Chile's Endangered Rivers

By Ben Witte

lejandro Koehler showed up at the headquarters of one of Chile's regional environmental authorities last October convinced he had the legal arguments to block a large-scale dam planned for the nearby San Pedro River. He was wrong.

Soon after presenting his case before the authority, known as COREMA, the then-mayor of Panguipulli found himself – along with 20 other critics of the project – dragged out of the government office by riot gear-clad police officers. By the time Koehler was released from police custody eights hours later, the deal was done. COREMA had given energy company Colbún – controlled by the Chilean Matte and Angelini economic groups – a green light to build the region's first large-scale hydroelectric dam.

"They violated all of our rights. They injured us. They hit us. It was totally arbitrary," said Koehler. "I was a political prisoner in 1973. I spent many years in exile in Germany. And so it seemed surrealistic being arrested under a democratic government which we'd fought so hard to restore."

Shouting into the wind

Koehler is one of thousands of people throughout the country who have raised their voices against plans by energy companies, oftentimes foreignowned, to tap the electricity potential of Chile's various rivers. The projects are environmentally destructive, economically short-sighted and, given Chile's potential for non-conventional renewable energies, ultimately unnecessary, argue a growing number of local residents, indigenous and environmental groups and politicians.

But as Koehler discovered first-hand, those arguments tend to fall on deaf ears, ignored by environmental authorities and the mainstream media alike. Chile's National Environmental Commission (CONAMA) and regional COREMAs have taken a rubber stamp approach, approving all but two of the 32 hydroelectric projects processed between 1997 and 2007.

Opponents of such projects are hoping the high-profile HidroAysén venture will be an exception. Formed in 2006, HidroAysén is a joint entity created by Italian-owned Endesa, the nation's top electricity provider, and Colbún. Together, the companies plan to build five massive dams along Chilean Patagonia's Baker and Pascua rivers.

Like Colbún's San Pedro project, HidroAysén's multi-billion dollar plan was quick to attract local resistance. However, local opposition soon mushroomed into national and international campaigns that have placed unprecedented pressure on the companies involved and helped stall the project.

"There's been a change on the level of the general public," said Santiago-based ecologist Juan Pablo Orrego, a leading member of the Patagonia Without Dams campaign. "There's a lot more consciousness these days than there was when we questioned the Pangue and Ralco projects on the Biobío."

"With these campaigns we've shed light on the real costs of these huge hydroelectric power plants," he added. "Before, they were always seen as sources of clean, renewable and cheap energy. The three clichés. We've shown that's not true."



An onslaught of dams are planned for Chile's rivers, including the Biobío. Photo: Aguas Libres de Quilaco

Dams, dams and more dams

With national attention focused on Patagonia, Colbún and other energy companies have quietly pushed through a long list of other hydroelectric projects in sensitive watersheds throughout Chile with little or no debate. Colbún's US\$200 million San Pedro power plant is a case in point. The project, approved with hardly a mention in the national media, calls for a 56-meter-high dam and accompanying reservoir that will extend more than 12 kilometers and flood nearly 300 hectares.

Colbún, the country's third largest electricity provider, insists energy-strapped Chile desperately needs the 144 megawatts the dam will provide. The company also insists the project is environmentally sound and will bring much-needed jobs to Region XIV, which is located 900 kilometers south of Santiago, Chile's political and economic center.

Alejandro Koehler and his allies in the fight against the dam insist otherwise. They say the San Pedro facility will have a major environmental impact, flooding rare Valdivian rainforest and altering the natural flow of the river.

Colbún's own Environmental Impact Study (EIS) points out that unlike other Chilean rivers, which are dominated by introduced salmonids, the San Pedro boasts a high proportion of native species: 96%. One of those is the *tollo valdiviano*, an extremely rare species of catfish that was not discovered until 1987 and is thought to exist nowhere else on the planet. University of Kansas professor Gloria Arratía, who discovered the species, says the dam could contribute to the animal's eventual extinction.

Critics also describe the project as economically short-sighted. While the project will generate jobs during construction, the facility will provide only a handful of permanent positions once it is in operation. Its negative impact on the area's tourism industry could be lasting, they warn.

"Once the project is finished, the state, the mayor and the citizens are going to have to ask themselves, 'OK, what do we do now?" said Koehler. "By that time, the rivers will already be tapped. We'll have dams and thousands of miles of power lines that will blight the landscape. Things just won't be the same."

The San Pedro project isn't the only major hydroelectric facility in the works for Chile's "Rivers Region," as Region XIV is also known. A Norwegian utility called SN Power has plans to build four hydroelectric power stations there that would together generate 700 MW, five times the capacity of the San Pedro facility.

