PROTECTING THE PILMAIKEN



PHOTO BY PABLO PIOVANO



TABLE OF CONTENTS

01 Introduction

02 Report Methodology **04** Chronology of the Hydropower Conflict

05 FPIC in Chile

03

Historical Background and Mapuche-Williche Territory and Cosmovision **06** Conclusion

INTRODUCTION

Across the globe, the development of low carbon energy projects marks an important step in reducing the effects of anthropogenic climate change. However, this development can not and should not occur at the expense of Indigenous communities. The term energy justice refers to the goal of achieving equity in both the social and economic participation in energy systems, while also remediating social, economic, and health burdens on historically marginalized communities (Hernández, 2015; Initiative for Energy Justice, 2023; Jenkins et al., 2020). This report details the energy injustices perpetuated by the Norwegian energy company Statkraft in a prolonged hydropower conflict with the Mapuche-Williche communities in defense of the Pilmaiken River (referred to as Pilmaiquén River in Chilean geography). The Norwegian government is directly implicated, since Statkraft is state-owned (Corporate, 2023).

The Mapuche-Williche communities in defense of Pilmaiken, located within modernday Chile, have been embroiled in a hydroelectric power conflict with Statkraft for 14 years. This conflict concerns a sacred ceremonial complex on the Pilmaiken River that is articulated throughout all of Mapuche-Williche territory. Statkraft and its subsidiaries have taken advantage of the ambiguity and complexity of water, energy, and environmental regulations in Chile to advance and perpetuate projects despite major opposition from the local Mapuche-Williche communities. As Statkraft continues to unethically develop energy in Mapuche-Williche territory, the affected communities are deprived of their basic human rights to life (M. Huichalaf, personal communication, February 24th, 2023). More severe repercussions continue to influence related to ecological harm to the physical site of the hydropower project, as well as social and cultural impacts of the company operating in a context of violence against protests and social fragmentation. We note that this is not the only Indigenous rights conflicts Statkraft is involved in; an ongoing conflict involving wind farms in southern Sápme territory of Norway has been found by the Norwegian Supreme Court to unconstitutionally affected Sámi communities (Ellingsen, 2023; Fjellheim, 2023; 2021; Normann, 2021). Scholars and Indigenous communities cite that "green colonialism" should not be exacted by Global North climate strategies upon Indigenous communities and territories (Fjellheim, 2023; The Guardian, 2023).





REPORT METHODOLOGY

This report was written by the Dartmouth Energy Justice Clinic, and it is published with consent from ancestral authority Machi Millaray Huichalaf and the Pilmaiken territory.

The EJ Clinic has studied the Pilmaiken conflict since December 2021. Our methods include interviews, legal document analysis, participant observation, engagement with researchers, and iterative meetings with interlocuters and Mapuche-Williche leaders. Machi Millaray Huichalaf, ancestral authority of the territory, and Esteban Vera, leader of the Asociación Wenuleufu, provided interviews and feedback on this research. These leaders have guided studies from numerous scholars, lawyers, and artists over the years. Felipe Guerra Schleef, lawyer for the community and P.hD candidate, was a primary interlocutor for the research. Guerra shared numerous legal and administrative documents and his own works to ground our legal and cultural understanding of the case. Dr. Sarah Kelly, mentor and co-author of the report, has researched hydropower conflicts with Mapuche-Williche communities in the broader territory for ten years. Since 2019, she has collaborated with the Pilmaiken defenders to provide reports and technical support. Similarly, we collaborated with and engage the research of Norwegian Geography Ph.D student Yngve Solli Heiret, we exchanged online and read the work of Henrikke Ellingsen, Eva Maria Fjellheim, and Susanne Normann.

Students Solange Acosta Rodríguez, Scarlette Flores, and Adriana Fajardo Mazorra wrote the majority of the report. Students who collaborated on writing this report include Adamari Benevidez, Gideon Gruel, Melody Tsutsumi Cruz, Noor Boukari, and Isabel Squire. Solange edited the report with Dr. Kelly; they visited the Pilmaiken territory to read the report aloud with the Machi in February 2023. Students Nadine Lorini Formiga and Adriana Fajardo Mazorra wrote multiple earlier reports that informed this text, with collaboration from Sebastian Fernández, Mayumi Liz de Andrade Miyasoto, Rachel Peréz, and Danny Goldstein. Dr. Maron Greenleaf aslo supervised early writing. We thank all those who shared their knowledge.

The Energy Justice Clinic at Dartmouth

Contact: Sarah.H.Kelly@Dartmouth.edu





Right: Mapuche territory in both Chile and Argentina; Left: Mapuche-Williche territory in Chile (Kelly, 2018)



HISTORICAL BACKGROUND ON MAPUCHE-WILLICHE TERRITORY AND COSMOVISION

There are approximately 1.745,000 million Mapuche individuals living in present day Chile, making up approximately one-tenth of the total Chilean population (Census, 2017). Mapuche-Williche territory is called the Futawillimapu, or the "great lands of the south." This name geographically designates the Mapuche-Williche land located between the northern Toltén river and the southern part of the Chiloe island (Historica C.V., 2008). In the Mapuche territory, rivers form the basic physical boundaries that divide and shape the territory. The Puelwillimpau territory, located within Futawillimapu, corresponds with the Wenuleufu (Bueno River) watershed between the northern Choshuenco volcano and the southern Osorno volcano. The three main lakes of the territory are Lake Ranco, Lake Puyehue, and Lake Rupanco. It is from these lakes that the three principal rivers of the territory flow: the Wenuleufu, 'river above' in Mapudungun or Rio Bueno in Spanish, the Pilmaiken River, and the Rahue River. The latter two are tributaries of the first.

