cross examination. Department attorneys took up residence in a motel across the street, and the hearings began.

The early pattern became repetitious. Fish and Game witnesses paraded to the stand and were grilled by attorneys from Utah International, Intake Water



Floating the lower Yellowstone, perhaps the last truly wild prairie river. CRAIG E. SHARPE.

Co., Montana Power, Department of Natural Resources and Conservation, and Conservation Districts. Each day, upon adjournment, Fish and Game witnesses, attorneys and supporters retired to the motel's watering hole to hold post mortems and lick wounds. After dinner, the next day's witnesses were coached and drilled until midnight or later.

The attorneys representing major corporations were exceptionally competent and vigorous in their examination of the Fish and Game application as well as the effort itself. In retrospect, it was their persistence that held the entire process together. All preparation was made in anticipation of a challenge from these corporate attorneys, and if the department position was damaged, it was because of their thoroughness. Fish and Game's only full-time ally was the Department of Health and Environmental Sciences whose staff had applied for minimum stream flow to preserve the river's water quality. Health Department attorney Mona Jameson performed tirelessly and effectively in her zeal to defend her agency's application. She helped Fish and Game's cause whenever possible and proper.

Ironically, the Yellowstone River did not bring Utah International and Intake Water Co. to these hearings. Instead, it was a tributary, the Powder River. Both corporations had claimed water from the Powder, and the applications by the Department of Fish and Game, and by a Conservation District could have affected the availability of that water.

Although the Powder is a much maligned stream because of its low flows and high turbidity, Fish and Game biologist Bruce Rewrinkle defended it with as much vigor and dedication as those who fought for the blue-ribbon trout waters of the upper river. At one point in Rewrinkle's exhaustive cross examination, he identified the Powder as Montana's first "black and blue ribbon river."

The Billings hearings lasted an entire month before they moved to Helena for another month. There, the agencies finished debating the issue, and it was the public's turn. Trout Unlimited, Montana Wildlife Federation, Environmental Information Center and Federation of Fly Fisherman led strong public support for the river.

Following the hearings, all parties prepared findings of fact and conclusions of law. These documents, some of which contained elaborate commentaries, were exchanged by all parties. And then, finally, it was over.

During this time-consuming process, the moratorium deadline, January 1, 1978, again loomed. However, the Department of Fish and Game and Trout Unlimited successfully appealed to the Mon-

Why they did it

The monumental decision made by the Board of Natural Resources and Conservation in December 1978, essentially meant the Yellowstone River would remain wild and dam free. The decision seemed counter to traditional water use in Montana and the West, and the Board felt tremendous pressure to reject or severely limit instream flows. So why did they do it?

After the decision, Dr. Wilson F. Clark wrote an explanation for *Montana Outdoors*, a magazine published by the Department of Fish, Wildlife and Parks. In the article, he explained the philosophy and principles that had guided the Board in its all-important decision. They were:

The Board saw the people of Montana and the Yellowstone River as their ultimate responsibilities. They viewed the applicants as narrow advocates.

The Board felt their perspective must be long-range, and they considered each conflicting demand in that context.

The Board was aware of the size and complexity of the task as well as the fact that this was the first undertaking of its kind. This awareness tended to make the Board more understanding and tolerant.

The Board was inclined to grant each applicant as much as could be justified, based on the record of the hearings and the water supply.

The Board sought to encourage off-stream storage and water requested for the purpose was granted.

The Board sought to encourage conservation whenever possible and to initiate a challenge to water users whose wasteful practices had become accepted.

