

erhaps you've heard about the effort to tear out four major hydroelectric dams on the Klamath River in rural Northern California and southern Oregon? It's been an ongoing cam-

paign for over 20 years. Dam huggers and haters alike call it the largest damremoval proposal...ever.

The four dams—J.C. Boyle, Copco I, Copco II, and Iron Gate—were built between 1918 and 1962. They produce enough clean energy to power 70,000 residences. They are owned and operated by PacifiCorp, yet are federally regulated and licensed.

The dam-removal camp (environmental groups, several government agencies, and leaders of some local Indian tribes) says the goal is to tear out the dams in order to "restore" a "free-flowing" Klamath, thereby

restoring tribal fisheries. They also claim the dams are creating "toxic" blue-green algae, hazardous to animals and humans.

But there's a growing heap of evidence that flies in the face of the dam-removal

# There's a heap of evidence that flies in the face of the dam-removal activists' claims—evidence that shows dam removal could be epically catastrophic for all wildlife and people on the Klamath.

activists' claims—evidence that shows dam removal could be epically catastrophic for all wildlife and people on the Klamath. Stakeholders such as PacifiCorp (owner of the dams) and Siskiyou County (home to three of the four dams) are concerned that dam removal will, in fact, harm fish and all other life on the river, as detailed below. And as for that "deadly" algae? There's never been a reported case of toxic exposure on the Kla-

math or in the reservoirs. What's more, the reservoirs are documented to dilute and sequester the algae, which occurs naturally at the head of the Klamath River.

Citing all the scientific evidence showing Klamath dam removal is a bad idea would take hundreds of pages. (It's been done in official comments by Siskiyou County, PacifiCorp,

Siskiyou County Water Users Association, and many affected citizens.) So, in the interest of saving space, time, and readers' sanity, we present today the list, Things That Don't Make Sense, about the whole ordeal.

But first, a bit more background. Antidam zealots have failed at multiple attempts to secure federal legislation to take out the dams, most recently in 2015. After the last legislation went down in flames, the antidammers changed their tactic: attempt to circumvent Congress by using the regulatory process. They set their sights on the dams' operating license, which is reissued every 50 years by the dams' regulating agency, the Federal Energy Regulatory Commission. The license is due for renewal, so the anti-dam camp's plan is to convince FERC to hand over the operating license to a newly created "damremoval entity," then approve the dams' decommissioning and removal.

The plan, now known as the "amended Klamath Hydroelectric Settlement Agreement," was quietly crafted around the beginning of 2016, initially through secret meetings held by a few officials from the U.S. Department of Interior, California and Oregon agencies, and PacifiCorp (yes, PacifiCorp is officially on board with dam removal. See item number 14 of "Things That Don't Make Sense," below). Shockingly, any handpicked "stakeholder" who was allowed to participate

in the meetings was forced to sign a nondisclosure agreement. (All this became public when staff of U.S. Rep. Doug LaMalfa infiltrated the meetings. LaMalfa's district encompasses 68 percent of the Klamath River, and he's fought dam removal relentlessly.)

The end product of this noninclusive process, which LaMalfa called "entirely inappropriate" for public employees, was the creation of a dam-removal entity, the Klamath River Renewal Corporation. If permitted by FERC, it will take

on the operating license for the dams and eventually remove them. A few years following dam removal, it plans to dissolve.

This method has never been tried by dam-removal activists elsewhere. It's a clear Hail Mary pass and here's why. There's just too much about this that doesn't make sense.

### THINGS THAT DON'T MAKE SENSE

### (1) The goal of "restoring" the Klamath.

Before the dams, another name for the Klamath was Stinking River. Stretches of the upper Klamath would often go underground in the summer, leaving the aquatic life to rot in the sun. The upper Klamath is also naturally poor habitat for salmon and steelhead, as it starts out warm and rich in phosphorus in



