When stagnant waters become fresh

The dams on the Klamath River are coming down. Their removal reflects a very different theology than their construction.

by Derek Taylor
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The Copco 2 hydroelectric dam on the Klamath River, outside Hornbrook, California, prior to its removal in July 2023. (AP photo / Jeff Barnard / File)

When I moved to the West Coast, I began praying for rain. At first these prayers were provoked by wildfires in surrounding regions. Then by heat waves and drought. Then by shrinking rivers and dying fish. Living in the arid West—and with climate change only making things worse—I quickly learned that water is life.

The ancient Israelites knew this, too. Unlike their neighbors in Egypt and Mesopotamia, the people of Israel could not rely on river-fed irrigation projects. Their livelihood depended on the rain. But this put them in a precarious position. What if the clouds didn't provide? Perhaps Baal, the god of rain and fertility, would pick up the slack if YHWH failed on his end of the bargain.

Though I pray for rain, I don't depend on it. When I drive to the grocery store to pick up my daily bread, I gladly receive the gifts of irrigation. In the arid West, these irrigation projects rely on dams and the reservoirs they create. To put the matter bluntly, regardless of whether God sends rain, the dams will provide.

We have built a lot of dams in the United States—nearly 92,000 of them by recent estimates. Graphs charting GDP growth, carbon emissions, fertilizer use, and dam construction follow a nearly identical pattern: a slow growth in the first half of last century, followed by a precipitous upward curve beginning in the 1950s. This isn't to say these phenomena necessarily share a direct causal relationship. But I suspect their correlation indicates something significant about the spirit animating the modern Western imagination.

There is at least one sign of change, however. Dams are coming down at increasing rates. By one count, 65 were removed in 2022. Many of these were relatively small, non-power-producing structures.

This summer, however, a new milestone in dam removal was reached. In July, a hydroelectric dam named Copco 2 was decommissioned and deconstructed—the first of a series of four hydroelectric dams to be removed from the Klamath River in southern Oregon and northern California. By the end of 2024, the other three dams—Copco 1, Iron Gate, and J. C. Boyle—will be gone as well. This dam removal project, the largest in history, will allow water to flow freely down the Klamath for the first time in over 100 years.

It will also restore 400 miles of pristine salmon habitat. Before dams clogged their route, 1 million salmon migrated up the river each year. For the Yurok, Karuk, and Hoopa Valley peoples—the Native inhabitants of the river basin—these fish were a tangible sign of the Creator's abundance and the cornerstone of tribal economy, spirituality, and identity. As one former Yurok tribal chairman put it, "The Klamath is our grocery store, our church, and our main highway."

Things changed when European Americans discovered gold and began rushing west, trampling the pristine waters of the Klamath in the process. In 1864 the tribes negotiated a treaty with the US government to secure rights to water and salmon. The problem is that the government promised water to the White settlers, too. The infamous “first-in-time, first-in-right” doctrine of western water law granted settlers all the water they needed to irrigate their little patches of desert. But the government overcommitted itself. It couldn’t keep both promises at once. When the first Klamath dam was constructed in 1918, the salmon migration was reduced to a mere fraction of its earlier totals. Technically the tribes still maintained their rights. But what good is a river without any fish?

Ongoing battles over water have only made the situation more dire. In 2002 the Bush administration authorized the diversion of water from the Klamath to irrigate farms in the region, thereby decreasing water flows and increasing water temperatures. Nearly 70,000 chinook suffocated, the largest salmon kill in history. The rotting carcasses that piled up on the bank were a pungent symbol of mismanagement. Dozens of those decaying fish eventually made their way to the front steps of the US Department of the Interior in Washington, DC. In an act of prophetic witness, tribal members shipped the carcasses across the country to call attention to an ongoing history of environmental injustice.

Two decades later, these protests are finally paying off. The Klamath River dam removal project is a momentous victory for the land’s Native inhabitants, the salmon, and the entire river ecosystem. It also inspires hope that other dam removal projects—once thought to be an environmental fantasy—might someday become reality.

Yet even if dams begin to disappear, our pressing environmental questions will remain. Will there be enough water to go around? How do we manage growing demand and limited supply?

The Bible is shockingly short on policy recommendations. But it does have something to say about the relationship between water quality and our walk with God. Here I think of Hosea’s prophetic cry: “The land mourns . . . the fish of the sea are perishing” (4:3). I also think of Ezekiel’s protest against Israel’s false shepherds: “When you drink of clear water, must you foul the rest with your feet? And must my sheep . . . drink what you have fouled?” (34:18–19).