And finally, the Board remained cognizant of the fact that their decision was subject to review and possibly re-allocation. The law required a review at least every ten years.

municipal

recreational

agricultural

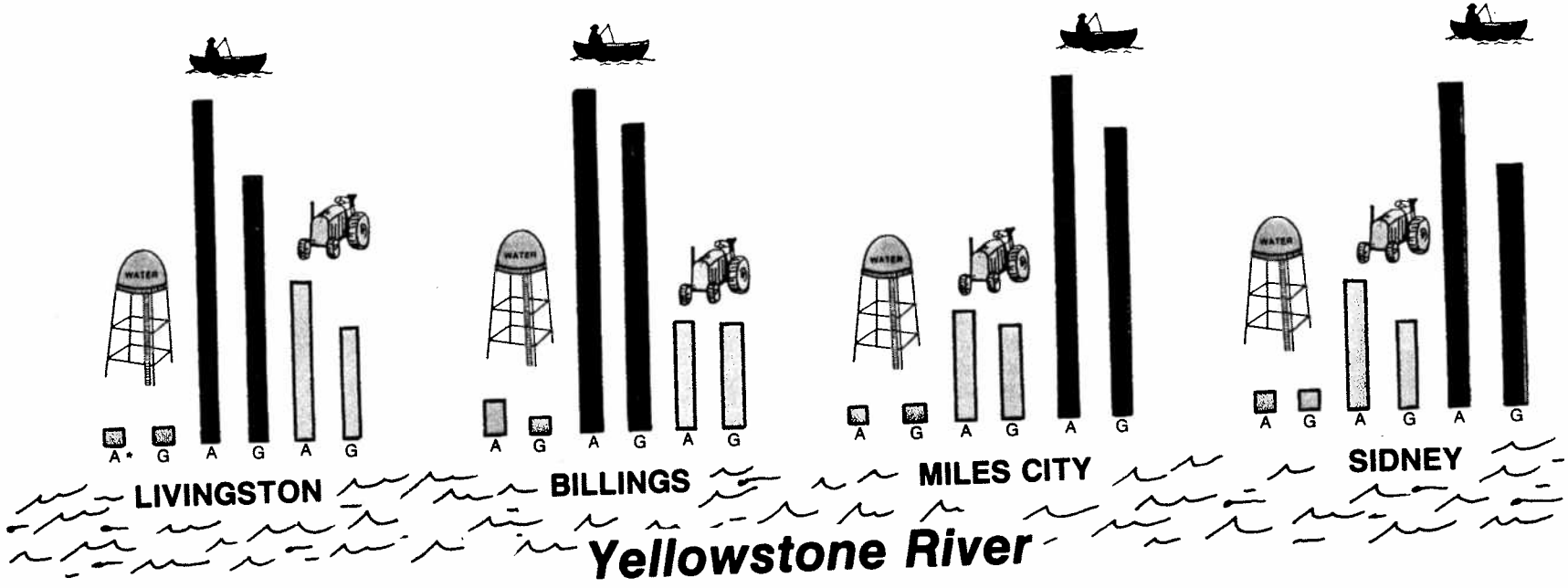
The results of the reservation of flow process.

WHAT HAPPENED?

The decision made by the Montana Board of Natural Resources was very complicated, but in general, it guaranteed that:

1. Municipal uses would get highest priority along the entire river.
2. In-stream uses — mainly fish, wildlife and recreation — would get priority over agriculture most of the time on the upper river above Billings.
3. Agriculture uses would get priority over in-stream uses most of the time downstream from Billings.

The Board also granted in-stream users most of the water they requested on the upper river above Billings, but only about two-thirds of the water they requested below Billings.



*A - applied for
G - granted

tana Supreme Court for an extension. The state's highest court subsequently granted additional extensions to allow the Board of Natural Resources and Conservation to make reasonable deliberations and sound judgments. On August 18, 1978, 11 months after the hearings ended, the Board heard the final argument and retired to deliberate the river's future.

The national media intervenes

After the hearings, the Department of Fish and Game continued the fast-paced information campaign promoting the river's assets and the need for a significant reservation of instream flow. Then, amid all this hard work, a slice of good luck brightened the day. Somebody found out about Yellowstone Whiskey.

Glenmore Distilleries of Louisville, Kentucky, has had an association with the name "Yellowstone" for more than a hundred years. Ever since a visit to Yellowstone Park by a company executive, Glenmore has had a subsidiary called Yellowstone Distillery.

Glenmore had been planning to initiate a new product called Yellowstone Mellow Mash in early 1978. Originally, Glenmore had considered sponsoring a tennis tournament to promote its new product.