The Klamath River, which used to go below ground for parts of the year in some areas, now flows year-round—thanks to the dams, located at the upper end of the river. This photo was taken from Independence Bridge, about 100 river miles down from the lowest dam, Iron Gate. Dams and all, the river was federally designated "Wild and Scenic" in 1981. A BLM webpage boasts about the river's beautiful scenery and rapids, noting that the Upper Klamath "has a lengthy season of use thanks to the steady water releases from the J.C. Boyle Dam and Powerhouse." The river is also an important "wildlife habitat corridor," another BLM webpage notes. It lists the river's anadromous fish populations—such as chinook, coho, and steelhead—as "outstandingly remarkable values." Despite the fact that the dams helped make all this possible, activists want to do away with them. Below left: Copco I Dam and Powerhouse. The dam, completed in 1921, is one of the farthest downriver. It was built at the head of a canyon where a 130-foot ancient reef prevented salmon passage "since time immemorial," according to the local Shasta tribe. Yet, dam-removal activists claim the dams are an impediment to prime salmon habitat. Below RIGHT: Copco

Lake. Here, it's partially drawn down, exposing some of the sediment that would be washed downriver should the dams be removed. All told, Copco and the other three dams hold behind them an estimated 20 to 30 million cubic yards of sediment. The low end of that estimate equates to two million dump truck loads.



the marshes and volcanic rock of south-central Oregon. Phosphorus feeds algae and makes for low-oxygen conditions that are bad for salmon.

The dams have been documented to improve water quality by filtering the phosphorus and other pollutants. Plus, they keep the river running year-round, in turn allowing for both fall and spring salmon runs. They also make it possible to send "pulse flows" down the river, which the agencies believe help prevent fish disease.

"Unnatural" as it may now be, the Klamath has become famous for its excellent whitewater rafting, fishing opportunities, and beauty. It was designated a Wild and Scenic River in 1981.



### (2) Releasing millions of tons of sediment to "restore" the river.

Even if the old river were, in fact, what the dam-removal activists wanted, it's not what they would get if the dams came out. An estimated 20 to 30 million cubic yards of toxic sediment is currently being held safely behind the dams. The low end of that estimate equates to a four-foot-deep, 150-foot-wide stretch of muck that would last for 200 miles. For context, the entire Klamath River is 257 miles long.

The effects this sediment will have on aquatic life in the river is a matter of great uncertainty. Some of the sediment is predicted to settle in the river and some of it may remain suspended in the water for several

FALL 2019 • RANGE MAGAZINE • 69

years. "Deposition of fine sediments would adversely affect aquatic and riparian biota and important habitat," said PacifiCorp in surprisingly hard-hitting comments submitted to FERC in February 2019. It also threatens salmon habitat, PacifiCorp noted.

A panel of scientists from Interior also noted in 2012 that "oxygen demand resulting from high organic content of the sediment deposits may result in periods of hypoxia in the river that are not suitable for aquatic life."

Additionally, a 2012 peer-reviewed report prepared for Interior asked planners for more information regarding sediment discharge. "As is the case with most dam removals," the report read, "the fate of the sediments behind the dams is of primary importance."

To date, further studies as to the amount and effects of sediment have not been done or, at least, have not been publicized.

### (3) Dam removers holding themselves harmless for any damages, while at the same time telling us not to worry about damages.

In the text of their document, the signatories to the Klamath Hydroelectric Settlement Agreement hold themselves harmless for: "any and all claims, actions, proceedings,

What about

liability?

to be left holding

the bag when

the sediment

hits the fan.

damages, liabilities, monetary or nonmonetary harms or expense arising from, relating to, or triggered by facilities removal, including but not limited to: (1) Harm, injury, or damage to persons, real property, tangible property, natural resources, biota, or the environment; (2) Harm, injury, or damage caused by

the release, migration, movement, or exacerbation of any material, object, or substance, including without limitation hazardous substances; and (3) Breaches or violations of any applicable law, regulatory approval, authorization, agreement, license, permit, or other legal requirement of any kind."

Well, seems like that pretty much covers everything. The trouble is, as pointed out by both PacifiCorp and Siskiyou County, just claiming you're not liable doesn't mean you're not liable. Someone will have to be left holding the bag when the sediment hits the fan.

