

STEWARDSHIP

RESURRECTING THE KLAMATH: A GIFT TO BE CLAIMED

BY BILL CROSS

FOR ANYONE WHO loves rivers, removing a dam is a gift. So what would you call removing four dams at once? Well, that would be like having your birthday, Christmas, Hanukkah and Kwanzaa all rolled up into one. Like that's ever going to happen ...

Yet in just under ten years, that's exactly what river runners could be doing: unwrapping the biggest dam-removal gift in history. In 2020, four dams may be demolished on the Klamath River near the Oregon-California border, helping to restore one of America's premier fishing and whitewater rivers. For the first time in over a century, more than 200 miles of the Klamath could flow free to the Pacific.

It's possible thanks to a complex deal hammered out between conservationists, farmers, Native American groups, utilities, and fishermen. The historic agreement, signed in 2010 by the dams' owner, PacifiCorp, along with the Secretary of the Interior, the governors of California and Oregon, and others, is unprecedented—and controversial. Interior Secretary Ken Salazar hails it as “the largest river restoration in the world,” yet some conservationists complain that it doesn't go far enough. And, perhaps surprisingly, many local raft outfitters wish one of the dams could stay.

The agreement contemplates a breathtaking possibility: removing four dams with a combined height of 400 feet; uncovering 17 miles of river flooded for half a century or more; and restoring flows to another 6 miles dewatered by hydropower diversions. In short, reuniting 233 miles

of river into one unbroken, unfettered waterway, restoring the Klamath as the West coast's longest whitewater river.

It sounds fantastic...but what would it mean for river runners? Would a restored Klamath be one of the West's premier whitewater rivers? Or is it possible—as some outfitters fear—that this brightly wrapped box actually holds a white elephant? River runners need to know, because while it might be fun to open a mystery gift, dam removal is serious—and irrevocable.

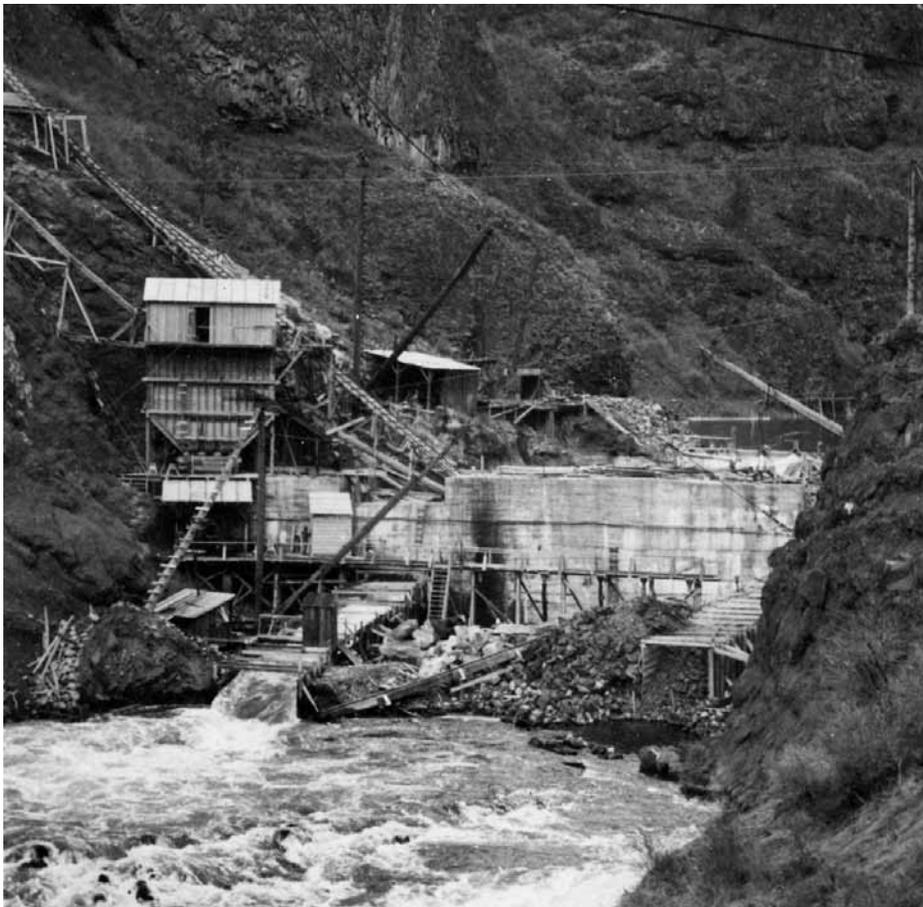
The dams were built long before boaters saw the Klamath, so there's no guide book to tell us what the pre-dam river was like. To predict what dam removal may reveal we need to “shake the box,” seeking clues to what a restored Klamath would look like. Doing so will help river runners prepare for the tremendous changes dam removal would bring, while securing key provisions like accesses, preservation of open space, and assistance for commercial outfitters who will have to adjust to new flows on existing runs, while gearing up to guide clients down entirely new stretches. If river runners don't know what a restored Upper Klamath would look like, they may, quite literally, miss the boat.

