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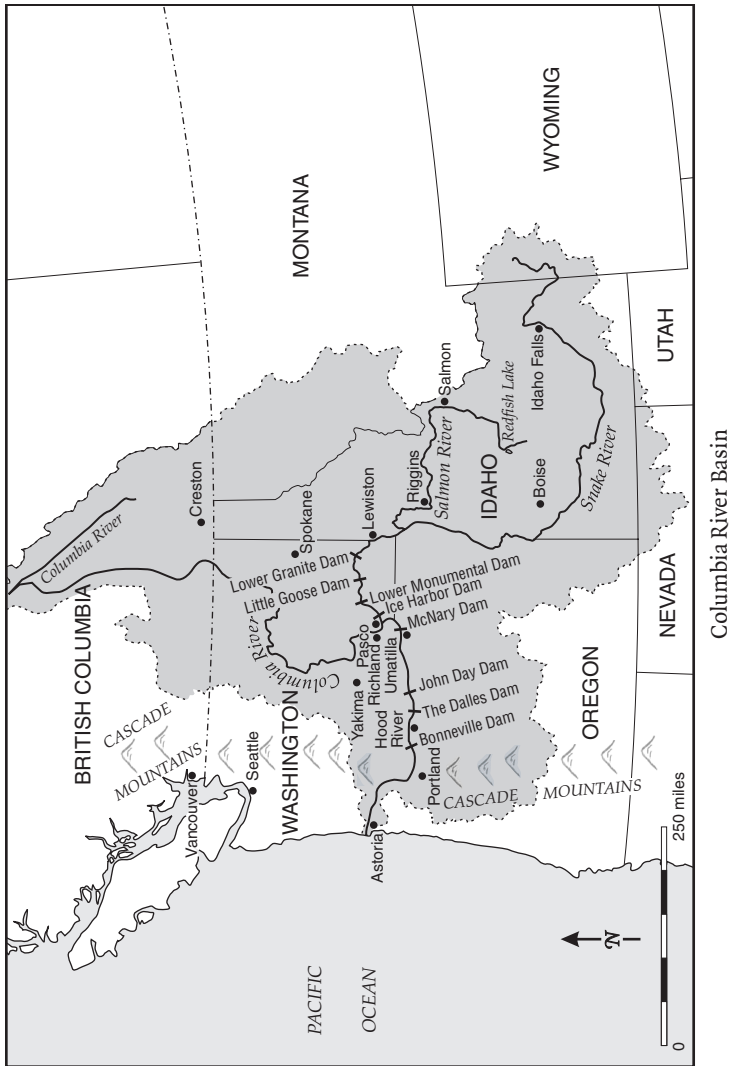
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*Sunbeam*

*But exaggerated, uninformed, unrealistic, greedy expectation has been a prescription for disappointment that the West has carried to the corner drugstore too many times. —Wallace Stegner, Where the Bluebird Sings to the Lemonade Springs*

Idaho's Redfish Lake sits in the bottom of a great alpine bowl formed by mountains—the Sawtooths, the Boulders, the White Clouds—in a place where one mountain range melds into the next so their names seem almost irrelevant. A creek lined with quaking aspens and lodgepole pines meanders out of the lake's north end then pools, creating a much smaller lake, Little Redfish, which pours itself into the Salmon River down a second creek. In its last four or five hundred yards, rushing as if in some great hurry, the second creek crashes over boulders polished smooth by time and flowing, pale blue water the color of a tropical ocean, although there is no ocean nearby, and at sixty-five hundred feet in altitude and snow possible any month of the year, the spot is anything but tropical.

On a warm Sunday at the end of May, my fiancée, Juliet, and I camped where that second creek meets the Salmon River. We

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spent the afternoon going through all the food, clothing, and camping gear necessary for my two-month kayak trip to the Pacific Ocean to make sure I wouldn't forget anything. Afterward, I tried packing it all into my kayak and discovered there wasn't room. I told myself the packing wasn't for real, and I imagined that somehow I would make everything fit when it really counted. Of course the next morning, May 28, the water filter, the backpacking stove, the fuel bottles, the clothes, the spare two-piece paddle, the two pots that fit together like nesting dolls and would also serve as plates, and the Ramen noodles and the pasta and the instant couscous and the Pop Tarts and the oatmeal and the cashew nuts and the granola bars all took up as much space as they had the afternoon before.

