

An aerial photograph of a river with white-water rapids. The water is a vibrant turquoise color, churning over dark, mossy rocks. The surrounding landscape is rugged and appears to be a forested area. The title 'Saving Europe's Blue Heart' is overlaid on the left side of the image in a large, white serif font for 'Saving Europe's' and a larger, light blue sans-serif font for 'Blue Heart'.

Saving Europe's Blue Heart

Activists are rising up to protect Bosnia and Herzegovina's wild rivers from a boom in small hydropower.

by **Peter Korchnak**

DRAGANA DRAKUL CROUCHES on the pebbled bank of the Bjelava River, shaded by a thicket of beeches and bushes, and scoops up several mouthfuls of water with her hands. She splashes some water on her face, then at her companion, Miloš Vujičić, who is her junior colleague at the medical school in Foča, a town of 12,000 some nine kilometers away in southeastern Bosnia and Herzegovina. The Bjelava is the only nearby river that Dragana Drakul can drink directly from.

"I love nature around Foča," says Drakul, who grew up in the area and lives in town with her family. "We have the most beautiful mountains in Bosnia. Many of the 17 rivers in our municipality originate up there."

Until early 2020, just before the Covid-19 pandemic, Drakul, Vujičić, and other locals thirsty for freshwater and the stillness of the surrounding hills would access the river through the forest, off an old service road. Nowadays, to reach the last untouched parts of the river, they walk on a new dirt road that was rammed through the woods to facilitate the construction of two small hydropower plants.

Bjelava's root word is "white," for the countless tiny rapids frothing the river and its two tributaries, the Velika (Great) Bjelava and the Mala (Little) Bjelava, which unite just below Vujičić's family property. The mainstem Bjelava River then runs another three kilometers northeast before merging with the

Drina River that forms a large portion of Bosnia's border with Serbia.

"I can see the confluence from my house," says Vujičić. His family has lived on the wedge of land for generations, raising livestock and operating a small water mill, which was the family's principal source of income. Over a hundred years old, it's the last flour-producing water mill in the municipality and enjoys protected heritage status as folk architecture. "There's now barely any water coming down Velika Bjelava to feed the mill," Vujičić says. "The river is our life, and if there is no river, there is no us. That's why we're fighting."

The two planned plants on the Bjelava are part of a wave of small



hydropower projects in Bosnia and Herzegovina that began about a decade ago, fueled by government subsidies for infrastructure projects, and facilitated, activists say, by lax enforcement of environmental laws and rampant corruption as well. It is a trend that Drakul and Vujičić are fighting locally as members of the leadership team of the Citizen Association Bjelava, one of many similar grassroots groups protecting rivers across the region.

For Drakul the fight to protect the river is personal. It's also something she does for a friend. "When the construction started," she says, Vujičić's "life was destroyed. He can't live without those rivers. And I feel I must try to help him."

THE STORY of small hydropower plants on the Bjelava has more twists and turns than the river itself. Construction of the two plants on the river began in March 2020, just days after Bosnia and Herzegovina declared a state of emergency in response to the coronavirus pandemic. The first step: bulldozing an access road through the forest. For nearly five months, crews felled beech, oak, and hornbeam trees (the logs were hauled away to destinations unknown), graded hillsides, and backfilled the original riverbed to redirect and straighten the stream.

"They didn't notify anyone about the construction; they didn't have any permits," Drakul says. Elsewhere in the Republika Srpska and the Federation of Bosnia and Herzegovina, three other small hydropower projects, at least one of which was similarly unpermitted, were also launched during the lockdown. (The country consists of two entities, each with its own government — Republika Srpska, within which Foča is located, and the Federation of Bosnia and Herzegovina. There is also the Brčko District, an additional, de facto self-governing unit.)

When she learned that construction had started on the Bjelava, Drakul joined Vujičić and others to form the group *Sačuvajmo rijeke Foče* (Let's Protect Foča's Rivers) and petitioned the municipality for an explanation. When repeated appeals were met with silence, the activists partnered with the *Centar za životnu sredinu* (Center for Environment) — a nonprofit that provides legal and research support for local environmental campaigns and helps organize protests — to scale up their fight.

The lack of official response was consistent with the government's general support for the projects: In 2018, the Republika Srpska government

awarded 50-year concessions for the projects on the Mala Bjelava and Bjelava, which would have a combined 3.088-megawatt capacity, to *Srbinje putevi* — a road construction company. This, despite warnings from the local water utility that construction on the Mala Bjelava could interfere with municipal water-supply pipes. (The company, which has no power plant-building experience, has said that, following road building and excavation, construction of the actual hydropower plants will be subcontracted.)