American Whitewater strongly favors removing the Klamath dams. The article that follows, *A River Runner's Guide to a Free-Flowing Upper Klamath*, helps explain why undamming the Klamath is a boon not only for salmon and the river, but for boaters too, as miles of lost whitewater will be restored. Clearly there will be challenges for outfitters, but there are things we can do to ease their transition. In the long run, undamming the Klamath will be one of the best gifts river runners have ever received.

Want to know more? Let's shake the box.

Copco 1 Dam under construction in Wards Canyon, 1916. In 2020 this scene could be repeated—in reverse—as this dam and three others are dismantled.

Photo courtesy PacifiCorp.



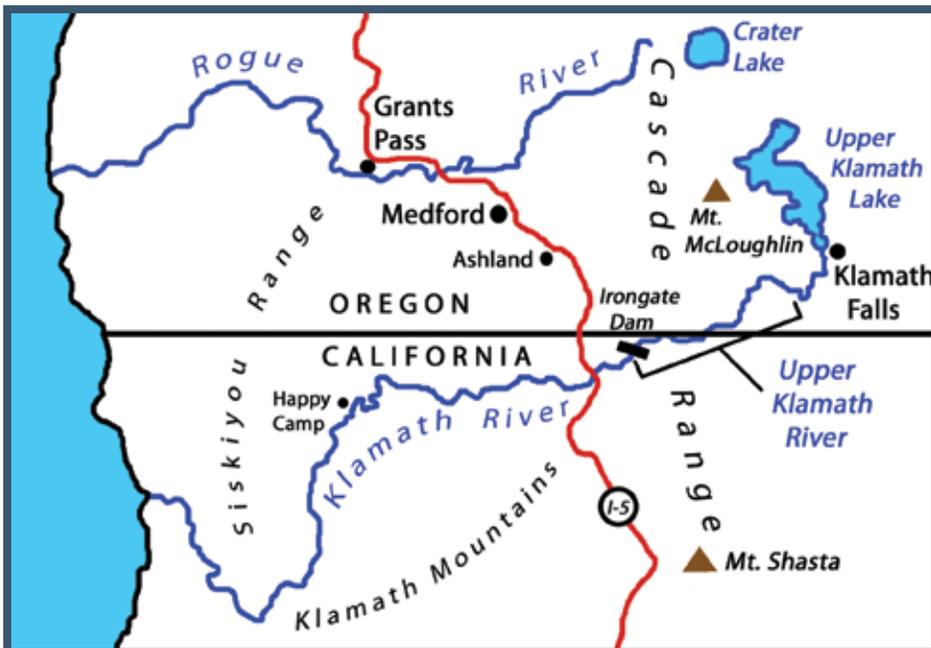
A RIVER RUNNER'S GUIDE TO A FREE-FLOWING UPPER KLAMATH

forced a passage through the lofty Cascade Range. Near the Oregon-California border, the Upper Klamath makes a dramatic 45-

Klamath is not a mecca for multi-day trips. The reason is simple: the same geography that produces outstanding rapids is also ideal for producing hydroelectricity. Beginning in 1917, the river's frothy course has been repeatedly tapped to slake the West's insatiable appetite for electricity.

Today four dams block the river as part of PacifiCorp's Klamath Hydro Project: JC Boyle Dam, Copco Dams # 1 and 2, and Irongate Dam (see Map 2). Together they flood or dewater half the Upper Klamath, leaving only two boatable stretches—the lightly used 7-mile Keno Run, and a popular 17-mile Class IV+ stretch sometimes called Hells Corner. Even these remnants were once targeted for dams which, if completed, would have converted the entire Upper Klamath to power generation.

Hydroelectric development has profoundly harmed the Upper Klamath, decimating fisheries, degrading water quality and destroying some two dozen miles of whitewater. Before dams, the Klamath was the West's third most productive salmon river, with over a million fish spawning annually. Today dams block migrating fish from 420 miles of habitat and foster the



Map 1: The Klamath River region.