The kayak provided roughly as much storage as a large backpack, and I already had saved space where I could. Instead of a tent, I had opted for a bivy sack, which is little more than a waterproof sleeping bag cover. Instead of a bulky synthetic sleeping bag that would keep me warm even if it became wet, I had opted for a lightweight down bag that compressed to about the size of a loaf of bread. I had too much food, like I always do, figuring that being cold and damp isn't so bad, but being cold and damp and hungry really sucks. I could occasionally buy more groceries when I passed one of the small towns scattered beside the Salmon, Snake, and Columbia rivers, three rivers I planned to kayak. So I decided I could leave a quarter of the food behind without any worries. I also had three thirty-three-ounce bottles of white gas, plus a twenty-two-ounce bottle I vowed to use only in an emergency, making me the kayaking equivalent of a super tanker. One large fuel bottle stayed behind, and a second probably could have, but didn't.

I went through my clothes. I had a pair of pants with zip-off legs, a couple of t-shirts, a rain jacket, assorted fleece pants and pullovers, and two sets of polypro underwear—one set to wear on the river for insulation beneath my waterproof top and waterproof pants and one set to wear around camp in the evening.

I moved my high-tech rain jacket into the leave behind pile. “You’re not taking that?” Juliet asked. She grabbed the jacket and folded it into one of its own pockets clearly marked “stow pocket.” Holding up the jacket, now smaller than a small box of crackers, she said, “You have room for that, don’t you.” It was more a statement than a question. “I bet you didn’t know you could do that,” she said. I hate it when the gear’s smarter than I am. I tossed the fleece pants and a fleece top into the stay behind pile instead.

I shoved anything water wouldn’t hurt into the stern of the kayak. Anything water might damage went into special bags, called dry bags, designed, as the name implies, to keep things dry. The bags filled the kayak’s bow and stern sections, but somehow, everything fit. I pushed my head and hands through the water-tight rubber gaskets of my dry top, pulled on my life jacket, put on my helmet, slid into the kayak, hooked my legs under the kayak’s thigh braces, and pulled the neoprene spray skirt over the cockpit rim to seal water out. Before she pushed the kayak into the river, Juliet kissed me and told me to be careful.

If I died on the trip—pinned upside-down against some rock, floundered in a terminal hydraulic, bailed out of the kayak and drowned during a long swim in rough water—someone, somewhere, would say I got what I deserved for kayaking alone. All the whitewater safety books say never boat alone. Many kayakers break that rule at some point, but that doesn’t make it any safer. I’m certain the idea of me alone on the river worried Juliet. She and I have paddled many rivers together—we met through mutual friends while kayaking—and by the time I left on the trip she knew I was a careful boater who had some common sense when it came to whitewater. But if the situation had been reversed, I would have worried about her, even though she is a fine kayaker and capable of taking care of herself in isolated places, having once lived for a year in the Central American rain forest doing biological field work.

Juliet and I had just one discussion about safety before the trip

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started. My parents had sent me a walkie-talkie-sized emergency locator beacon called an EPIRB, which when activated, allows satellites to determine its position and relay that information to search and rescue teams. I had planned to leave the EPIRB behind, reasoning that it would go in the back of the kayak, out of reach, and that the biggest danger I faced was flipping, missing my roll, swimming, and becoming separated from the kayak and the EPIRB. Juliet had said she would feel better knowing I had the beacon.

Along with the EPIRB, I stashed a rope, web slings, Prussic loops, and carabineers—equipment used to free a boat if it becomes pinned on a rock—in the back of the kayak. Of course a pin kit is used to pull somebody else's kayak free and in reality was just as useless as the beacon. But I needed the ropes and slings with me in the same way Juliet needed me to take the EPIRB.