Then in April 2020, a month *after* the start of the construction, the government issued a geological survey permit for the two projects, "an attempt to [retroactively] legalize the illegal construction," according to a sign-on letter penned by the Center for Environment. (The investor was ultimately fined \$1,200 for providing false application documentation for this permit. Drakul describes that as "a joke of a fine.")

The same day the government issued this retroactive permit, Let's Protect Foča's Rivers held its first protest. In defiance of the pandemic-related ban on public gatherings, activists blocked the workers' path to their equipment at the river for a few hours. Shortly after the protest, Let's Protect Foča Rivers founded a more formal nonprofit, *Citizens Association Bjelava*, where Drakul serves as a spokesperson. Together, activists from the two groups have collected over 3,000 signatures on a petition opposing the hydropower projects.

Though their membership has grown over the past year, the activists have faced an uphill battle for community support, in part due to the influence of Gordan Pavlović, a local businessman who made his fortune buying bankrupt companies and who

now, among other ventures, owns the company involved with the two Bjelava projects. A member of the ruling Alliance of Independent Social Democrats party, Pavlović has been photographed in the friendly company of a well-known Republika Srpska strongman, Milorad Dodik. (Pavlović could not be reached for comment.)

“Only about five or six people are active” in Citizens Association Bjelava, Drakul says, adding that few people come to protests. Pavlović, she notes, “is the most powerful man in Foča. A lot of people in the area work in his companies so they are scared to cross him openly. Many people also think it’s impossible to win against him, so they stay away.”

Local communities’ reluctance to fight is common, says Jelena Ivanić, vice president of the Center for Environment. “Everyone who fights is brave.”

This bravery paid off when, in September, following another local

protest, the then-mayor of Foča, Radislav Mašić, ordered construction on both hydropower plants be suspended. But quite a bit of damage, by then visible on Google Earth, had already been done, says Drakul. Srbinje putevi had built nearly seven kilometers of road along 70 percent of the combined course of the Velika Bjelava, Mala Bjelava, and Bjelava. Vujičić, who knows “every tree and every rock here,” shows anyone he can where the river used to run and where the forest stood before the road was installed. “They trespassed on private properties and did this,” he says in a campaign video he made, gesturing across the destroyed landscape.

Last winter, a large landslide took down a hillside near the city’s water-supply pipes, burying portions of the new road and a waterworks service shaft. A number of smaller landslides occurred along stretches of the new streambed. While activists attributed the landslides to the road construction,

the municipal water inspector concluded snowmelt and excessive rainfall caused the unusual scale of landslides. The river also flooded in multiple locations along the rerouted riverbed and demolished sections of the new road. A mountain river can’t flow straight, says Vujičić. “The Bjelava is already returning to its natural course.”

Despite these obvious impacts, at the turn of the year, the Republika Srpska government approved an amended concession for the project: Instead of two plants on Mala Bjelava and Bjelava respectively, only one plant could be built on the Bjelava. But the amendment allowed waters from the Mala Bjelava, as well as the Velika Bjelava — which springs from a source in a protected zone — to be diverted to the plant.

The Center for Environment filed an administrative lawsuit in response. “We will defend Bjelava to the last breath by all legal means,” Drakul says.

Last year, without notifying local residents or obtaining any permits, a construction crew bulldozed an access road through the forest to the Bjelava River. The crew felled beech, oak, and hornbeam trees, graded hillsides, and backfilled the riverbed to redirect and straighten the stream.



THE BALKAN REGION “has the most intact and diverse waterways in Europe,” says Ulrich Eichelmann, founder of the Vienna-based environmental NGO Riverwatch. Some 35,000 kilometers of rivers run through the region, which includes the countries of the former Yugoslavia plus Albania, Bulgaria, and parts of Greece and Turkey. These rivers are home to one in five of Europe’s fish species and are considered among the continent’s most important freshwater biodiversity hotspots. Sometimes referred to as Europe’s “blue heart,” these rivers are home to at least 69 endemic fish species,

small. Many are planned for protected areas like national parks. Bosnia ranks second in the region, after Albania, in terms of hydropower development. About half of the country’s 262 rivers have small hydropower plants on them already, and 354 more such projects are under construction or planned.

Riverwatch’s Save the Blue Heart of Europe campaign is fighting to keep the projects that are still in planning or construction stage from being built by providing environmental assessments, funding, lawyers, consultations, and other resources to local conservation and citizen groups. “The campaign’s

move forward and work together for our beautiful country.”