By definition, being Mapuche derives from being a Che (person) of the Mapu (Earth/territory). Therefore, the Mapuche identity is constructed through the relationships formed with other human and more-than-human beings, as well as with the spiritual territory (Melin Pehuén et al. 2016). Even though people inhabit different physical areas of the Puelwillimapu, all are connected spiritually through their relationship with different Ngens. Ngens can be translated as the inhabitor or spiritual guardian of an element or place (Catrileo, 2017; Grebe, 1993). For example, the Ngen Mapu is the guardian spirit of the planet or earth and is related to other Ngens, like the Ngen Ko who are the spirit guardians of water.

[2] Text from this section is adapted from the doctoral thesis (Kelly 2018) and a legal report written for the Second Environmental Court of Chile related to the case (Kelly, 2019).



Ngens live in and protect places which have cultural, physical, and ecological significance within Mapuche territory; Ngen Ko are often located in sites affected by hydropower among other forms of economic development (Kelly, 2019B). In all of the areas inhabited by Ngens, there is also Newen, which can be described as the strength and vital force located within those places (Melin Pehuen et al., 2016). Because of this pan-territorial connection to Ngens, the damage or a disappearance of one Ngen poses a threat to the entire territory. Overall, there is a tendency on the part of the Chilean state and private actors to misunderstand Ngen (Guerra, 2023).

Rivers are the means by which the souls of ancestors flow down to the ocean, where they are then reunited with the river of the stars that then flows back to the mountains ((M. Huichalaf, personal communication, December 2022). The cyclical nature of Mapuche afterlife cannot be ruptured, as any disequilibrium in the flow of the spirits will cause spiritual damage to the present world (ibid). Rivers thus play a vital role in Mapuche spiritual life (Kelly, 2019B; Hernándes-Arrese, 2021; Guerra, 2023).

Damming the rivers is a direct intervention into Mapuche-Williche culture and their way of reproducing themselves as a people. The Pilmaiken river specifically is home to very important Ngens named Ngen Kintuante and Ngen Kilen Wentru; these twin spirits are responsible for caring for the medical, sociocultural, and economic wellbeing of the territory (Guerra, 2023). Together with the eltuwe (cemetary), nguillatuwe (ceremonial site for the nguillatun) these sites are part of a unity brought together by amunkuwe (movemement of waters) toward the wenu mapa (the dimension above) (Millaray, 2019). The ceremonial complex that these Ngens guard is known as the Ngen Mapu Kintuante. It is a place of vital importance to the Mapuche-Williche and to Mapuche territory more broadly. These sites are a spiritual referent for a much broader territory from the Caulle volcanoes to the ocean; a spiritual complex interwoven with the waters (ibid). This is a pilgrimage and healing site throughout Mapuche territory; the Machi Millaray depends on medicine with specific properties from this ceremonial complex to heal.







MAP OF WENULEUFU (BUENO RIVER) WITH NGEN . LAKE PUYEHUE IS THE MIDDLE LAKE, THE PILMAIKEN RIVER IS THE MIDDLE RIVER (KELLY, 2021). MAP ORIENTED EAST-WEST IN MAPUCHE GEOGRAPHY.



Justice Clinic at Dartmouth "A NGEN IS NOT AN OWNER, IT IS A PROTECTOR. WE AS MAPUCHE HAVE THAT PERSPECTIVE. WE ARE NOT HERE TO BE OWNERS OF TERRITORY, WE ARE HERE TO BE PROTECTORS. NGEN MAPU KINTUANTE IS A DEITY, IT'S SUPERIOR, ITS ENERGY COMES FROM ABOVE IN THE WENUMAPU, THE SPACE ABOVE. THE NGEN'S HOME IS A PIECE OF THAT HERE ON EARTH.

KINTUANTE LIVES IN A RENI (CAVE) WHERE WESTERN TIME DOES NOT EXIST. IT IS ANOTHER SPACE-TIME, AND HE IS IN CHARGE OF MAINTAINING THE EQUILIBRIUM IN THE WATER, IN THE EARTH, IN THE BIODIVERSITY OF LIFE THERE. THE EQUILIBRIUM BETWEEN PEOPLE; THE EQUILIBRIUM WHEN THERE IS NEGATIVE ENERGY AS WELL. WHEN THERE ARE CONFLICTS, PROBLEMS, TERRITORIAL ISSUES, WE LOOK TO THE NGEN TO PROTECT US, AS IT PROTECTS THE WATERS.

AT THE SAME TIME, THE NGEN IS REPRESENTED IN THE FORM OF HUMANS AND ANIMALS, SO THAT ONE CAN IMAGINE IT IN DREAMS. HE IS A MALE GOAT THAT STANDS ON HIS FEET. HE IS ALSO AN ELDER. THAT IS HOW HE PRESENTS IN DREAMS, AND WE CAN TALK DIRECTLY WITH HIM. BECAUSE OF HIM WE ARE HERE, BECAUSE HE ASKED FOR US TO BE HERE."

-ANCESTRAL AUTHORITY MACHI MILLARAY HUICHALAF

MAY 2023



PHOTO BY PABLO PIOVANO



MAP 3



LOCATION OF THE NGEN MAPU KINTUANTE WITH RELATIONSHIPS OF HEALING AND CEREMONY IN THE GREATER FUTAWILLIMAPU TERRITORY (KELLY 2019A). MAP ORIENTED EAST-WEST IN MAPUCHE GEOGRAPHY.