In contrast, the Bible regularly depicts God's faithfulness in terms of fresh, clean, abundant water. Ezekiel goes on to foresee a time in which God will send "showers in their season" that produce "splendid vegetation" (34:26–29). The river of life flowing from the temple, Ezekiel tells us, will enter "stagnant waters" and they "will become fresh" (47:8).

Dams do exactly the opposite. When they block a river's flow, they create pools of still water that bake in the sun. When water temperatures rise, so too do toxicity and bacteria levels. One infectious parasite found in the Klamath reservoirs, *Ceratonova shasta*, is responsible for killing juvenile salmon. An alga in the water, *Microcystis aeruginosa*, has produced toxicity levels that exceed WHO guidelines by nearly 4,000 times. A Google satellite image of Copco Lake, the reservoir formed behind Copco 1 dam, reveals a giant fluorescent green puddle. I am not a scientist, but it appears that fresh water has become stagnant.

I am a theologian, so I appreciate the spiritual verve on display in this explanation offered by a natural resources consultant for the Karuk tribe: given the current state of the water, the consultant claims, the tribe's ceremonial river bathing ritual "would be like going to mass and them giving you toxic algae to drink instead of wine."

According to one Yurok creation story, the Creator sends fish up the river so that humans can survive in the land. After filling the seas, the Creator looks out and proclaims: "There is enough." "Now the people will have enough to live," the Creator continues. "Everything that is needed is in the water."

A powerful theological imagination is on display in this creation story: there will be enough if we only take what we need. The ability to say "enough," of course, runs against the grain of Western economic orthodoxy. Apparently the Klamath tribes weren't concerned about sustaining constant growth. They seemed content with the steady state of the annual salmon run.

Then, in the spirit of "more," we dammed their river. In this moment, we proved how true their theology was. The algae-producing, bacteria-breeding, and fishing-killing dams disrupted an entire way of life. Everything they needed was in the water. Now the water is foul.

I must admit, though, that I've benefited from dams. They've made my life more convenient, more affordable, and more comfortable. Without them, I probably wouldn't exist at all. My ancestors moved to the region to work at the Hanford

nuclear site. Like all residents of central Washington, they were beneficiaries of the Columbia Basin irrigation project, one of the government's most aggressive attempts to water the desert, at the heart of which lies Grand Coulee Dam, once the largest slab of concrete in the world.

Aldo Leopold suggested that "the modern dogma is comfort at any cost." If so, then dams epitomize the modern moral imagination. The Klamath tribes believed in a theology of enough; dams are an extravagant performance of the dogma of more. They are modern dogma made concrete.

The clash between these two theologies runs throughout the biblical story. We see it when Jesus calls out those who build bigger barns, worry about tomorrow, and hoard their wealth at the expense of others. In this, Jesus isn't a novel theologian. He simply makes punchy what was plain all along. We see the same clash throughout the biblical narrative, wherever humans are tempted to secure their well-being without trusting God: Eve at the tree, Abram selling away Sarai, David counting his army, Israel's perennial attraction to false gods.

And we see it today in competing visions of a river. One vision of the Creator's abundance looks like cheap energy, extraordinary comfort, toxic reservoirs, and rotting fish. The other looks like 1 million salmon swimming up from the Pacific.

I'm not optimistic that the God of daily bread will inspire policy decisions as effectively as gods who promise to fill storehouses. Yet precisely as I pray for daily bread, I also pray for God's kingdom to come. When I look at the Klamath River, I see signs emerging on the horizon. The Bible ends with a river, after all (Rev. 22:1). Fresh, freely flowing water is an eschatological symbol. It seems appropriate, then, to see the Klamath River dam removal project—a project that literally makes stagnant waters turn fresh—as a proleptic sign. A freely flowing river full of clean water and healthy fish is a foretaste of the world renewed, a tiny bit of new creation rushing through the present.

Perhaps it's also a foretaste of things to come in the more immediate future. Bringing down a few dams now might inspire the moral and ecological imagination necessary for future acts of deconstruction. If we can remove these dams, maybe we can remove the Snake River dams that have choked out the West Coast's most abundant salmon fishery. And if we can liberate these watersheds, just imagine what other forms of un-mastery might be possible.

Until then, I think Christians have a simple task: to proclaim to the world that God's original vision of abundance is possible, if only we learn to trust it. Such a witness will be aided by better policy and fewer dams. But it doesn't require these things. All it requires is that we publicly display our faith in the God of enough.

It remains unclear whether we can sustain our current consumption patterns while also letting rivers flow freely. Perhaps it must be one or the other. Maybe in our modern world Baal's victory is inevitable. Unlike Elijah atop Mount Carmel, we are still waiting for the lightning to fall.

In the meantime, at least a few dams will.