Not long after Juliet pushed me into the river, the Salmon dropped into a steep-walled canyon that closed out the world. The valley with its road, ranches, and expensive vacation homes disappeared. The river has just started its tumble toward the ocean, so it's shallow and filled with riffles instead of whitewater. The kayak constantly bounced off rocks, and I couldn't paddle without hitting river bed. An osprey resting on a half-dead conifer took to the air just before I reached its perch, flew downstream, and landed in another tree. And just before I reached that tree, it took off, flew downstream, and again perched. When it flew away the third time, the canyon had opened up enough for the bird to turn upstream. The road came back to the river, and I half expected to see Juliet pulled off on the shoulder, but she was already on her way home. I suddenly felt lonely, something I hadn't expected. The river kept pushing me downstream.

Except for a short stretch just down from Redfish Lake, the Salmon flows north from its headwaters to the town of North Fork, where the Bitterroot Mountains force it west. At Riggins, the river again turns north before looping west to meet the Snake

River. I planned to follow the Salmon 400 miles from its headwaters to the Snake, then, once on the Snake, paddle 189 miles to the confluence with the Columbia River before kayaking another 325 miles to where the Columbia meets the Pacific Ocean; roughly 900 miles in all.

In the autumn of 2000, when such a long kayak journey was only a vague notion, I had watched hundreds of salmon stranded in an eastern Washington irrigation ditch. I was there for my job as a reporter for the local newspaper, but random people pulled their cars to the side of the road and got out to gawk as well. Water diverted from the upstream reaches of the Yakima River washed through the ditch, and any not used for irrigation was returned to the main river many miles below its original diversion point. For the fish, the water carried the odor of home, and it pulled them from the main river with a force as strong as gravity. A spillway created a barrier, and the salmon crowded below it into a pool littered with pop cans and fast-food containers to hurl themselves, like fin and scale rockets, at the obstacle and continue their migration. But the spillway was impassable.

Not long after seeing those salmon, I decided that in spring I would quit my job and take a long river journey. Growing up in Virginia, I had worked briefly as a commercial fisherman and for a much longer period as a mate on a sport-fishing boat. While I rarely fish anymore, I retain a fisherman's interest in fish, meaning that anyone other than another fisherman or maybe a fisheries biologist would find my level of fascination strange. But fisherman or not, nobody living in the Northwest can completely ignore salmon. Salmon delineate the Columbia and its tributaries as clearly as any lines on a map. In 1805, camped near the Salmon River, the Shoshone Indians offered Meriwether Lewis salmon, and from that gift he deduced correctly that the Corps of Discovery had reached a Columbia tributary.

I picked the Salmon River's headwaters as my starting point not just because I had come to love the river during the time I had lived in Idaho, but also because it remains free of dams in

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a part of the country where dams span almost every river. Only sabotage kept the Salmon River undammed. Or maybe it wasn't sabotage but an official act. Some people claim whoever dynamited the river's only dam in the early thirties, various stories say 1931 others 1933 or 1934, worked for the state and did the demolition with Idaho's official blessing. Some people claim he acted on his own.

I started my trip at Redfish Lake, a half-day's paddle upstream from the ruined dam, not to unravel the mysteries behind the dam's destruction—they were too old and others had already attempted that with little apparent success—but because Sunbeam Dam was destroyed to save Redfish Lake's sockeye salmon, and now talk of removing dams to save salmon is constant. My plan was to navigate the same currents the lake's endangered salmon follow on their way to the ocean, making fish as much a part of my trip as kayaking.

By the time I started down the river, the Salmon should have flowed dark and sullen, pushed its way into groves of riverside trees, left its muddy stain on whatever it touched, but after a winter when half as much snow as usual had fallen, it ran clear and confined within its banks. A woman had told me the river normally reaches high water the second week of June. That spring it had peaked May 17. I rode the ice clear river through the town of Stanley past wood-sided outfitters' shops, hotels, restaurants, the houses where some of the town's hundred year-round residents live, and toward the remains of Sunbeam Dam. The valley floor turned mostly level and sometimes treeless, and for a while I could see the naked granite of the Sawtooth Mountains off to my left.