CHRONOLOGICAL EVENTS OF THE HYDROPOWER CONFLICTS ON THE PILMAIKEN RIVER

Statkraft's actions in southern Chile are part of a larger history of extractivism and dispossession in the region. Mapuche-Williche territory has faced a wide variety of environmental threats over the course of its attempted colonization by the Spanish empire and later Chilean governance because of the richness of its unique temperate rainforest landscape (Klubock, 2014). Known as a land of rain, the high concentration of rivers and abundant precipitation makes the region especially suitable for water-based development like hydropower (Habit et al, 2019). However, climate change has already triggered water insecurity in this area, as in recent years rainfall has more than halved, with more variable and diminished precipitation expected in the future (IPCC, 2022).

These threats to water are further exacerbated by the privatized nature of the Chilean water system which constructs water as a private good, permitting the purchasing and selling of it independently from land and communities (Bauer, 2004). Currently, multiple threats exist to water management. Norwegian companies also affect the health of Chilean watersheds via their salmon aquaculture ventures, which has also received social protest (Berglund, 2019).

In this report, we refer to three hydropower projects of Statkraft. Currently, Statkraft owns one operating hydroelectric project (Rucatayo), one project inconstruction (Los Lagos), and one desisted project (Osorno). The presence of the Rucatayo, Osorno and Los Lagos Hydroelectric projects on the Pilmaiken River – a culturally and spiritually significant river to the Mapuche – has provoked an interregional conflict that takes place between the Rio Bueno communes in the Los Rios, and the San Pablo and Puyehue region in Los Lagos (Guerra, 2023).[3]

[3] While available in Spanish, we also recommend checking out the timeline and information provided by INDH in Chile, which is the National Institute for Human Rights. <u>Accessible here</u>.







MAP OF THE HYDROPOWER PROJECTS AND SACRED SITES (DI GIRALMO AND TERRA, 2021)



2007-2009

In 2007, the company Empresa Eléctrica Pilmaiguén S.A. (EEP) submitted the two hydroelectric projects – Osorno and Los Lagos – to Chile's environmental impact assessment agency (at the time the National Commission for the Environment, today it is the Environmental Assessment Service). The original Environmental Impact Assessment (EIA) for the Osorno and Los Lagos projects found that there were no legally constituted Indigenous people in the project's area of influence (CONAMA RCA 3744/2009). In their filing, they neglected the existence of Mapuche-Williche people or territory (Morales, Correa, and Moulián, 2012; Kelly et al. 2021). Critically, the environmental agency did not require the company to conduct a full Indigenous consultation in 2008-09 when it was under review, but instead only required they consult with the three Indigenous communities later identified by EEP as "directly affected". In 2009 the projects were approved, and the environmental agency required the company to develop a participation process with the three affected communities.

Since Chile ratified ILO Convention 169 in 2008 and codified it into law in 2009, some believe these projects were pushed through quickly before more stringent ILO-linked regulations were put in place (Kelly et al. 2021). Affected Mapuche-Williche communities who inhabit the impacted territory began to express their opposition by occupying the site above the home Ngen Kintuante which was threatened to be flooded by the Osorno project, filing legal and administrative petitions, and organizing social movements.

2010

In 2010, the Rucatayo project was built by EEP and it enterred into operation in 2012. The Rucatayo plant is located on the Pilmaiken River and has an installed megawatt capacity of 52.5 MW (Statkraft Website 2023; Rankia, 2013).



2013-15

In 2013, Machi Millaray was jailed for four months on what were viewed territorially as trumped up charges for a fire in the nearby Fundo Pisú-Pisué. Social movements and administrative and legal conflicts ensued, with growing territorial tensions and police repression. In 2014, EEP submits the official acts created via negotiating with the three communities to the environmental authorities.

In 2015, people from the territory explain, Statkraft bought a conflict (Guerra, 2023). Specifically, Statkraft Chile acquired Empresa Eléctrica Pilmaiquén S.A. and obtained the rights to the approved projects of Osorno and Los Lagos, which would negatively impact the Mapuche-Williche territory.

After further analysis and in response to a decision from the Chilean Superintendence of the Environment rejecting the signed acts and the methodology used by the company to achieve them, in 2016 Statkraft Chile suspended the development of the Osorno project due to the high degree of resistance to the potential impact on the culturally significant site of Ngen Mapu Kintuante. At the same time, the Environmental Assessment Agency confirmed the legitimacy of the consultation process. Regardless, Statkraft continued to hold conversations with communities in the territory, continuing to inflict social fragmentation during this process by holding meetings pitting groups against each other and continuing to provide benefits to negotiating communities (Kelly et al., 2021).



2019-Present

While the Osorno project was abandoned, the Los Lagos site began construction in 2019. Announcement of this development came as a surprise to many because EEP and later Statkraft primarily discussed the Osorno project throughout the two regions; thus many felt that they were not informed adequately about the Los Lagos project (Kelly et al., 2021). Statkraft was able to continue construction for the project while cultural patrimonial harm was formally debated. Guerra (2023) finds that this created a space for misunderstanding, since the construction of the project was not halted and it appeared that it should be paralyzed since 2023. The Chilean Supreme Court ordered the Chilean National Monuments Council (Consejo de Monumentos) to hold an Indigenous consultation for the Statkraft hydroelectric project of Los Lagos due to the emerging evidence of a number of archeological remains in the project site (Guerra, 2023; Corte Suprema, 2021). Statkraft has continued the construction of the project (Statkraft Sustainability Report 2022). Now in February 2023, the Los Lagos project is reported by the company to be about 70% completed.