"We're talking about projects that cover almost the whole watershed. And I don't think there's been any real analysis to see how many hydroelectric plants the area can really handle," said Koehler. "Our government, the Chilean state, has responded to the energy shortage in this very over-simplified way, by saying 'Well, we have this watershed, these rivers, so let's build dams."

Major hydroelectric projects are in the pipeline further north as well. Colbún submitted an EIS last year for a US\$500 million facility on Region VIII's Biobío. Chile's second largest river after the Baker, the Biobío already supports two of the country's three biggest dams, Pangue and Ralco, which supply approximately 9% of the country's total electricity.

In 2004, the year Ralco was inaugurated, the Chilean government promised in a report to the Organization of American States that it would not allow any more such projects in the area. Both the Pangue and Ralco dams had proven to be highly controversial, not only because of their environmental impacts but because in both cases the projects forced the relocation of Pehuenche-Mapuche indigenous communities.

History now looks to repeat itself as Colbún's 360 MW Angostura project, planned for the juncture of the Biobío and Hueque-

cura rivers, calls for a 640 hectare reservoir that would displace approximately 45 families. A number of those families are Pehuenche-Mapuche. To make matters worse, six of the families were already relocated to make room for the Pangue Dam.

A rubber stamp approach

Observers say the problem is fundamentally institutional, that Chile's system of environmental impact review is neither designed nor equipped to properly assess and thus filter out potentially destructive projects.

The SEIA process includes a public participation phase, during which observers have 60 days to present arguments for or against a given project. But those two months are not sufficient to analyze the often voluminous impact reports.

Another shortcoming, say critics, is that the COREMAs – the regional bodies responsible for deciding whether or not to approve a given project's EIS – lack any real autonomy.

COREMA boards are headed by regional governors, who are appointed by the president. The approval process is easily subject to the political and economic whims of the COREMA board members or their superiors in Santiago.

"The COREMAs don't have any independence whatsoever. They do what La Moneda (Chile's presidential palace) tells them to do. What's more, La Moneda is co-opted by the large corporations," said Juan Pablo Orrego, who heads an environmental NGO called Ecosistemas. "Taking on that alliance between the government and the multinationals is a huge challenge."

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${\bf Development\ Decisions\ } continued$

Community members, environmentalists, church leaders and indigenous peoples organized a municipal referendum against dams on the Pacuare River in Costa Rica in 2005. Of the 10,000 people who voted, 97% opposed the dams. The national electoral tribunal decided the results of the vote would stand for two years. In the meantime, communities are still organizing and informing others of the benefits of preserving the river for ecotourism and local use.

In order to make community consultation binding, "national laws have to be changed, or the courts need to decide that the results of local referenda on issues of local and national interest are binding," said Gordon.

The people from Tambogrande held the first local vote on mining in Peru in 2002, making use of a municipal law that allows local referenda to vote on issues of local importance. Of all eligible voters who participated, 98% voted against the proposed mining project. "We ask that our decisions are respected, and if the communities say no, well, 'no' means 'no'," said a woman from the Tambogrande community. The national government and the mining company Manhattan refused to accept the results. Later, the project was stopped when the company was unable to meet government requirements. The company recognized that the demonstrated opposition was an obstacle.

"Popular consultation is democracy at its finest, and the best way to demonstrate community sentiment regarding mines and dam projects is by voting in free and fair elections," says attorney Brant McGee, a consultant with the Environmental Defender Law Center. "These referenda represent a new, accurate, and democratic measurement that can help in the evaluation of whether a community has provided the free, prior, and informed consent to proposed development as required under international law."

Growing trend

Popular consultations on dams and mines are now taking place in many countries. In Guatemala alone, more than 500,000 people have participated in 35 community consultations on mining, oil and dam projects. In 2005, the Municipality of Río Hondo, Guatemala, held a popular consultation on three dams proposed on the Colorado River near the headwaters of the Sierras de las Minas mountain range. The vote, proposed by the Mayor and Municipal Council and conducted by the Supreme Electoral Tribunal, overwhelmingly rejected the dams due to their potential environmental impacts, and irregularities in the environmental impact study. The vote was recognized by the Guatemalan government.

In Peru, a popular consultation took place to decide on the Río Blanco copper and molybdenum mining project in three communities high in the foothills of the Andes. Although the voters rejected the mine, the Majaz Company (now Río Blanco) continued exploration, and with help from the police has violently repressed opposition to the mine.

We have yet to see the final impact community consultations and referenda will have in the defense of rivers and the livelihoods of local people. These consultations challenge current development practices, and propose mechanisms for the direct participation of communities in the development process.

"The idea of referenda as a means of fulfilling the right to free, prior and informed consent will become better known as a successful political and legal means to fight unwanted development," says McGee.

Using local referenda to record the voices of local communities is a powerful democratic tool to not only challenge unwanted development projects but also empower local communities to determine their own path of development.