Map by Bill Cross

Cleaving the Cascades

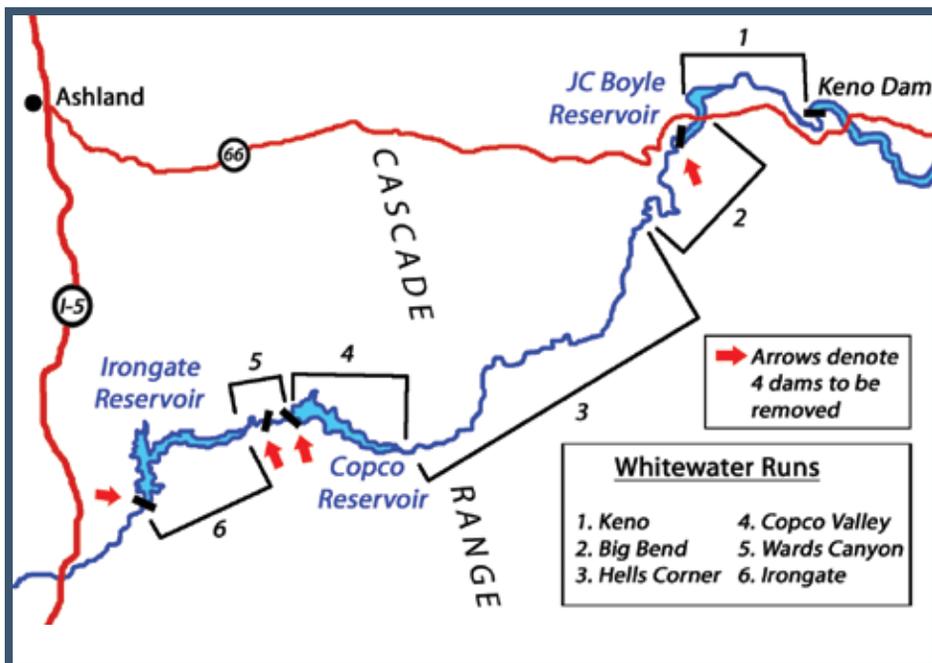
The Klamath is a rebel. Most rivers rise from mountains rather than cutting through them. From the Appalachians to the Sierra Nevada, America's mountains give birth to her greatest whitewater rivers. But these offspring usually flow away from the summits where they were born; only rarely do they breach the very heart of a range. When they do, the spectacular collisions between roaring rivers and towering peaks produce many of America's finest multi-day whitewater trips.

The Klamath is one of these mountain-cleaving rivers—one of only three to have

Map 2: Upper Klamath from Keno to Irongate. Four dams to be removed are marked with red arrows. Six whitewater runs are shown: two existing—Keno and Hells Corner—plus four potential new runs.

Map by Bill Cross.

mile cut through the Cascades (see Map 1). The river was here before the mountains, and held its course as volcanic peaks grew up on either side. Yet unlike other rivers that traverse mountains, the Upper



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growth of toxic algae. Salmon runs have plummeted, striking a terrible blow to the Klamath's indigenous peoples as well as to commercial and recreational fishermen. For river runners the effects have been more complex: the Klamath Project obliterates 23 miles of whitewater, but alters flows in a way that benefits commercial rafting on Hells Corner. As a result, dam removal has generated some controversy in the whitewater community. Adding to the tension is an almost complete lack of information about what a post-dam Upper Klamath would offer to river runners.

Gathering of Waters

Geographers divide the Klamath at Irongate Dam: everything upstream is the Upper Klamath, everything downstream is the Lower. The upper basin is dry by Oregon standards, but big enough—twice the size of Delaware—to generate impressive runoff. Like many Cascades rivers, the Upper Klamath has a moderate flow pattern, with much of the precipitation percolating into the porous volcanic soil, then emerging as steady springs that help keep the river runnable year-round in all but the driest years.

The waters of the upper basin gather in broad, shallow Upper Klamath Lake, Oregon's biggest body of water, which acts as a giant solar water heater, warming to over 70 degrees in summer. Where water spills from the lake, the Klamath is born. For its first 21 miles the river winds placidly past homes, farms and ranches, its current slowed by a dam near Keno. At Keno the Klamath shifts abruptly from its pastoral beginnings to its pell-mell passage through the Cascades. Keno Dam is not part of the four-dam removal package, and marks what would, in future, be the start of the free-flowing river. If all goes well, in a decade the Klamath will run free from here to the sea.

Below Keno the Upper Klamath has all the makings of a whitewater classic: high gradient, ample flow, excellent scenery, and—if the dams come out—several days' worth of boating. These 45 miles are the

steepest on the Klamath, with an average gradient of 42 feet per mile and peaks of over 100 feet per mile. Where the river cuts down to bedrock it offers thrills to satisfy any expert, but there are milder sections as well, with gradients as low as 16 feet per mile. A restored river would offer runs to suit any taste, from mellow Class II to roaring Class IV+ or even V. The availability of more and longer runs would almost certainly boost the river's popularity with private boaters, and could help offset reductions in commercial use on Hells Corner. Currently most trips are single-day, but after dam removal boaters could enjoy multi-day journeys.

The Undiscovered Country

At last we're ready to launch our virtual boats for a guided tour of two places: the Klamath that is, and the Klamath that may be.

But first, a disclaimer: what follows is a guide to a river that does not yet exist. As a guidebook author I've written about scores of rivers, but never about runs that are buried underwater. To meet that novel challenge I have sought the best available information to predict what dam removal might reveal: USGS maps and flow data, pre-dam surveys, historical photos and accounts, PacifiCorp documents, Bureau of Reclamation flow projections, and reservoir depth-soundings. Still, some mystery remains. I have tried to distinguish clearly between what is known, and what is educated guesswork.