In the Geography Report from 2019 titled, "Los Lagos and Osorno Hydroelectric Projects on the Pilmaiken River, Mapuche-Williche territory: a Cultural Geography Report, "Dr. Sarah Kelly found three irregularities in the environmental impact study (EIS) performed by the National Environmental Commission, or CONAMA.

1) First, the EIS did not consider the proximity of the Osorno and Los Lagos projects to each other. At only 11.6 km apart, there are cumulative effects produced by these projects for the Pilmaiken River that should have been considered as "synergic effects" under Chilean environmental law.

2) Second, Chile ratified ILO convention 169 and the United Nations Declaration of the Rights of Indigenous Peoples (UNDRIP), thus companies have to obtain communities' Free, Prior, and Informed Consent (FPIC) before enacting projects on their territories.



2019-Present cont.

3) Lastly, the environmental impact statement says there are no indigenous communities in the affected area of the project, which is not true. Historian Martín Correa (2021) explains the history of dispossession in the region, and why Mapuche people were not landholders of the sacred site.

Ultimately, this meant that a full Indigenous consultation prior to the development of the projects was never conducted. Neither EEP nor Statkraft ever conducted a full Indigenous Consultation for the projects. Statkraft, when they acquired the projects, could have opted to resubmit the projects for environmental assessment and thus carried out an official Indigenous Consultation at that time. Here, it is important to mention that the Chilean state has also failed to protect human rights and ensure an Indigenous consultation occurred in good faith and at the right time. Consequently, Statkraft continues to develop projects with baseline studies dating back to 2007 or earlier. Given the significant changes provoked by climate change to the watershed, there is concern that the river levels are lower than previously calculated, among other ecological indicators.

The Los Lagos project is a 52.9 MW hydroelectric power plant. In the project design, the water will be held by a 36.2 m high dam near the territory of Maihue and Carimallín. The dam will create a reservoir of approximately 156.6 hectares, which will have the capacity to store a volume of water of 24.6 million m3.







MAP OF RELATIONSHIPS BETWEEN ÑIZOL NGEN (GREATER SPIRITUAL PROTECTORS) IN MAPUCHE-WILLICHE TERRITORY (KELLY, 2019A). THIS MAP SUPPORTS THE CLAIM THAT THE NGEN KINTUANTE SITE IS ONE OF PEREGRINATION AND SPIRITUAL REFERENCE FOR ALL OF MAPUCHE-WILLICHE TERRITORY (GUERRA, 2023). THIS MAP IS ORIENTED EAST-WEST IN MAPUCHE GEOGRAPHY.



DEFINING FPIC

Statkraft has not met the terms of Free, Prior, and Informed Consent (FPIC), and the Chilean and Norwegian states have not ensured that the terms are met. FPIC is a legal principle that ensures the right of self-determination of Indigenous peoples. FPIC is meant to enable communities to "give or withhold consent to a project that may affect them or their territories and to negotiate the conditions under which the project will be designed, implemented, monitored, and evaluated" (FAO, 2023). A table detailing the definition of FPIC is below. Importantly, there is no guarantee of how FPIC is actually implemented across nations (Papillon ϑ Rodon, 2017a). Negotiations between corporations and Indigenous representative organizations without direct State intervention are not always consistent with the spirit of FPIC, which suggests deliberations at the community level and not fragmented or with the leadership of the organizations (Papillon ϑ Rodon, 2017b).

Free	Consent is freely and voluntarily given without coercion, intimidation, or manipulation. The process is self- directed by the community from whom consent is being sought and is unencumbered by externally imposed expectations or timelines.
Prior	The consent is sought sufficiently in advance of any authorization or commencement of activities.
Informed	The engagement and type of information that should be provided prior to seeking consent and also as part of the ongoing consent process.
Consent	A collective decision made by all right holders and reached through the customary decision-making processes of the communities.



FPIC INFRINGEMENTS IN CHILE

Chile codified indigenous consultation by including it in the context of the Chilean Environmental Impact Assessment System, which introduced significant degrees of uncertainty in the environmental assessment procedures for investment projects. This manner of codification of ILO 169 for the environmental assessment of projects offers limited opportunities for indigenous peoples to guide the decision-making process (Meza-Lopehandía, 2016). Many stakeholders tend to view environmental assessments as a limited and insufficient mechanism for establishing the legitimacy of a project, so direct negotiations have gained importance as an alternative mechanism for mobilizing indigenous consent (Guerra, forthcoming; Guerra et al. 2021; Kelly et al., 2021; Yáñez, 2014).

In particular, consent has not been achieved prior to the development of the projects with all affected leaders and communities in an informed and free manner. Statkraft's methods have hinged on an incomplete implementations of Free, Prior, Informed Consent (FPIC) practices and dividing communities. In Chile, "the lack of meaningful FPIC in the case of [Stakkraft's] proposed hydropower projects on the Pilmaiken River have harmed Mapuche-Williche people" (Kelly et al. 2021). The Chilean government, in conjunction with Statkraft, is required to facilitate a situation wherein the Mapuche-Williche communities are able to provide their consent to any actions that would affect their lands. Since the proposed projects would directly affect the flow of the Pilmaiken, a vital facet of Mapuche geography, cosmology, and epistemology, it is imperative that the requirements of FPIC are satisfied.



COMMUNITY SUPPORT AND CONTESTATION

Statkraft has stated in news outlets differing numbers of communities in support of the projects (between 3-23), however our previous interviews document that multiple ancestral and juridical leaders state that there are over 50 Mapuche-Williche communities who are opposed to the Osorno and Los Lagos projects. Statkraft has continued to engage three supportive communities to most negotiations including conversations about devolving ownership of the Kintuante ceremonial site (Kelly et al. 2021). The Asociación Wenuleufu, formed in 2013, also claims to represent over 50 communities opposed to the projects.