### (4) Taking out fish hatcheries to "save" the fish.

Iron Gate hatchery, which is made possible by cold and abundant water from the dams, annually releases 75,000 yearling coho salmon, 900,000 yearling fall chinook



Several populations of sucker fish living in reservoirs behind the dams have been designated as "endangered." Dam removal will obliterate many of them and much of their habitat. In a strange contradiction, some local tribal leaders—who call the fish "sacred" and "teetering on the brink of extinction"—are pushing for dam removal. At the same time, these leaders have been calling on Klamath farmers to give up their water for the sucker. RIGHT: U.S. Rep. Doug LaMalfa, a staunch supporter of the dams,



meets with now-President Trump in Redding, Calif., May 2016. He seems to be making inroads with the administration: this May, Interior retracted a letter calling for Klamath dam removal, written by an Obama-era secretary of Interior. LaMalfa's been effective at stopping the dams' destruction in the past; his opposition was a primary reason that Klamath dam-removal legislation failed in 2014.

salmon, and 5.1 million fall chinook salmon smolts. PacifiCorp noted in its February 2019 comments that the "hatchery programs that currently conserve listed coho salmon

> and support harvest opportunities for chinook salmon" will come to an end.

### Someone will have (5) The goal of "restoring" coho salmon on the Klamath.

Protecting "threatened" coho salmon is likely the most-touted reason for Klamath dam removal. But the prevailing evidence shows that the Klamath

has never been prime habitat for coho.

The Shasta Indian tribe, whose aboriginal territory encompasses the dams, has stated that the river was, "since time immemorial," historically unfit for coho. A California Department of Fish and Wildlife fishing guidebook refers to coho as a coastal fish that doesn't like to spawn farther than 20 miles inland. And if the coho had wanted to migrate upstream to the present locations of the dams, it would have been stopped by at least three high reefs impassable to salmon.

Oh, and just so we're clear, this is the same coho that you can buy at the store. Coho are caught in large numbers off the coast of Alaska, where it thrives in the cold northern waters. Northern California and southern Oregon waters are too warm to be prime habitat—yet in 1997 the federal government designated coho in that region as an "evolutionarily significant unit." Hence the protected status of a fish you can buy for dinner.

### (6) Claiming dams have harmed salmon, when the numbers show salmon populations increased with the advent of the dams.

The first and largest dam, Copco I, was built in 1918. Thanks to hatchery records, we know that salmon returns to that area made no significant changes in response to the building of the dam. But after Iron Gate's construction in 1962, salmon returns actually increased by over 20 percent. Between 1980 and the present—a period cited by some as the "salmon collapse"—salmon returns to Iron Gate have been 200 percent of those pre-Iron Gate.

### (7) Creating a sucker fish versus salmon scenario, where neither can possibly win.

The anti-dam camp claims dam removal will help both salmon and suckers. The problem is, the two types of fish need totally different types of habitat—both of which are currently made possible by the dams. Suckers, which have been listed as "endangered," live above the dams, having adapted to the naturally highnutrient, warm waters of the upper Klamath. Below the dams, "protected" salmon need cold water and deep refugia in the river. Taking out the dams will both jeopardize salmon habitat and obliterate sucker habitat and two entire sucker populations in the reservoirs.

### (8) California Legislature giving the project a free pass to kill an endangered species.

How is the obliteration of "protected" suckers possible in a world where (usually) the Endangered Species Act trumps all? Unbelievably, the California Legislature last year passed a law (AB 2640) allowing the dam-removal corporation to kill endangered suckers. Yes, these are the selfsame suckers that farmers in the Upper Klamath Basin have been losing their livelihoods over. Remember the 2001 Bucket Brigade? More than 20,000 people showed up to support the 1,200 farmers whose water was shut off by the federal government in the name of the sucker. To this day, those farmers face the same threat each year. But killing suckers in the name of dam removal? No problem.

# (9) Expecting government agencies that are already signatories to the dam-removal agreement to perform objective analysis of the possible effects of dam removal.

Multiple Oregon and California agencies, as well as the U.S. Department of Interior and National Marine Fisheries Service, signed on to the 2016 agreement to tear out the dams. Yet, per their respective environmental quality acts, these same agencies will be responsible for running "objective" analyses of the expected environmental and socioeconomic impacts, should this project advance. Can anyone say "predecisional document"?

Meanwhile, the county of Siskiyou (California), home to three of the four dams and 68 percent of the river's length, has

expended hundreds of thousands of dollars of its limited resources fighting dam removal, including providing hundreds of pages of historical documentation and scientific studies. Many of those damning studies were actually commissioned or performed by the very state and federal agencies promoting dam removal. Why haven't we heard about them from the agencies? Well, when a study doesn't come out the way you wanted, you keep quiet.