One unknown is how long it may take for reclaimed stretches of river to recover. Bypassed reaches will heal almost instantly: restoration is a matter of "just add water." But where reservoirs are drained, no one can be certain how soon the landscape will recover—though much could be done to hasten revegetation. The good news is that the reservoirs hold only moderate amounts of sediment. Much is fine-grained and should flush out almost immediately, though it may take several seasons to fully restore the channel.





Surfing the Keno Wave.
Photo by Marsh Chamberlain

Another key concern is future flows. At present, dam removal is linked to the Klamath Basin Restoration Agreement (KBRA), which allocates water between agriculture and fisheries. KBRA would allow more year-to-year flow variation than the present regime, depending on each year's rain and snowfall. The guide that follows presumes that flows after dam removal would be governed by KBRA, but that is not a political certainty.

I have divided the Upper Klamath into six runs (see Map 2), and my descriptions project what these sections will be like once the river has recovered.

1. KENO RUN:

Keno Dam (4,065') to Hwy 66 (3,785' est.) – see Map 3
 Length: 7 miles
 Gradient: 40 ft/mi; 50 ft/mi first 5 miles
 Difficulty: III

Keno is where river and mountains first clash, as the Upper Klamath makes its initial cut into the Cascades with a quick sprint through a rugged canyon (see Map 2). A highway parallels this run but stays

far above the river, giving this stretch excellent solitude. The forested canyon is home to abundant bird life including eagles, cormorants, and pelicans.

Present

Exciting Class III rapids pepper the first five miles below Keno Dam, and not far below put-in Keno Wave offers outstanding park-and-play at the right flows. Although this run is technically boatable year-round, few use it in mid-summer since flows are skimpier here than on downstream stretches. Yet even during spring snowmelt, this run gets only modest use despite challenging whitewater and fine scenery. The culprit is the problematic take-out: JC Boyle Reservoir backs water over the final two miles, so boaters face a long flatwater paddle to take-out.

Map 3: Keno and Big Bend runs
Map by Bill Cross

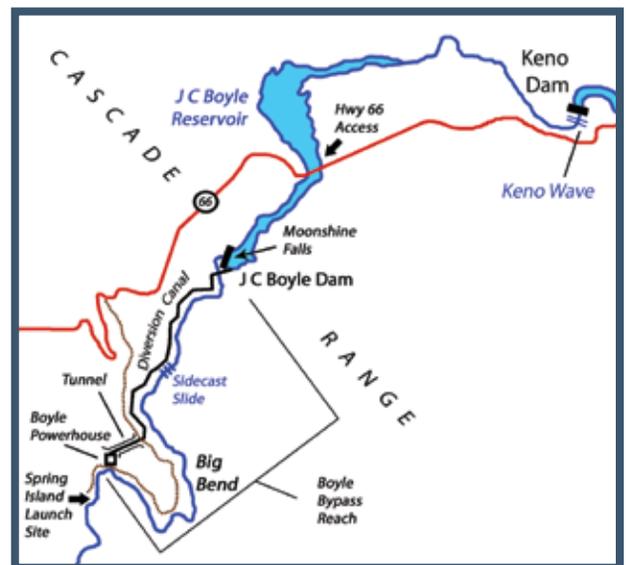
Future

Dam removal will eliminate this run's biggest drawback—the flatwater at the end. Based on pre-dam surveys and reservoir depth soundings, the last two miles appear to have a gradient of about 10 feet per mile, suggesting good current and perhaps a few riffles. With Boyle Dam removed, boaters could combine the Keno run with the thrilling rapids of Big Bend just downstream. As part of dam removal, river runners could seek improved access below Keno Dam, allowing easier put-ins and greater use of Keno Wave.

2. BIG BEND:

Highway 66 (3,785' est.) to Spring Island Launch Site (3,300') – see Map 3
 Length: 6 miles
 Gradient: 81 ft/mi, peaks over 100 ft/mi
 Difficulty: IV, V at higher flows.

Big Bend is steep. These half-dozen miles drop nearly 500 feet, making this an expert paddlers' paradise. Below the Highway 66 bridge the canyon narrows and the Klamath knives into a deep gorge. The basalt bedrock is laced with subterranean water channels, and in this stretch the Klamath picks up roughly 250 cfs of steady spring inflow—most of it about a mile below JC Boyle Dam. In fact, anglers call this the Clearwater section in reference to the icy



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Rafting Boyle Bypass Reach during the 2002 Recreational Flow Study. The diversion canal is visible above the right bank.

Photo by 2002 Recreational Flow Study

spring water. Near the end of this reach a two-mile meander known as Big Bend marks the canyon's deepest point, with rugged slopes rising a thousand feet from the river.