The increased friction and divides within the communities are the product of Statkraft's continued interventions that have resulted in new Indigenous communities being registered with the Chilean state (Guerra, 2023). Statkraft has intervened in the yearly nguillatun ceremony by supporting certain communities participating in the ceremony and bringing animals and wine to them. This affects the territory's ability to access kume mogen, or buen vivir, since each rancho (ranch) should bring their best harvest and animals to be offered in ceremony. With the devolution of the Kintuante site (that has not occurred in the time promised) and other reasons for meeting with local communities including the archeological consultation (see below), Statkraft continues to position the small number of communities and individuals receiving mitigation payments as equal actors with the growing opposition, furthering dissent and conflict in the territory (Guerra, 2023).

The Mapuche-Williche delegation that traveled to Norway in May 2023 claimed there are now 100 Mapuche-Williche communities united against the hydropower projects, from upstream in Lake Puyehue to downstream in La Unión. This participation will be able to be confirmed in the archaeology consultation in late May 2023.



IMPACTS TO BIODIVERSITY

Mapuche knowing recognizes that everything is interconnected; harming one facet of the territory — human or more-than-human — would affect every other part of the system to which it is connected. Statkraft has ignored and begun to harm the interconnected web of biodiversity that constitute Mapuche-Williche territory. For the Mapuche-Williche, since Statkraft's hydroelectric plants damage the Ngen Mapu Kintuante, thousands of beings across the whole territory would be harmed.

In Chile, the construction of the hydropower plants in the sacred site of Kintuante demonstrates a lack of understanding about Mapuche territory from both the company and the State. A report by Dr. Cecilia Smith Ramírez (2023) of the Universidad de los Lagos in Chile describes the cultural and environmental importance of the Ngen Kintuante. Smith highlights the enormous biodiversity of the site by labeling it as a "mini biodiversity hotspot, characterized by the presence of native vegetation and flooded forests". Some of the vegetation and mammal species present are vulnerable and have been declared endangered by the Ministry of Environment. In particular, the report mentions the presence of a tree, "Maimailican," which according to Machi Millaray is used in ceremonies and to heal spiritual illnesses (Smith, 2023). Like the Maimailican, other species present in the Kintuante are used as traditional medicine by Mapuche communities. Additionally, in the Kintuante there are Laurel trees (Trihue). This tree is the guardian of the energy of the spirits, of the beings that are in the place (Smith, 2023). Each leaf represents a spirit, which is why it is used for the guillatún, a religious ceremony. Therefore, the community takes care of the plants and life in general in the Kintuante. At the moment of harvesting them for their religious ceremonies or to cure illnesses, they only collect specimens that do not have flowers so as not to damage the reproduction of the plant. According to the report, the Machi states that in terms of medicinal strength, the Kintuante plants are stronger than the same species collected elsewhere.



The permanence of the native vegetation, most of which is endemic to the temperate forests of southern South America, has occurred because of the communities' defense of the site and because it is protected by the almost 90-degree sloping wall. This wall faces south-southwest and therefore has many hours of shade (Smith, 2023). Numerous springs flow into this wall, which are loaded with water in the upper and northern part of the Pilmaiken river basin, giving shape to the three caves where the Ngen live. Among the animal life, the report mentions the presence of the monito de monte (monkey of the forest), a species declared as "Near Threatened." The monito de monte (theumul or chimaihuen) has spiritual value because it is the guardian of ancestral knowledge. Additionally, the community mentions the presence of foxes, guiñas, pudús and otters in the Kintuante. The presence of the dwillin bumblebee is also identified. This species is declared endangered and is one of the four sacred insects in Mapuche culture, representing the elders that come to participate in the guillatún ceremony (ibid).

Therefore, Smith's report (2023) defines the following environmental and ethno-environmental criteria for considering the Kintuante as a Historic Monument:

- 1) Exceptional refuge of biodiversity, i.e. high species richness and unique confluence of species from different places.
- 2) Presence of threatened species decreed by law as protected by the State.
- 3) Presence of a sacred tutelary tree of great cultural significance.
- 4) Presence of spirits expressed in all forms of life and even in the leaves of the trees.
- 5) Place of collection of plants that have a singular force of healing.



ARCHAEOLOGICAL HARM

After Statkraft announced their plans to go forward with Los Lagos project in 2019, soon after Mapuche communities found evidence that an affected archaeological site was not included in the original EIA. Again, they filed for the appellate court to require the Council for National Monuments to hold an Indigenous consultation for the cultural patrimony, which the Supreme Court sided with. Effectively, this means that the company is waiting for this permit for its EIA resolution to be active.

Critically, Statkraft has continued construction for the project while cultural patrimonial harm is formally debated. Mapuche-Williche people who went to visit the archaeological complex, which includes an ancient cemetery among other sites, found that it was poorly maintained by Statkraft and their independent archaeologists. Cows were roaming and water entered the excavation holes. Statkraft publicly stated on their website in July 2019: "in relation to discovering a few archaeological fragments 'small ceramic pieces and rock tools' in the Los Lagos project, the company has a rescue plan approved by the National Monument Council'.[6] Archaeologist Noriluz Hermosilla Osorio from the Universidad de Chile and the Archaeology College visited the site and stated: "these small pieces of ceramics and rock tools are much more than that" (Interferencia, 2019). Later she emphasized: "the Norwegian company cannot build a hydroelectric project where they have found ceramic material that dates back to before the Spanish arrived" (ibid). In Statkraft's quote, the site is diminished to "fragments" and "small ceramic pieces", where Noriluz found that these findings were much more substantial due to the materials dating back to pre-Hispanic times.