Beyond Stanley, forests of lodgepole pines ran down steep hills then spread themselves along the Salmon's rocky shore. Groundwater dripped and dropped its way into the river. Creeks added their flow. The river became deeper. It pushed harder. The kayak no longer bumped across rocks. My paddle no longer hit bottom. In a deep pool where a salmon might pause its migra-

tion home, I stopped to put on the pair of nose clips that hung by a cord from my helmet. I twisted my body to the left, held my paddle parallel to the kayak, took a deep breath, rocked my hips, and flipped. The water was as cold as melted snow.

Normally, one of the first things I do when I put on a river is snap off a roll or two, and I was especially anxious to practice that first day. My kayak was borrowed. It was German made and popular with expedition paddlers because it holds a lot of gear, but some people also claim it's hard to paddle and hard to roll. For psychological reasons, I had stayed away from the boat since winter when I had paddled it around an indoor swimming pool. I didn't want something to go wrong on a river that would destroy my confidence. So in the run-up to the trip, when I had paddled almost every day for two months, I had used my own boat and spent most of my river time surfing waves or trying to cartwheel the kayak bow over stern.

Upside down, setting up for that first roll, my pre-trip preparation seemed half-assed. My left hand always touching the boat, I swept my paddle in an arc until my kayak looked like the letter T drifting downriver, with my paddle as the base crossed by my boat. The upper body doesn't do much work rolling a kayak. Instead, the paddle acts like a stabilizer so the hips can right the boat. It's even possible to roll without a paddle. I snapped my hips. The force drove the kayak right side up. I took my helmet off, shook myself dry like a wet animal, put the helmet back, and relaxed a little. I flipped and rolled again and then again. Each time, my head came out of the water last, which is perfect form.

The kayak actually rolled better loaded than it had in the pool, but that was the only thing it did better. I worked on my forward strokes, planted the paddle in the water as close to vertical as possible and pulled it back not with my arms, but by unwinding my torso. I tried reverse strokes then the sweep strokes used to turn. A whitewater kayak is designed to turn, and a skilled kayaker flows down a river like a dancer turning graceful pirouettes, kayak and kayaker moving as one; an unskilled kayaker staggers

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like a baby taking its first steps, unable keep a straight line, unable to control a turn, boat and boater irreconcilably disjointed. Although I always imagine myself looking more like a dancer and less like a toddler in my kayaking, I fall somewhere between the two extremes. That first day on the Salmon though, I staggered.

The extra weight from my supplies made the kayak hard to handle. I tried to carve into eddies, my paddle acting as a fulcrum so the kayak could pivot upstream and come to rest in the calm water. Instead, I hit the rock that formed the eddy, or turned far enough below the rock there was no calm, or blasted through the calm back into the river's current, or stalled on top of the unstable line of water where the river's current, which moves downstream, met with the eddy's, which moves upstream. If I did hit an eddy cleanly, when I peeled out into the river again, I couldn't control the bow or use the water's energy to accelerate the kayak as it turned downriver. If I managed to make a good downstream turn, I couldn't keep the kayak on the right line. It always takes time getting used to a loaded kayak and nothing I went through was unusual. After some practice, I caught eddies cleaner and peeled out smoother.

But that initial awkwardness stressed my confidence at a time when I already felt uncomfortable. I wasn't paying attention to the river. So I didn't hear it grow noisier or feel its pace quicken or notice the looming horizon line until I fell off the edge and into whitewater froth. Too late to eddy out or read the water. Too late to sort rock from river, hydraulic from green water. I flipped and rolled on instinct. With half a rapid left, I paddled hard because in a kayak, when you don't know what to do, you always paddle hard. The kayak sounded a hollow plastic thud against a rock that should have stopped the boat but didn't. I almost flipped again. The kayak went straight. I wanted it to turn right. Then, as abruptly as it had all started, I was breathing hard, sliding through a calm, green pool, and looking back upstream at the rapid trying to figure out what had happened.

I faced Sunbeam next. I had seen a clear line through the rapid

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formed by the old dam's rubble when Juliet and I had stopped to scout the day before. But Sunbeam Dam had worried me from my first paddle stroke. The clumsy run through the first rapid only made me worry more, and not some abstract who blew up the dam or what did the dam do to the salmon worry, but a worry hard as rebar and concrete and sharp-edged blocks of dynamited granite.