With the help of Tom Pero of Trout Unlimited, the Department of Fish and Game made contact with

Glenmore and its public relations firm, Rand Public Relations of New York City. After reviewing a copy of the special issue of *Montana Outdoors* and *The Yellowstone Concerto*, Glenmore was convinced and gave Rand the green light—a $50,000 commitment by Glenmore to help make Americans aware that out in Montana a great river was in big trouble.

A plan developed by Rand had two basic approaches—to distribute *The Yellowstone Concerto* nationally and to bring national writers to Montana to, in turn, spread the story throughout the country.

Rand bought 30 copies of the film, and circulated it, along with a brochure promoting the preservation of the river, to television stations, universities and to other groups.

Throughout the summer of 1978, plans were laid for the press tour. Late September was chosen as the date. With a little luck, the cottonwoods would be turning gold. An early season storm would have dusted the mountaintops with snow. And of course, the trout are always hungry in late September.

On September 21, Ted Schwinden, who was Lieutenant Governor at the time, welcomed 15 writers and photographers. He spoke eloquently of the river, but also encouraged Glenmore's guests to get all sides of the story.

After breakfast, the writers were flown to eastern Montana coal fields to see strip mines and power plants before following the river all the way back to Livingston. After landing in buffeting winds and treating a few cases of air sickness, the group drove to Chico Hot Springs for an evening of gourmet dining, informational programs and mellowing out with Yellowstone Mellow Mash.

The next day, September 22, belonged to the river. Gardiner and Livingston river guides volunteered their services, floating the writers and photographers down choice stretches of the upper Yellowstone through Paradise Valley. Nobody missed the obvious significance of the valley's name, and it would appear many times in subsequent months. And the tour's planners had a little luck—nature cooperated. The cottonwoods were turning gold, the peaks displayed the season's first snow, and the trout eagerly took artificial flies.

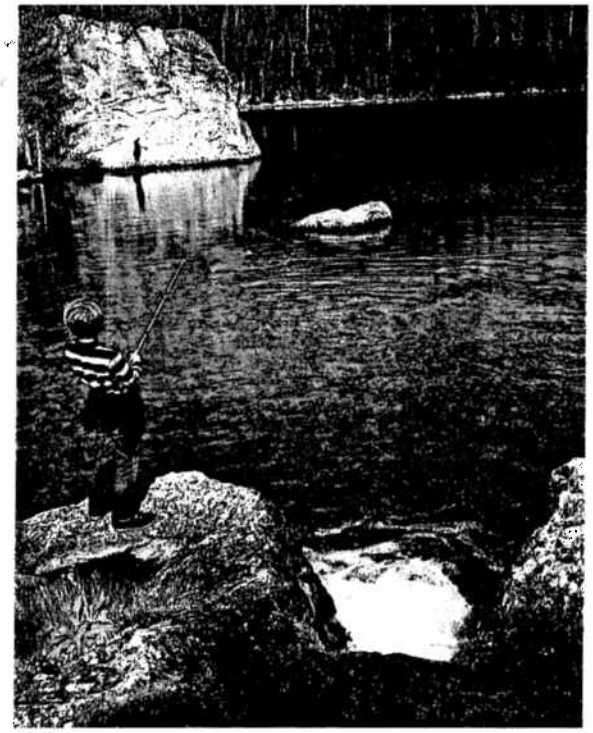
The results of the press tour were both immediate and long term. The *Billings Gazette* published a full-page spread describing the tour on October 1. On October 11, the *Wall Street Journal* ran a long story on the front page. In time, articles appeared in *Fly Fishing the West, Trout, Sierra, Life, Business Week, Mariah, Reader's Digest, Outdoor Life* and *Field and Stream.*

Float fishing on the Bighorn River just below Yellowtail Dam. MICHAEL S. SAMPLE.

Of all the articles, perhaps the *Life* article, 10 pages of glorious color, had the most impact. It hit the newsstands in Montana on about December 1, 1978, about two weeks before the Board of Natural Resources and Conservation made its decision.