The most recently available report from December 2022 reported 17 sites of archeological importance in the Los Lagos project, however since then more sites have been identified (Servicio Nacional de Patrimonio Cultural, 2022). We suggest following the ongoing consultation to verify this information, and question if best practices are being followed for site protection.



EPISTEMIC INJUSTICE

The benefits produced from the hydropower development will predominantly go to other interests instead of the local community. Statkraft repeatedly stresses that these projects are contributing to powering a "green" future and are fundamentally beneficial to the affected communities (Statkraft, 2020). However, the principal benefit of the projects – the energy produced – do not go back to community members. Electricity produced by Statkraft in Chile is sent back to the grid to power nearby cities or powering Dutch owned food producers and aquacultures firms in the area (ibid).

Moreover, there is no monetary value that is equivalent to the level of harm that is perpetuated by the destruction of the Pilmaiken river. This reflects the epistemic gap between western ways of knowing and Indigenous cosmovision regarding their relation with water and energy (Kelly et al., in review). Statkraft has employed a system that privileges settler knowledge on policy areas and environmental decisions that undermine indigenous knowledge and reinforce different forms of liberal injustice (Guerra, 2023; Kelly et al., 2021). This privileges modern epistemologies of authority, running contrary to the terms stated in ILO Convention 169. Thus, the Mapuche-Williche communities have been obligated to adapt their ways of knowing within the Western mitigation structures provided by the state and corporations in order to have the slightest possible chance of saving their sovereignty, and culture. In other words, epistemic injustices in the application of FPIC and compensation mechanisms further conflicts in the territory and silence the Mapuche epistemology, cosmovision, and culture in this process (Guerra, 2023).



CONCLUSION

The intrinsic value of an area to Mapuche-Williche communities has been systematically devalued by Statkraft and other state parties in Chile. The harm perpetuated through the intentional misinterpretation of FPIC, the ignorance of Indigenous conceptions of spiritual and physical territory, and the extractive nature of the intervention cause significant harm. At the center of these conflicts is the epistemic injustice that reinforces structural inequalities. The exclusion of Indigenous ways of knowing from processes such as FPIC consultations means that such inequities will continue as part of renewable energy development.

The Pilmaiken River, or the Ngen Kintuante's home, is a life-giving holy site that requires protection. The Los Lagos, Rucatayo, and Osorno projects pose a serious threat to the Mapuche's water access and way of life. After analyzing Statkraft's actions on the Pilmaiken River, the Mapuche-Wiliche people ask that Statkraft halt any further development of the Los Lagos projects, and dismantle the existing infrastructure that has been constructed. Statkraft could end a cycle of infringement of indigenous rights and reimagine what the renewable energy transition could look like.

Statkraft has a legal and environmental obligation to raise its standards as to how it develops renewable energy in the Global South. Norway has the opportunity to show that there is a green future without extractivism, a green future where no one gets left behind and green colonialism is not perpetuated. We suggest further research is needed to assess if Statkraft is meeting Norwegian legal standards in its operations in Chile.



Appendix: Norwegian Involvement in Chilean Aquaculture

Beyond hydropower, Norwegian companies are heavily involved in other water-based industries in Chile, notably aquaculture. Chile is the second largest producer of farmed salmon in the world, second to Norway (Quiñones, 2019). Norwegian companies have invested in the Chilean industry since its onset in the 1980's (Barton, 2010). Chilean regulations and environmental protections are significantly more relaxed than Norway's, especially for the use of antibiotics (Baxter, 2009). The Chilean aquaculture industry has come under scrutiny for its major environmental and social impacts, such as the Infectious Salmon Anemia outbreak of 2007 and the Harmful Algal Bloom of 2016 (Franklin, 2016). During a state visit to Chile in 2019, 70 representatives from Norwegian businesses accompanied the Norwegian royal family, where they were met by protesters in Santiago, Punta Arenas, and Puerto Williams. Jorge Amarales, one of the protestors, stated that "We oppose the salmon industry. We are a part of the world with untouched nature, but now the authorities have turned over large areas to the salmon industry. We're trying to take care of traditional salmon fishing" (Berglund, 2019).



CITATIONS

BARTON, J., & FLØYSAND, A. (2010). THE POLITICAL ECOLOGY OF CHILEAN SALMON AQUACULTURE, 1982-2010: A TRAJECTORY FROM ECONOMIC DEVELOPMENT TO GLOBAL SUSTAINABILITY. GLOBAL ENVIRONMENTAL CHANGE, 20(4), 739-752. <u>https://doi.org/10.1016/j.gloenvcha.2010.04.001</u>

BAUER, C. J. (2004). SIREN SONG: CHILEAN WATER LAW AS A MODEL FOR INTERNATIONAL REFORM. ROUTLEDGE. HTTPS://DOI.ORG/10.4324/9781936331062

BAXTER, A. (2009, SEPTEMBER 30). OFFICIAL REPORT REVEALS THAT SALMON AQUACULTURE IN CHILE USES 600 TIMES MORE ANTIBIOTICS THAN NORWAY. OCEANA; OCEANA. <u>https://oceana.org/press-releases/official-</u> <u>report-reveals-salmon-aquaculture-chile-uses-600-times-more/</u>