A mining company built Sunbeam in 1910 and used its electricity to light the company's mine and run a mill that crushed rock so gold could be extracted. But the rock contained so little gold that the company couldn't turn a profit. It went out of business the next year. The dam, built without any passageway for salmon migrating upstream, remained. Although attempts were made in 1912 and again in 1920 to add fish ladders to the dam, nobody knows if they worked.

With no way past Sunbeam, the dam should have wiped out Redfish Lake's sockeye salmon. Sockeye are what I sometimes picture when I hear the word salmon, probably because they were the first of the five species of Pacific salmon I ever saw. In the ocean, sockeye are silver with a bluish back. In freshwater, as they prepare to spawn, they turn a deep red, redder than the reddest sunset, along their flanks, while their heads turn greener than a river's deepest pool. Sockeye feed on plankton, but at breeding time, the males grow hooked jaws reminiscent of the pincers on some evil sci-fi robot and sharp teeth line the jaws. Most sockeye spawn along sandy lakeshores, in small streams that feed into a lake, or just below lake outlets, and after hatching, the juveniles spend one or two years in that lake before migrating to the ocean. Such a life history makes it unlikely any sockeye would have spawned in the river downstream of Sunbeam, and there were no other sockeye nearby to stray into the lake to repopulate it once the dam was gone.

Still, by the 1950s, sockeye had returned to Redfish Lake. Sometimes they came in the thousands, sometimes in the hun-

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dreds. Salmon biology explains how sockeye stayed alive in Redfish Lake even when they shouldn't have. Pacific salmon can live out their entire lives in freshwater. Chinook and coho salmon stocked years ago into the Great Lakes by fish and game departments survive by spawning in tributaries and maturing in the lakes. Landlocked sockeye populations exist in lakes throughout the West, including Redfish. These landlocked sockeye, called kokanee, are much smaller than ocean-going sockeye (maybe a foot long instead of two), but are the same species, with the same scientific name, *Oncorhynchus nerka*. When the federal government considered listing the Redfish Lake sockeye as an endangered species, some people argued Sunbeam had killed off the ocean-going sockeye. The resurrected sockeye were simply kokanee that had started migrating to the ocean, and since Redfish Lake's kokanee and sockeye were really part of the same population, and there were plenty of kokanee, the sockeye didn't qualify as endangered, they said. That hypothesis and several others explaining the sockeye's presence were looked at and rejected. The fish were listed in 1991 despite lingering questions.

A genetic study later uncovered fish that looked like kokanee, and never left the lake like kokanee, but that were genetically similar to ocean-going sockeye. The scientists conducting the study theorized that after Sunbeam was built, some sockeye survived in the lake. These "residual sockeye," as the scientists called them, spawned in different places and at different times from the kokanee, so the two groups never mixed. When Sunbeam was dynamited, some of the residual sockeye's offspring could again migrate to the ocean and back.

I don't know if each spring, for the twenty-some years Sunbeam existed, groups of juvenile sockeye smolt, pulled by the ocean and already transforming themselves into saltwater fish, made their way downstream, found their path blocked, and so returned to the lake. Maybe some smolt made it past the dam to the ocean, only to find the dam impassable when they returned as adults. If that's the case, if some sockeye migrated to the ocean,

then genetics must have kept others tied forever to the lake, and with each generation some must have left the lake while others stayed put. This is speculation on my part, not science, but I can figure no other way succeeding generations of sockeye could know the dam had disappeared.

I like to think of the genetic variability and the force of instinct that enabled those salmon to endure. I keep that force and the complex genetics in mind whenever I hear or read about the Columbia River salmon's slide into oblivion. If sockeye could survive in Redfish Lake, then maybe salmon can persist in the Columbia and its tributaries, even though science paints a bleaker picture.

The Columbia's salmon now exist perpetually at the edge of extinction. For more than a hundred years, people have argued over their fate, faulted one group or another for their decline, and suggested doing this or that would revive the runs. In the 1930s the federal government started building large hydroelectric dams on the Columbia and its tributaries, and since then, dams have taken much of the blame for the salmon's precarious existence. The concern over dams destroying salmon runs intensified after the government built four dams on the lower Snake between Lewiston, Idaho, and the river's confluence with the Columbia. As salmon runs steadily declined and scientific evidence accumulated showing that the four Snake dams were damaging fish runs on the Salmon and other rivers, some people began talking about removing, or breaching, the dams on the lower Snake. Others, predictably, claim breaching the dams will not help salmon but will cripple the economies of Idaho, Washington, and Oregon.