# (10) Making local residents, who oppose dam removal, pay for it.

In 2010, Siskiyou County residents voted nearly 80 percent in opposition to dam removal. Later, citizens in Klamath County, Ore., voted 72 percent against dam removal. These same citizens are currently being forced to fund the very dam-removal effort they oppose—to the tune of \$450 million.

Of that \$450 million, \$200 million is coming from electricity ratepayers of California and Oregon. Every month on their power bills, these PacifiCorp customers are paying a

### "The Klamath dams provide green, renewable, already existing, lowcost power—and it's baseload power, meaning you can always count on it, unlike solar and wind."

—U.S. Rep. Doug LaMalfa, whose district encompasses 68 percent of the Klamath River



The Klamath Basin is located in rural Northern California and southern Oregon. The four dams being targeted for removal are owned and operated by PacifiCorp, a Warren Buffett subsidiary. They provide steady, cold, year-round water for salmon below them, and safeguard sucker fish habitat above them. Below: Klamath Basin residents are being forced to pay for dam removal they oppose. Here they are protesting dam removal in Yreka, Siskiyou County, Calif., in February 2019. In 2014, 80 percent of Siskiyou County voted against dam removal.

surcharge dedicated to dam removal...which, if accomplished, will make their electricity bills even higher.

The other \$250 million is coming from—you guessed it—California taxpayers! The money has been siphoned from a 2014 water bond measure, Proposition 1. It was sold to voters as a bond for "water quality, supply, treatment, and storage projects." It includes a total of *zero* references to Klamath dam

removal in its 26 pages of text. And, of course, nothing was mentioned about dam removal on the ballot.

Given the lack of evidence that dam removal will have a net benefit for animals or people, could the appeal of the project be the large sum of money associated with it?

## (11) Convincing locals that they won't miss the dams.

Property along the river will be affected dramatically by a newly formed 100-year floodplain (remember those 20 to 30 million cubic yards of sediment), the loss of flood control currently provided by the dams, the loss of

water in the river and reservoirs to fight wildfires, and a drop in the water table, which could dry up wells and possibly result in damages to homes as the ground shifts. The entire community of Copco, nestled along the banks of the Copco Reservoir, will be forever damaged.

One local group, the Siskiyou County Water Users Association, has pointed out yet another danger for residents in the Klamath Basin: when dam removal fails to provide more and better water for salmon, regulators will target residents—particularly farmers and ranchers—for water. That will include farmers in the Upper Basin and on tributaries to the Klamath, like the Scott and Shasta rivers.

The proposal's obvious danger to human existence on the Klamath begs another question: Is the effort being driven by an ideology that longs for a pre-human era?

### (12) Claiming local tribes support the effort.

While it's true that (the *leadership* of) a few tribes do support dam removal—namely, the Karuk and Klamath tribal leadership—the Shasta tribe, whose aboriginal territory encompasses a large portion of the Klamath Basin, adamantly opposes dam removal.

The Shastas stated in a press release in 2008 that the project will "destroy socioeconomic resources to property owners, ranchers, farmers and residents of Siskiyou County."

The press release further reads, "It is the collective opinion of the Shasta Nation Tribal Council that the removal of Klamath River dams would be catastrophic to modern-day water conditions for fish habitat and water users."

Furthermore, the tribe fears that dam

removal will "obliterate Shasta Nation history, past, present and future." Removal of the dams would expose and possibly wash downriver the bones of the Shasta Nation people who are buried under the lake in their historic villages.

As for the position of the other tribes, one can only surmise that they either believe the myth of fishery restoration, or are after something else entirely.

# (13) Convincing certain irrigation groups to sign on, even though there will clearly be less stored water available for irrigation, and even though dam removal will introduce new protected species both above and below the dams—which brings new regulations for farmers.

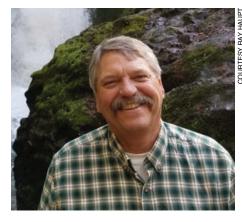
This one only makes sense when one considers that Upper Klamath farmers depend almost entirely on water controlled by the federal government, via the Klamath Reclamation Project (remember the Bucket Brigade). Those farmers are at the mercy of the agencies every time those agencies determine that fish—suckers or salmon—need that water.

Recognizing this vulnerability, the writers of the dam-removal agreement conjured a second agreement promising to "take every reasonable and legally permissible step to avoid or minimize any adverse impact" from new Endangered Species Act regulations that might befall farmers in the Upper Klamath—but only if they support dam removal. Otherwise, all bets are off.