Present

This high-gradient stretch was an obvious target for hydro development. PacifiCorp's 68-foot-high Boyle Dam blocks the river a mile and a half below Highway 66, flooding the first part of the run and diverting the river into a canal for the next 4.3 miles. The dewatered "Boyle Bypass Reach" is reduced to fish flows except during rare high runoff. The water is returned to the river at Boyle Powerhouse, just below Big Bend.

Future

With Boyle Dam removed, this stretch could be a classic advanced run thanks to challenging whitewater, rugged scenery and strong base flows. Information about the lower part of the run comes mostly from a 2002 Recreational Flow Study

Moonshine Falls before construction of JC Boyle Dam.

Photo courtesy Klamath County Museum

photos show a riverwide ledge known as Moonshine Falls near the Boyle damsite, but it's unknown whether the falls survived dam construction (see photo).

Big Bend should be boatable year-round in all but the driest years, thanks to strong mid-summer base flows plus spring inflow. The run is at its best above 1,000 cfs, and should flow at or above those levels throughout spring runoff in most years. Mid-summer flows would fall below 1,000 cfs in most years, but kayaks and small rafts could still probably navigate the run all summer except in dry years. Larger rafts—including commercial paddle boats—could use the run in spring when flows are higher, and possibly all summer in wet years. Mid-summer use could be enhanced by developing an alternate put-in at Boyle damsite, just above where springs add flow. Big Bend would make an excellent day trip, or could be linked with adjoining runs for longer trips.

3. HELLS CORNER:

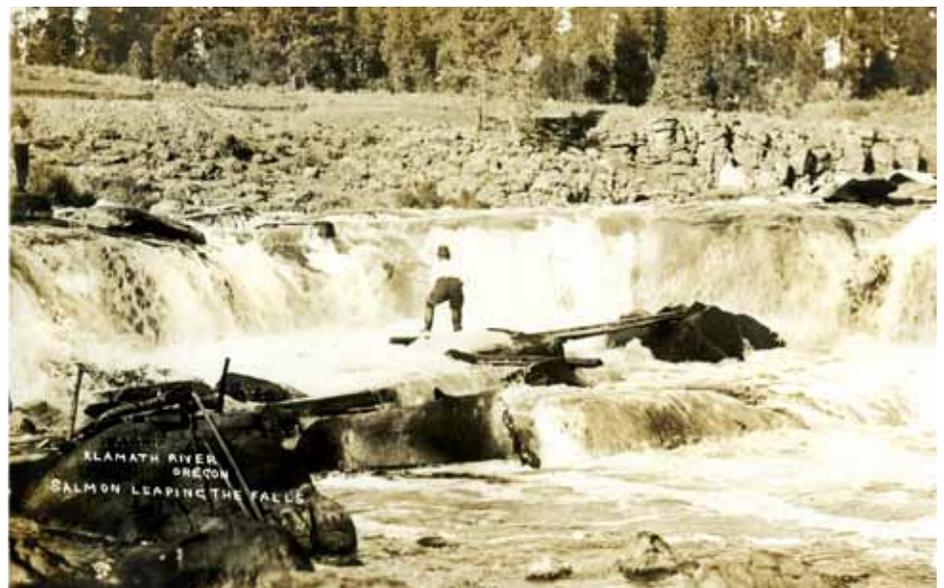
Spring Island (3,300') to Copco (2,605')

Length: 17 miles

Gradient: 41 ft/mi; peaks around 75 ft/mi

Difficulty: IV+

Hells Corner is by far the best-known section of the Upper Klamath. In fact,



Paddle raft on Hells Corner.

Photo courtesy Kokopelli River Guides

when most river runners say “Upper Klamath,” they mean these 17 miles. The reason is simple: this is the only section other than Keno that is not inundated or dewatered. Hells Corner marks the midpoint of the river’s descent through the Cascades, the landscape becoming gradually drier with each mile. As the river crosses into California (mile 11) the rugged canyon gives way to a broader valley with easy whitewater.

Present

Hells Corner’s outstanding rapids make it a favorite of commercial outfitters. Most of the drops are packed into a five-mile gorge in the middle of the run where the gradient soars to 74 ft/mi and the river pounds through powerful Class IV and IV+ rapids. Boaters can take out at the state line or continue down six miles of Class II to the hamlet of Copco. Hells Corner is much less popular among private boaters, in part because of the arduous shuttle.

The key to this run’s commercial success is reliable summer flows, allowing outfitters to book several thousand clients every summer. Hells Corner’s consistent flows are not natural: they are the result of hydro development. JC Boyle generates electricity during peak demand from late morning through mid-afternoon. PacifiCorp stores up the Klamath’s flow every night, releasing a paltry 100 cfs of “fish flow,” then discharges the pent-up water through Boyle Powerhouse the next day in an oversized pulse. Thanks to these artificially enhanced flows, even in mid-summer rafters ride a powerful surge of 1,550-1,750 cfs.