This was a hectic time, especially for the Board as they tried to digest tons of information and fend off rumors and politics. One board member, Dr. Will Clark of Billings, spent endless hours trying to develop a water budget for the Yellowstone. The Board also had to deal with the the Department of Natural Resources and Conservation's recommendation that only 2.8 million acre-feet be granted for instream purposes.

Relying heavily on Clark's work, the Board reached its decision. It adopted instream flows and the reservations on the mainstem Yellowstone and 61 of its tributaries. The reservations for fish, wildlife and recreation and for the protection of water quality came to 5.5 million acre-feet for the main river and its tributaries. This meant all new water users must honor this instream water right. All requests for water reservations were honored in some degree, and the rights of the river were respected.



Fishing high mountain lakes in the upper reaches of the Clark's Fork of the Yellowstone. BILL SCHNEIDER.

Victory for a free river

In 1978, December 15 was a clear night on the upper Yellowstone, and a bright moon reflected off the icy river. There was momentary peace on the river, six years and six months after the first Department of Fish and Game study team had come to the upper Yellowstone.

The fate of the river finally had been decided.

That decision meant, in essence, that the Yellowstone would remain a free river.

The decision was a victory to some and a shock to others. And the river's advocates immediately found themselves back in the battle. The 1979 Legislature convened and deliberated on several bills intended to weaken the Board's decision. However, they all failed—dying more easily than they did in 1977. In the 1981 Legislature, acceptance of the instream flow system was even stronger.

This support was, perhaps, a result of a successful public information campaign. In retrospect, the unique blending of people with technical expertise and people with communications skills in Department of Fish and Game's Environment and Information Division was critical to the success of this effort. This may have made the difference.

Success came 17 years after Cassagranda and Nelson, both biologists with public relations skills, had laid out the simple blueprint for stream preservation and declared it a priority.

In the final analysis, it was the people who made it happen. These were people with a variety of skills and backgrounds who lived with the river for a while and then did what they had to do, speak up for the river when it really counted. Perhaps the best compliment paid these people came from the Glenmore press tour. Don Roberts captured the character and spirit of these people late one night in the hot pool at Chico Hot Springs. In *Fly Fishing the West*, he wrote:

"It was well past midnight when the fisheries people, a river guide from Bozeman, and I decided to test the fabled hot springs. I was the only writer in the group; consequently, the fishery people quickly became unofficial. After numerous associations with bureaucrats, it was a relief to find a state agency which seemed to be dominated by departmental types who are human. We didn't really swim, but porpoised hopelessly in the 104 degree water, stomachs distended with Montana beef. Posewitz hollered for beer and a mysterious figure emerged from the nearby saloon, tossed a six-pack of Bud into the center of the pool, and disappeared back into the darkness. Fisheries people swooped toward the bobbing cans and an uproar ensued. It was similar to dropping a throat cut horse into an Amazon river teaming with giant piranha. The survivors of the frenzy retired to isolated corners and sucked at the brew with primitive vigor.

"As the night wore on, the fisheries people complained openly of the political pandering in Montana, of the foolish ranchers who were bedding with the corporate wolves, of inter-departmental bungling, and of the lack of real statesmen like Mansfield and Metcalf. Jim Posewitz listened in silence, then announced to me, 'In Montana, we are allowed to get emotional.'

"I had finally found a place where the agency people did not speak in tongues, did not hide behind jargon, did not hesitate to speak directly to the issue. In Montana, the state wildlife people are real. . . . you scratch them and they bleed (they will also claw back). . . . Fill their river with concrete and they cry."

Cottontail, common in the thick brush along the Yellowstone. TOM MURPHY.

They made history

Seven Montanans served on the Board of Natural Resources and Conservation in 1978. They made a historic decision, the first-ever major reservation of flow on a major river. They probably saved the Yellowstone River. They were:

Cecil Weeding, chairman	Jordan
William H. Bertsche	Great Falls
Dr. Wilson F. Clark	Billings
David G. Drum	Billings
Charles L. Hash	Kalispell
J. Viola Herak	Charlo
Dr. Roy E. Huffman	Bozeman