The problem is the federal wildlife agencies (aka, the regulators) haven't signed the document making all those promises of protection. Even the document itself admits that "certain outcomes [are] not guaranteed or are more uncertain than others." Sure sounds like something to take to the bank, doesn't it?

# (14) PacifiCorp supporting the removal of its own dams.

Actually, the company *did* want to relicense the dams after the 50-year operating license expired in 2006. But when it reapplied for a new license with FERC, other federal and state agencies demanded upgrades for fish passage and other expensive "mitigation" measures. As the mountain of regulatory roadblocks grew, PacifiCorp began to see dam removal as a more palatable route—especially when dam-removal proponents came up with the idea of making taxpayers and electricity ratepayers fund the whole thing.



Ray Haupt, member of Siskiyou County Board of Supervisors, has asked high-level Trump administration officials to save the dams. He is a forester and former U.S. Forest Service ranger with a background in ecology. When asked why the dam-removal activists seem unresponsive to the science showing dam removal will be environmentally devastating, he says: "I've come to realize this isn't about the science. It's about money, politics and an ideological agenda."

# (15) Creating an interstate agreement to tear out the dams without congressional approval.

The Compact Clause of the U.S. Constitution requires that "No State shall, without the Consent of Congress...enter into any Agreement or Compact with another State." The Klamath Hydroelectric Settlement Agreement clearly does so, which is the thrust of a legal challenge brought by Siskiyou County Water Users Association. The challenge is currently pending before FERC.

### THINGS THAT DO MAKE SENSE

Luckily, things are starting to happen that do make sense. For example:

Legal victory for Siskiyou County, January 2019: A federal court ruling says California and Oregon can't continue to use permitting delays to stop FERC, the federal regulator, from relicensing the dams.

PacifiCorp comments, February 2019: The owner of the dams wrote scathing comments, laying out all the reasons why the project was a huge liability. "Dam removal on the Klamath River is a natural-resource-management decision that PacifiCorp, as a regulated utility, is unwilling to undertake because of the substantial risks and uncertain benefits," the company wrote. It has since recommitted to dam removal in a press release, after a backlash of political pressure from damremoval activists.

Secretary of Interior retraction of damremoval support letter, May 2019: U.S. Interior Secretary David Bernhardt retracted a support letter for the dams' destruction, written by Obama-era Secretary Sally Jewell. This was a major victory for Rep. LaMalfa and Siskiyou County Supervisor Ray Haupt, who had both been pushing on the administration to retract the letter. The fact remains, however, that Interior is still a signatory to the damremoval agreement.

FERC still waiting on answers from the dam-removal corporation: FERC, the regulating agency, hasn't yet accepted a "definite plan" from the dam-removal corporation, or even determined whether the corporation has the "legal and technical capacity" to take over the operating license. In making that determination, FERC has stated it will apply a "heightened public-interest standard" due to the unique nature of this endeavor.

Additionally, FERC has asked the corporation some pretty tough questions—like how will it get insured against the significant liability attached to this, and what will it do if costs exceed its \$450 million budget, which seems likely? So far, instead of providing answers, the corporation has only asked for extensions.

Meanwhile, the corporation has already awarded an \$18 million contract to Kiewit Infrastructure West Co. This initial contract, awarded in April 2019, is just for the exploratory "design phase" of the dam removal, yet it gives the disheartening impression that the project is a done deal. Next, Kiewit will come out with a cost estimate for the entire project—if the company thinks it can be done.

Here's an idea: instead of continuing the tough job of building a house of cards, why don't the dam-removal activists just pocket the \$450 million and spend the rest of their days in the Bahamas? They'd be doing the Klamath Basin a favor.

Theodora Johnson and her husband raise cows and kids in Siskiyou County. She was born on the Klamath, and has always known it as a beautiful river. However, her mother remembers before the last dam, Iron Gate, was built in 1962, and how low and smelly the river would get in the late season. Her generation was grateful for the flood control and proud to have its own clean self-sustaining hydroelectric power that made the river better. To see some of the extensive documentation supporting the dams, go to Siskiyou County's comments, found on its webpage (https://www.co.siskiyou.ca.us/naturalresources/page/klamathdams), as well as PacifiCorp's official comments from February 2019 (found at https://tinyurl.com/pacificorpcomments2019).