Future

The most obvious effect of dam removal would be a shift from peaking releases to a steady round-the-clock flow, partway between today’s peak flow and fish flow. And that has outfitters worried. Many fear that these intermediate flows won’t support rafting in summer—or at least not the adrenaline-charged ride that thrills



customers. Everyone agrees that the river will still offer great rafting during spring snowmelt, but opinions differ over whether commercial rafting would be viable after early July in most years.

Under KBRA, post-dam flows are projected to be at or above today’s peak-release levels until around early June on average, then gradually recede to mid-summer lows averaging about 1,000 cfs. Because KBRA allows considerable year-to-year variation, about one year out of four mid-summer flows would dip below 800 cfs, while in wet years they could stay above 1,200 all summer. That increased variability will be tough on outfitters, who relish consistency.

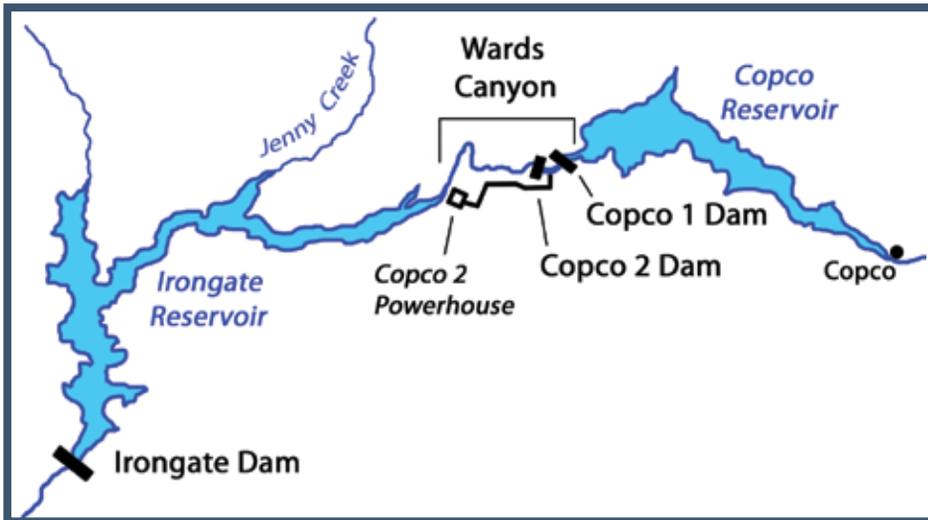
What would Hells Corner be like at the range of mid-summer flows projected under KBRA? In the 2002 Flow Study, boaters tested releases of 730, 1,060 and 1,360 cfs. They agreed that 730 was too low for commercial rafting, though the run was possible for kayaks and small inflatables. That suggests the run should almost always have enough mid-summer flow for boaters in small craft who don’t mind bony conditions, but the driest years will simply be too low for summertime commercial rafting. At 1,060 cfs—close to KBRA’s projected post-dam mid-summer median—the 2002 study found good technical paddling and the possibility

of low-flow commercial rafting, though several outfitters felt conditions were too rocky. At 1,360 almost everyone agreed commercial rafting would be viable.

Those findings make it tough to predict just how popular or satisfying mid-summer commercial rafting would be after dam removal. It’s safe to say that in most summers, Hells Corner would not be as attractive to clients—or as profitable for outfitters—as it is now. Outfitters could probably navigate the run in smaller rafts throughout most summers, but it’s hard to guess how many customers would sign up for these lower-flow runs.

One unquestioned benefit of dam removal on Hells Corner would be morning flow. At present, peak releases usually reach the primary put-in by ten AM, but it takes the water another couple of hours to reach the intermediate access at Frain Ranch, five miles downstream. Some outfitters and many privates would prefer to launch at Frain because it greatly shortens the shuttle, but few want to wait that long for flows to arrive. Without dams there would be no wait—the water would always be there. To maximize this benefit, river runners could press for improvements to the extremely rough road in to Frain Ranch. Morning flow could also make Hells Corner a more viable overnight trip by eliminating the long wait

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Map 4: Upper Klamath from town of Copco to Irongate Dam.

Map by Bill Cross

for releases to reach campsites miles below the powerhouse.

4. COPCO VALLEY:

Copco (2,605') to Wards Canyon entrance (2,500' est.) – see Map 4

Length: 6 mi.

Gradient: 18 ft/mi

Difficulty: Probable II to II+

The six-mile Copco Valley run would be the gentlest on a restored Upper Klamath—thanks, ironically, to a dam. Not Copco



The dramatic entrance to Wards Canyon at the end of Copco Valley, before construction of Copco 1 Dam, circa 1910.

1 Dam, the 126-foot-high concrete plug that currently floods this stretch. No, the dam that produces this easygoing reach is far older. Six miles below the settlement of Copco a lava flow once blocked the river, backing up a five-mile lake. The Klamath gradually filled the lake bottom with sediment, then carved a deep outlet notch through the lava dam, creating the landscape that Native Americans once knew: the Klamath winding gently through a broad valley before knifing into a deep volcanic canyon.