BERGLUND, N. (2019, APRIL 1). ROYALS CONFRONTED OVER SALMON FARMS. NORWAY'S NEWS IN ENGLISH — WWW.NEWSINENGLISH.NO. <u>https://www.newsinenglish.no/2019/04/01/royals-confronted-over-salmon-</u> <u>farms/</u>

CORPORATE GOVERNANCE. (2023, MARCH 14). STATKRAFT. HTTPS://WWW.STATKRAFT.COM/IR/CORPORATE-GOVERNANCE/

DI GIRALMO, G. & TERRA, C. (2021). MILLARAY HUICHALAF: LA PROTECTORA DEL RIO SAGRADO. ACCESSIBLE ONLINE HERE: HTTPS://WWW.GOETHE.DE/RESOURCES/FILES/PDF250/MILLARAY-HUICHALAF-THE-PROTECTRESS-OF-THE-SACRED-RIVER-LA-DEFENSORA-DEL-RIO-SAGRADO_ONLINE_FA_ES_ZA.PDF

ELLINGSEN, H. S. (2020). RESISTANCE TO WIND POWER DEVELOPMENT IN NORWAY: EXPLORING POWER, KNOWLEDGE PRODUCTION AND INJUSTICE AT FOSEN AND FRØYA (MASTER'S THESIS).

GUERRA SCHLEEF, F.A., & SÁNCHEZ SANDOVAL, G. A. RL. (2021). LA FUNCIÓN EPISTÉMICA DEL DERECHO DE LOS PUEBLOS INDÍGENAS A LA CONSULTA PREVIA EN CHILE. IUS ET PRAXIS, 27(3), 24-44.

GUERRA SCHLEEF, F. (IN REVIEW). MISUNDERSTANDING THE NGEN KINTUANTE. SUBMITTED TO THE JOURNAL OF LEGAL PLURALISM.

FJELLHEIM, E. M. (2020). THROUGH OUR STORIES WE RESIST: DECOLONIAL PERSPECTIVES ON SOUTH SAAMI HISTORY, INDIGENEITY AND RIGHTS. IN INDIGENOUS KNOWLEDGES AND THE SUSTAINABLE DEVELOPMENT AGENDA (PP. 207-226). ROUTLEDGE.

FJELLHEIM, E.M. "YOU CAN KILL US WITH DIALOGUE:" CRITICAL PERSPECTIVES ON WIND ENERGY DEVELOPMENT IN A NORDIC-SAAMI GREEN COLONIAL CONTEXT. HUM RIGHTS REV 24, 25-51 (2023). HTTPS://DOI.ORG/10.1007/S12142-023-00678-4

FRANKLIN, J. (2016, MAY 17). TOXIC "RED TIDE" IN CHILE PROMPTS INVESTIGATION OF SALMON FARMING. THE GUARDIAN. <u>https://www.theguardian.com/world/2016/may/17/chile-red-tide-salmon-farming-neurotoxin</u>

HABIT, E., GARCÍA, A., DÍAZ, G., ARRIAGADA, P., LINK, O., PARRA, O., & THOMS, M. (2019). RIVER SCIENCE AND MANAGEMENT ISSUES IN CHILE: HYDROPOWER DEVELOPMENT AND NATIVE FISH COMMUNITIES: RIVER SCIENCE AND MANAGEMENT. RIVER RESEARCH AND APPLICATIONS, 35(5), 489-499. HTTPS://DOI.ORG/10.1002/RRA.3374

INTERNATIONAL LABOR ORGANIZATION. (2023). C169 - INDIGENOUS AND TRIBAL PEOPLES CONVENTION, 1989 (NO. 169). JUNE 27, 1989. ACCESSIBLE ONLINE: HTTPS://WWW.ILO.ORG/DYN/NORMLEX/EN/F? P=NORMLEXPUB:12100:0::NO::P12100_ILO_CODE:C169

KELLY, S. (2018). ARTICULATING INDIGENOUS RIGHTS AMIDST TERRITORIAL FRAGMENTATION: SMALL HYDROPOWER CONFLICTS IN THE PUELWILLIMAPU, SOUTHERN CHILE (DOCTORAL DISSERTATION, THE UNIVERSITY OF ARIZONA).

KELLY, S. (2019A). IMPACTS OF THE LAGOS AND OSORNO HYDROPOWER PROJECTS IN THE PILMAIQUEN RIVER, MAPUCHE-WILLICHE TERRITORY: A CULTURAL GEOGRAPHY REPORT. CENTRO DE INVESTIGACIÓN PARA LA GESTIÓN INTEGRAL DEL MANEJO DE DESASTRES. UNIVERSIDAD CATÓLICA DE CHILE.

KELLY, S. (2019B). MEGAWATTS MASK IMPACTS: SMALL HYDROPOWER AND KNOWLEDGE POLITICS IN THE PUELWILLIMAPU, SOUTHERN CHILE. ENERGY RESEARCH & SOCIAL SCIENCE, 54, 224-235.

KELLY, S. H., GUERRA-SCHLEEF, F., & VALDÉS-NEGRONI, J. M. (2021). NEGOCIANDO CONSENTIMIENTO Y DERECHOS INDÍGENAS: GEOGRAFÍAS LEGALES DE LA FRAGMENTACIÓN EN TERRITORIO MAPUCHE-WILLICHE, FUTAWILLIMAPU, CHILE. JOURNAL OF LATIN AMERICAN GEOGRAPHY, 20(2), 67-102.



KLUBOCK, T. M. (2014). LA FRONTERA: FORESTS AND ECOLOGICAL CONFLICTS IN CHILE'S FRONTIER TERRITORY. DUKE UNIVERSITY PRESS.