Riverwatch’s experts have concluded that, while every big hydropower plant causes major environmental damage individually, small hydropower plants incur significant environmental costs through their cumulative effects. As on the Bjelava, small power plants are typically built in forests near rivers, and they require the construction of access roads, bridges, and transmission lines, which damage forest and river ecosystems.

A typical small hydropower plant is run-of-river style, drawing water from a river’s natural bed rather than storing it, and diverting it to a downstream powerhouse with channels or pipes. As a result, streams suffer from water shortages or can even be completely dewatered, destroying paths for spawning fish and depriving many organisms of their habitat. Riverwatch estimates that if all the planned hydropower plants in the Balkans are built, it would lead to up to 11 species extinctions, including fish like the asp and several types of dace, loach, and minnow.

Small hydropower plants have social impacts as well. They alter pristine forests and rivers that attract outdoor tourism, a fast-growing sector in Bosnia. In rural areas, where hilly topography prevents large-scale farming, they also impact irrigation and drinking-water supplies for livestock. And, as with the Bjelava projects, in some cases small hydropower plants are built near people’s homes, interfering with their lives and livelihoods.

That was the case for Vujičić, who came home from work one day to hear machinery working in the forest. The noise of excavating, bulldozing, hauling, drilling, and blasting resounded through the river valley for months, frightening his children and livestock. “It sounded like war here,” Vujičić says.

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many of which are endangered, and 40 percent of Europe’s endangered freshwater mollusk species. Forests around the rivers provide sanctuary to a variety of wildlife, including the endangered Balkan lynx.

Eighty percent of Balkan rivers are in pristine or good hydromorphological condition. “When I’m in Switzerland, I have no clue what a river looks like,” Eichelmann says. “But I can still go to the Balkans. These rivers are extraordinary in the European context, maybe even globally. The threat [they face] is extraordinary, too.”

According to Riverwatch’s last biennial count, in 2020, 1,480 hydropower plants were operating in the Balkans, more than double what existed in 2015, and 108 plants were under construction. An additional 3,431 hydro projects are planned for construction across the region, 92 percent of which are

goal is to stop all of them,” says Eichelmann, “which is weird because sometimes if you want to stop a single hydropower project, it seems like you have to dedicate your life to it.”

Activists fighting these projects habitually crisscross the country to attend protests and support each other. Many of these struggles are now receiving international attention as well. Maida Bilal, leader of the Brave Women of Kruščica, a women’s group in the eponymous village in the Federation, about 150 km northwest of Foča, received the 2021 Goldman Environmental Prize for her advocacy work. Bilal and her fellow activists maintained a 24-hour vigil on a local bridge for 503 days to block construction crews from breaking ground on two hydropower plants on the Kruščica river. “For us, rivers are life. They connect us,” says Bilal, “and they help us



Miloš Vujičić (left) participates in a solidarity action to protect the Bjelava. Dragana Drakul (right) holds a sign that reads “Let’s Stop Ecocide” at an August 2020 protest to save the Bjelava. Soon after the protest, the then-mayor of Foča suspended construction on the hydropower plants.

A NUMBER OF FACTORS drive the development of small hydropower in Bosnia and Herzegovina, including the country’s emissions-reductions goals. In 2014, Bosnia committed to improving energy sector efficiency and producing 40 percent of its electricity from renewable sources by 2020. But the energy transition has been slow, and the country has failed to meet that renewable energy target: Currently, Bosnia’s electricity comes primarily from coal-fired and large hydropower plants, at a two-to-one ratio. Small hydropower plants, meanwhile, supply only 3.6 percent of the country’s power needs.

The Bosnian government implemented a subsidy system to support the transition. Because small hydro power is classified as a renewable energy source, the government purchases power from them for a guaranteed price, which is, on average, 35 percent above market. Through this feed-in tariff subsidy system, Bosnia’s citizens pay a renewable energy surcharge of about \$14.5 million annually, with the Republika Srpska government

chipping in an additional subsidy of \$6 million annually.

Some 95 percent of renewable energy subsidies go toward small hydropower in Bosnia. But the subsidy system ignores the negative impacts of these projects on the ground. A 2018 report by the Center for Environment, Riverwatch, and the German foundation Euronatur concluded that, combined with inadequate environmental protection policies, the subsidy incentive makes small hydro profitable for individual investors while creating disproportionate social, economic, and environmental harm.

“We’re paying for the destruction of our rivers instead of investing in less-harmful energy sources,” says Ivanić. Only three wind and no solar power plants currently operate in the country, though it has significant wind-power potential.