Present

The lava narrows, known to settlers as Wards Canyon, was the Klamath's most obvious damsite, and in 1918 Copco 1 Dam was built, flooding the valley. The reservoir's straight channel masks the serpentine meanderings of the original river, and motorboats now skim over what was once the most fertile stretch of river below Keno: pre-dam maps show the river winding past ranches, pastures and orchards.

Today Copco Reservoir's stagnant waters produce a decidedly less appealing crop: toxic algae. When the Klamath's warm waters stagnate, trouble brews, and almost every summer blooms of blue-green algae coat Copco and Irongate Reservoirs, emitting a potent toxin that has forced swimming closures at the reservoirs and along the Lower Klamath. At times the State

of California has posted warnings for over 80 miles downstream, deterring some boaters—including commercial outfitters' customers—from visiting the Klamath. The river simply can't flush the reservoirs quickly enough to keep the algae at bay, but dam removal will dramatically improve water quality by letting the Klamath flow swiftly through these sections.

Future

Pre-dam surveys show a modest gradient, implying good current but easy whitewater—ideal for less experienced boaters or anyone who prefers scenery to thrills. Historic photos show a lush riverside forest, and once vegetation returns, wildlife should thrive. Draining Copco will expose 1,000 acres of riverfront land, much of it gently sloping benches ideal for camping and hiking. Outfitters and private boaters could use this run several ways: for gentle one-day trips; as an extension of the final five easy miles of Hells Corner; for camping after running Hells Corner; or as a prelude to the dramatic whitewater of Wards Canyon. The key to making this a workable run is to develop accesses just above Wards



Toxic algae in Copco Reservoir.

Photo courtesy of Klamath-Salmon Media Collaborative

Canyon, so less experienced boaters can take out before the big rapids downstream.

5. WARDS CANYON:

Wards Canyon Entrance (2,500'est.) to Copco 2 Powerhouse (2,330') – see Map 4
Length: 2.0 mi
Gradient: 85 ft/mi
Difficulty: IV; possible V

Wards Canyon is a whitewater brawl. Bookended by the peaceful Copco Valley upriver and the moderate Irongate run downstream, Wards Canyon is an intense clash between the irresistible force of the Upper Klamath and the immovable object of a lava dam. The Klamath wins this geologic fracas by slashing a deep cleft through the dam, but the lava gets enough licks in to churn the river to foam in the turbulent passage. It's a natural collision guaranteed to quicken the pulse of advanced boaters. But Wards Canyon is more than just big whitewater: it is a scenic and geologic wonder, a 300-foot-deep defile bounded by sheer colonnades of columnar basalt.

Present

Wards Canyon is an engineer's dream: easy damsites, a steep descent and abundant flow. Small wonder that every inch is tapped for hydro production. Copco 1 Dam blocks the river a quarter-mile below the canyon entrance. Then 500 yards downstream, Copco 2 Dam diverts the entire river (except at rare high water) into pipes that bypass the channel for 1.5 miles down to Copco 2 Powerhouse. The dam releases a paltry 10 cfs to the bypass reach, which as a result is heavily overgrown with brush. All of which means that Wards Canyon has never been available for boating. The only documented runs were during the 2002 Flow Study, and even those only reconnoitered the bypass reach. No boater has ever seen the upper half-mile that is buried by dams.

Future

Wards Canyon has tremendous potential, especially given its proximity to I-5. To predict what the rapids will be like, our best



Kayaking Wards Canyon during the 2002 Recreational Flow Study.

Photo by 2002 Recreational Flow Study

modern source is the 2002 Flow Study, when paddlers tested releases from Copco 2 Dam into the bypass reach. At 1,200 cfs—barely higher than median projected mid-summer flows under KBRA—they found numerous exciting Class IV rapids. Historical sources offer clues to what lies in the uppermost half-mile, buried beneath the Copco dams. Engineer John Boyle's 1911 description of Copco 1 damsites speaks volumes:

The width of the canyon...was 70 feet, all of which was taken up by the water of the river. For 150 feet above the dam and 350 feet below, the river channel had a grade of 2 feet per hundred, producing a velocity... of about 20 feet per second.

Boyle's description tells us the river was narrow, very swift, and had a gradient near 100 feet per mile. Clearly Wards Canyon started with a serious bang—certainly Class IV, possibly higher. We simply won't know until the dams come out.

Wards Canyon has a lot going for it: big rapids, spectacular scenery, summer-long flows, short shuttle and location 20 miles from I-5. Outfitters could offer half-days,

or full-days in combination with adjoining reaches. Private boaters could do "laps" of this short stretch, while overnight boaters could continue downriver. The key elements needed are new accesses at the upstream and downstream ends of the canyon, along with brush removal—after 90 years of diversions the canyon is so overgrown that it could take decades to clear on its own.