MAPUCHE. MINORITY RIGHTS GROUP. (2020, NOVEMBER 23). RETRIEVED APRIL 3, 2023, FROM HTTPS://MINORITYRIGHTS.ORG/MINORITIES/MAPUCHE-2/#:~:TEXT=MAPUCHE%20ARE%20THE%20LARGEST%20INDIGENOUS,OR%20ABOUT%201.3%20MILLION%20PEOP LE.

MEZA-LOPEHANDÍA G., M. (2016). LA JURISPRUDENCIA DEL MULTICULTURALISMO EN CHILE: LA CONSULTA PREVIA Indígena antes tribunales.revista de ciencias sociales, (69). https://doi.org/10.22370/rcs.2017.69.932

MORALES, ROBERTO; CORREA, MARTÍN; MOULIAN, RODRIGO (2012). FUNDAMENTOS DE LAS SIGNIFICACIONES SOCIO CULTURALES Y ANTECEDENTES HISTÓRICOS DEL USO DEL TERRITORIO WILLICHE DE MAIHUE, EL ROBLE, CARIMALLÍN EN EL SECTOR DEL RÍO PILMAIQUEN.

RANKIA. (2023). PILMAIQUÉN S.A. ACCESSIBLE ONLINE: HTTPS://WWW.RANKIA.CL/BLOG/ANALISIS-IPSA/1847484-PILMAIQUEN-S

NORMANN, S. (2021). GREEN COLONIALISM IN THE NORDIC CONTEXT: EXPLORING SOUTHERN SAAMI REPRESENTATIONS OF WIND ENERGY DEVELOPMENT. JOURNAL OF COMMUNITY PSYCHOLOGY, 49(1), 77-94.

PAPILLON, MARTIN AND RODON, THIERRY, 2017A: "PROPONENT-INDIGENOUS AGREEMENTS AND THE IMPLEMENTATION OF THE RIGHT TO FREE, PRIOR, AND INFORMED CONSENT IN CANADA", ENVIRONMENTAL IMPACT ASSESSMENT REVIEW, 62.

PAPILLON MARTIN Y RODON, THIERRY, 2017B: "INDIGENOUS CONSENT AND NATURAL RESOURCE EXTRACTION. FUNDATIONS FOR A MADE-IN-CANADA APPROACH", IRPP INSIGHT,16.

SMITH, C. (2023). INFORME SOBRE LAS CARACTERISTICAS E IMPORTANCIA CULTURAL -AMBIENTAL DEL NGEN KINTUANTE, COMUNA DE RIO BUENO, REGION DE LOS RIOS.

STATKRAFT. (N.D.). STRATEGY: POWERING A GREEN FUTURE. STATKRAFT. RETRIEVED APRIL 20, 2023, FROM HTTPS://WWW.STATKRAFT.COM/ABOUT-STATKRAFT/STRATEGY/

STATKRAFT. (2023). AGROSUPER. ACCESSIBLE AT: HTTPS://WWW.STATKRAFT.COM/NEWSROOM/NEWS-AND-STORIES/2020/AGROSUPER/

UN GENERAL ASSEMBLY, UNITED NATIONS DECLARATION ON THE RIGHTS OF INDIGENOUS PEOPLES : RESOLUTION / ADOPTED BY THE GENERAL ASSEMBLY, 2 OCTOBER 2007, A/RES/61/295, AVAILABLE AT: HTTPS://WWW.REFWORLD.ORG/DOCID/471355A82.HTML [ACCESSED 1 MAY 2023]

VÁZQUEZ, K. H. & HODGKINS, C. (2021). RENEWABLE ENERGY (IN)JUSTICE IN LATIN AMERICA. BUSINESS & HUMAN Rights resource center. https://media.businesshumanrights.org/media/documents/re_latam_final_english.pdf

OBSERVATORIO CIUDADÁNO. (2023). ENTREVISTA A NANCY YAÑEZ. ACCESSIBLE ONLINE: https://observatorio.cl/entrevista-radial-a-nancy-yanez-derecho-a-la-consulta-y-alconsentimiento-frente-a-proyectos-extractivos/#

QUIÑONES, R. A., FUENTES, M., MONTES, R. M., SOTO, D., & LEÓN-MUÑOZ, J. (2019). ENVIRONMENTAL ISSUES IN Chilean Salmon Farming: A review. Reviews in Aquaculture, 11(2), 375-402. <u>https://doi.org/10.1111/raq.12337</u>

WINZENRIED, K. (2018, DECEMBER 11). WINDPARK IN NORWEGEN - SCHWEIZER INVESTMENT VERDRÄNGT INDIGENE. SCHWEIZER RADIO UND FERNSEHEN (SRF). RETRIEVED APRIL 20, 2023, FROM HTTPS://WWW.SRF.CH/NEWS/SCHWEIZ/WINDPARK-IN-NORWEGEN-SCHWEIZER-INVESTMENT-VERDRAENGT-INDIGENE

YÁÑEZ, N. (2014). NUEVOS PARADIGMAS PARA LA INTERPRETACIÓN JURÍDICA DEL DERECHO DE AGUAS EN CHILE A PARTIR DEL ENFOQUE DE DERECHOS FUNDAMENTALES Y LINEAMIENTOS PARA UNA REFORMA INSTITUCIONAL AL MODELO CHILENO DE AGUAS (DCTORAL DISSERTATION, TESIS PARA OPTAR AL GRADO DE DOCTOR EN DERECHO, UNIVERSIDAD DE CHILE).