People hold a variety of opinions about salmon and what to do as their numbers dwindle. Some people depend on the fish for their livelihood or their culture or both and would accept almost any plan, no matter the hardships, if salmon once again would fill the rivers. Some see the fish as symbols, either of the region or as a sort of living representation of the natural world, and they

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too seem willing to endure some hardship for salmon. Some people want salmon but would sacrifice nothing for them; some wouldn't care if salmon went extinct; a few probably never even think about salmon, the final group growing larger the farther they live from a river with salmon in it. Between each opinion exists another opinion multiplied off into infinity. I often use the collective pronouns "we" or "us" when I talk about salmon. In my journalist's attempt at objectivity, I try to see myself holding almost any opinion, even ones I don't agree with; I also think that all of us are responsible for the salmon's future.

Because nobody can agree on what to do about salmon, the government has sometimes concocted strange plans to maintain populations while debate continues. By the time the Redfish Lake sockeye were listed as endangered, they had almost vanished. Some years only four or eight adults returned from the ocean, some years one, some years none. So a captive breeding program began. Biologists took fish from the lake, both adults and juveniles, as brood stock for a hatchery near Boise, Idaho. Each year, four hundred eggs, carefully selected for their genetic diversity, are culled from the thousands of sockeye eggs collected at the hatchery. The salmon born from those eggs spend their lives not in a lake or river or ocean, but in concrete hatchery pens. Another four hundred sockeye are raised at a separate hatchery just in case something kills all the hatchery sockeye near Boise.

According to the federal government, the program is viewed as a "short-term safety net, pending decisions about longer-term approaches." It's not clear anybody knows what those longer-term approaches will be. Juvenile sockeye not used for the captive breeding program are released and will spawn in the lake if they survive their time in the ocean. The goal is to have two thousand sockeye return each year to Redfish and two other nearby lakes. But in the best year, only a couple hundred fish have made it back. Running the Idaho hatchery costs more than seven hundred thousand dollars a year and a group of economists recently

estimated that each sockeye returning to Redfish Lake costs close to seventy-five hundred dollars apiece.

Maybe our willingness to spend so much money to preserve Redfish Lake's sockeye proves that Sunbeam Dam is part of the past. Maybe now most people would choose salmon over some business that will eventually come to an end. It's hard to say. In the late 1930s and again in the 1940s and 1950s, a company operated a gold dredge on the Yankee Fork, which joins the Salmon just past Sunbeam Dam. The huge craft had plied the river, scooping up streambed. The gold gone, the dredge now sits like a bleached shipwreck beside the Yankee Fork and mounds of what once was river bottom rest nearby in long rows like brown banks of rocky snow pushed up by a plow. The gold dredge wrecked the Yankee Fork as salmon habitat. Over time, restoration projects have improved the river's habitat, but salmon runs remain far below historic levels.

In the 1990s, an open pit gold mine that used cyanide to separate gold from rock was started near a creek feeding into the Yankee Fork. Like the mine powered by Sunbeam Dam, the new mine lost money, and three years later the owners closed it. Cyanide-tainted water from the five-hundred-million-gallon tailings pond remained, and eventually small amounts of tailings-pond water started to leak into nearby streams. People worried about what the water—tainted with mercury and cadmium, as well as cyanide—would do to the salmon that spawned in the Yankee Fork and in the main river. The mining company controlled the leaks, and various government agencies have decided to let the company drain the pond, slowly, without treating the water. Instead the river will dilute the deadly waste.

When the next mine or timber sale or who knows what else that might threaten salmon is proposed, I'm certain some people will protest, but I'm not certain economic or political expediency won't win the day. Even I might be willing to compromise for the sake of jobs and the economy, although I would like to think I wouldn't. I am certain that after the damage was done, everybody