6. IRONGATE:

Copco 2 Powerhouse (2,330') to Irongate Dam (2,170') – see Map 4
Length: 7 mi
Gradient: 24 ft/mi
Difficulty: probable II+ to III+

In Irongate the river finds a happy medium between the mellow meanderings of Copco Valley and the hell-for-leather sprints of Big Bend and Wards Canyon. In this final stretch the Upper Klamath flows through a semi-arid canyon dotted with oak, juniper and pinyon pine. The run ends below Iron Gate, a scenic narrows for which the dam is named.

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Present

Since 1962 this reach has been flooded by 173-foot-high Irongate Dam.

Future

This reach has great potential, combining strong summer flows with enough gradient for good whitewater—most likely intermediate, though stronger drops are possible. It is long enough for a day trip, or could be combined with adjacent sections for longer runs. The first four miles descend at a brisk 30 feet per mile as the river courses through a narrower canyon. Three miles above Irongate the canyon broadens and the gradient eases to 16 feet per mile, suggesting good current but milder rapids in the final stretch.

Irongate could prove quite popular for both private and commercial trips. For outfitters, the run's proximity to I-5 makes it potentially fertile territory: take-out is just nine miles off the interstate. This stretch may hold the most accessible intermediate whitewater on the entire Klamath, along with good camping and solitude. As at Copco Reservoir, draining Irongate will expose 1,000 acres of previously flooded land, but unlike Copco there are almost no homes along the shore. With proper stewardship, Irongate could offer excellent scenery and seclusion just miles from I-5.

Making the Gift Count

Removing the Klamath dams is great news for river runners—one of the biggest gifts the whitewater community has ever received. Spectacular reaches of river will be restored, new whitewater runs will emerge, toxic algae will cease to pollute the lower river, and the Upper and Lower Klamath will be reunited into the West Coast's longest continuous whitewater river. The transition will be challenging for local raft outfitters, yet even as they lose Hells Corner's predictable flows, they will find new long-term opportunities on a restored Klamath.

But the gift of dam removal won't mean much to boaters if they can't use the

river. That's why American Whitewater is working to secure access, eliminate boating hazards, preserve open space and ensure that a restored Klamath is fully accessible to both private and commercial river runners.

The BLM has completed a study of the effects of dam removal on whitewater recreation, and is seeking public comment. AW is urging the BLM to support dam removal while planning ahead to maximize future whitewater recreation on a restored river. We need your comments in support of these goals.

1. Claim the Gift: Undam the River

While many groups are focused on the fishery benefits of a restored river, there are also recreational benefits to free-flowing rivers. Paddlers are uniquely qualified to provide this perspective and register support for the removal of all four Upper Klamath Dams.

2. Demand the Accessories: A River Runners' Wish List

Removing the dams is great but to take full advantage of a restored river and enjoy a quality recreational experience there are a number of details that need to be addressed in the restoration plan. The time to weigh in with these specific needs is now, as restoration plans are being developed:

- **Public Access:** Access is vital, especially where the difficulty of whitewater is variable, so boaters can choose runs suited to their skills and tastes. Paddlers should request new or improved access at Keno Dam, Highway 66 Bridge, JC Boyle Dam Site, Frain Ranch, Above Wards Canyon, Below Wards Canyon, and at Irongate Dam Site.
- **Assistance for Outfitters:** The river has long supported a vibrant commercial rafting industry. Dam removal will mean changes but these changes can be positive if basic steps are taken to address outfitter needs. These include improved access at Frain Ranch, timely

issuance of permits for new runs, and restoration of a more natural flow regime just prior to dam removal to help outfitters evaluate the run and prepare guides, equipment and logistics for post-dam conditions. Following dam removal, continued access to flow information is important for all river runners.

- **Restoring the River Channel:** In removing the dams, all debris associated with the man-made structures needs to be removed from the river channel to facilitate safe passage. In addition, vegetation that has colonized the dewatered Ward's Canyon needs to be removed.
- **Preserving Open Space:** PacifiCorp owns 3800 acres adjoining the reservoirs. Management of these lands will profoundly affect river runners. AW supports permanent protection of all PacifiCorp lands, including restoration and revegetation.
- **Permanent Protection:** Finally, to protect the investment in river restoration, we support designating the entire Upper Klamath from Keno to Irongate as a National Wild & Scenic River.

Watch the American Whitewater website for additional details on providing comments. The public comment period will be open for 60 days starting on September 22. You will be able to file comments on the Klamath Restoration website, <http://klamathrestoration.gov>, where you can also sign up to receive future updates.

Bill Cross is the co-author of Western Whitewater from the Rockies to the Pacific, an award-winning guide to over 150 rivers. He is an AW volunteer Regional Coordinator, and was named AW's 2009 River Steward of the Year for his work on the Rogue River.