The power generated from small hydropower plants has so far provided little local benefit. Local communities receive only 2 to 3 percent of profits from small hydropower plants as payment,

and the plants generate few or no long-term jobs past the construction stage. Foča’s four existing small hydro plants, for example, contributed \$49,000, or 0.07 percent, to the municipal budget in 2019, according to city officials, and currently employ a single individual. The Bjelava plants would create no jobs once they are operational.

In addition to the subsidy system, activists say that corruption is a major factor behind the small hydropower boom. In Transparency International’s 2020 Corruption Perception Index, Bosnia and Herzegovina is seen as so corrupt it ranks 111th out of 180 countries, and is “a significant decliner,” particularly since the pandemic, meaning its score has been dropping as corruption increases and transparency decreases. There’s even a saying here: “Some countries have a mafia, here a mafia has a country.”

Bribery and patronage based on political affiliation are the prevalent forms of corruption in Bosnia and Herzegovina. A study by Humboldt University of Berlin, for example, found that bribes speed up the process

of obtaining concessions and permits, or sidestep the process altogether. Along with public sector jobs, these are awarded based on political affiliation as payback to supporters. In such a system, investors like Pavlović benefit from proximity to political party elites, their pre-existing financial standing, and savvy in navigating the complex regulatory system.

“The problem of [small hydro-power plant] construction, on Bjelava and elsewhere around Bosnia, is very much connected to the problem of corruption,” says Dijana Radović, an investigative reporter with the website Antikorupcija.info, which is run by the Sarajevo-based Centers for Civic Initiatives. She says projects tend to follow the same pattern of legal violations, procedural omissions, and lax enforcement seen on the Bjelava. “The local citizens are only demanding the laws and regulations be respected,” she

and they should be working for [the country] not against it.”

THOUGH THE FIGHT to save Bosnia’s rivers continues, activists have celebrated some hard-earned victories over the past two years. In June 2020, the Federation of Bosnia and Herzegovina Parliament adopted the Declaration on the Protection of Rivers and voted to issue a moratorium on the permitting and construction of small hydropower plants. Eight months later, the Republika Srpska Parliament unanimously adopted the Declaration as well.

The bans were temporary, meant only to provide the government time to draft related legislation that would more tightly regulate the small hydro-power industry. Draft laws are currently pending in both entities that would drastically lower or scrap feed-in tariffs for small hydro, and the Federation proposal would ban construction of

all small hydro projects to be conducted lawfully, safely, and with citizen input. Then in June, the government finally suspended all activities related to the Bjelava projects pending a judicial resolution of administrative disputes.

“The project is stopped for the time being,” confirms Ivanić. “If the institutions take all evidence into account, we will win.”

Drakul feels relieved but remains guarded. “When we started I didn’t believe we’d succeed,” she says. “Personally, I’ve spent a lot of time and effort in this fight, and I can’t simply give up.”

In addition to protecting its rich natural heritage, the movement to protect its rivers is also bringing the citizens of Bosnia and Herzegovina together and “has cathartic potential for our society,” says Kusturica. Following the conclusion of the Bosnian War in 1995 with the Dayton Peace Agreement, ethnic division undergirds the country’s administration — Serbs predominate in Republika Srpska, while Bosniaks (Bosnian Muslims) and Croats share the Federation.

“We have been divided for 30 years,” Kusturica adds. But “ordinary people have realized rivers know no borders and unite us against a common enemy: corrupt politicians and investors with tentacles in every sector of society who don’t care about people’s livelihoods, environment, or laws. People waking up, organizing, and visiting each other is definitely painting a brighter future.”

“Serb, Bosniak, Croat, we all live here,” adds Drakul. “Everybody worships their own god, but there is only one Nature, and it belongs to all.” ■

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adds. “We all want a functioning country with a transparent government.”

Proponents of hydropower, for their part, bill small plants as a non-polluting, renewable energy source without the drawbacks of reservoir power dams. “When hydropower plants are operated in line with all laws and regulations, the impact on the environment is minimal,” Ramo Gutić, president of Hidro energija, an industry membership group, said via email. “[Activists] should let experts deal with such important questions. Small hydropower is a development opportunity for Bosnia and Herzegovina

new small hydropower plants outright.

The declarations energized anti-hydro activists across the country, including those fighting to protect the Bjelava.

“We still have a chance to preserve these amazing rivers in this region,” says Lejla Kusturica, executive director of the Sarajevo-based Atelier for Community Transformation, Save the Blue Heart of Europe’s partner in the Federation. “And by saving Balkan rivers we are saving the planet.”

As far as the Bjelava projects, in May, the Foča Municipal Assembly ordered