CONFLICTS OVER WATER IN CHILE: BETWEEN HUMAN RIGHTS AND MARKET RULES

Edited by: Sara Larrain and Colombina Schaeffer, Chile Sustentable.

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Authors: Antonio Belmar, Agrupación Ciudadana Pro-Defensa del Corredor de Chillan; Luis Carvajal, Comité de Defensa de Chusmiza-Usmagama; Manuel Cortez, president of Chadenatur-Chañaral; Harris Castro y Sandra Silva from Unión Comunal de San Pedro de Melipilla; Karla Ferreiro, Programa Tierra Alerta, Coquimbo; Jorge Godoy, Coordinadora de defensa del Agua from Copiapó, Rosa María Lama, Organización Ciudadana para la Protección de la Cordillera de Ñuble; Sara Larrain, Chile Sustentable; Virginia Mc Rostie, Comité de Defensa del Río Achibueno, Maule; Marcela Mella y Jack Stern, Coordinadora Ciudadana Ríos del Maipo; Katherine Kliwadenko, Chile Sustentable; Teresa Armijo, Sodem-Melipilla; María Rojas, Asociación de Agua Potable Rural de San Pedro el Yali-Melipilla; Patricio Segura, Coalición Aysén Reserva de Vida y Consejo de Defensa de la Patagonia, Claudia Sepúlveda, Acción por los Cisnes, Valdivia; Chistan Villarroel, Chile Sustentable; Pablo Villarroel, Universidad Austral de Chile

With the Collaboration of: Víctor Palape, presidente Comunidad Aymara of Quillagua; Cristina Farias, Organización Ciudadana Ambiental de Salamanca; Helmut Huerta, Chile Sustentable; Hernando Silva y José Luis Vargas from Observatorio de Derechos Ciudadanos; Lorenzo Soto, lawyer in Cipreses and Puyehue cases; Milka Ulloa, Comité Defensa del Valle de Chuchini, Coquimbo; Antonio Mamaní, Comunidad Aymara de Cancosa, Tarapaca Region

Translation: Marcelo Montecinos Translation Review: Sara Larrain and Colombina Schaeffer

Layout: Matthew Ramsden Foreward Editing: Jan Malek

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Santiago, Chile, September 2010
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FOREWARD

Chile has gone farther than any other country in the world in commodifying water and creating a market economy based on private water rights. The process started with the 1981 Water Code enacted by the military regime of the time, and was based on a strong pro-business bias. For the first time in Chile’s history, land and water were separated in order to allow for the unconstrained purchase and sale of water. While water was defined as a “national public good,” in the code, it was also defined as a “market asset,” allowing the privatization of water through the granting of rights for free and in perpetuity to big corporate interests. Once water rights are granted, the state no longer has the power to intervene and the reallocation of these water resources is done through the buying and selling of water markets.

The following excerpts from this excellent report by Chile Sustentable show that this process has been an unmitigated disaster for the people of Chile and for the water supplies and the ecosystem.

First, it has led to the concentration of ownership of Chile’s water by a handful of corporations, many of them foreign, the majority in the export sector. Seventy-five per cent of all mineral production is in the hands of private companies, most of them transnational. Three companies own 90 per cent of the water rights for power generation nationwide. The Spanish power company, Endesa, recently acquired by state Italian company Enel, controls more than 80 per cent of the total national water rights for non-consumptive (water that is returned to the watershed) use. The agriculture sector uses close to 85 per cent of all water granted for consumptive (water that is not returned to the watershed) use, nearly 20 per cent of which is exported out of the country in the form of virtual exports. All agribusiness exporters are private.

Second, this concentration of water and power over water in largely transnational corporate hands has led to an unprecedented assault on the country’s surface and groundwater sources, which in turn is causing great ecological strain in many areas and creating tensions between local communities and the corporations. The report cites the “degradation of the country’s most important watersheds” and the subsequent shortage of drinking water in many rural villages and indigenous communities. Water consumption in the three economic sectors experienced astonishing growth of 160 per cent between 1990 and 2002 and has continued apace till today. Chilean government figures predict an exponential increase in water use by these companies in the coming decade.

Chilean agribusiness uses large amounts of pesticides, herbicides and fertilizers, all of which destroy watersheds, and, as well, over extracts local water sources to produce export commodities. Communities in the northern town of San Pedro are in a fierce struggle with several agribusiness companies that control water rights in the Yali aquifer. They currently use the majority of water the aquifer produces forcing the people of 16 local communities to truck water in. The companies are seeking further rights that would exceed the aquifer’s production capacity.

Massive hydroelectric development by transnational companies is threatening protected and indigenous areas all through Chile’s southern region, where the water supplies are more plentiful. A Norwegian state company is planning the damming of 15 major rivers; an Italian-Chilean consortium appears poised to build two huge hydroelectric projects inside the Puyehue National Park in the Los Lagos region; and HidroAysen, owned by transnational Endesa, is seeking the right to build six gigantic dams deep into Patagonia, flooding as much as 7,500 hectares of virgin jungle and negatively affecting 10 state-protected areas and 26 wetlands.

The mining industry is causing “critical deficits” of water in some regions of the country. In the water scarce Antofagasta Region for example, mining uses more than 1,000 litres of water a second, and mining companies hold almost 100 per cent of the groundwater rights. The Chilean Copper Corporation itself admits in a report that this region will experience an “extreme deficit” in drinking water by
2025. The report ends with a series of case studies describing the growing conflict over water as the government is now allowing mining and drilling in national parks and issuing more water rights than there are actual water reserves, resulting in the drying up of areas of the country. Whole water basins have been polluted and/or depleted by mining corporations operating in the absence of regulations.

Because the Mining Code gives any company the right to search for and dig any land regardless of ownership, indigenous and local communities are overrun and exploited by rapacious foreign mining companies seeking ever-new mineral deposits. In 1940, there were 400 families in the northern village of Quillagua that had access to 660 litres of water per second from the Loa River. Today only 100 families live there and have to share 90 litres per second, all that is left after two mining companies have contaminated and over-extracted the river. Cancer and respiratory problems plague the residents of Chanaral after decades of toxic dumping by the state mining company. The local community in Copiapo, another northern town, remembers a time of abundance before two of the three local rivers, the Copiapo and the Salado, totally disappeared to due to over-extraction by private mining and agribusiness companies. These stories are repeated all over the country.

Third, in its commitment to a private water model, Chile has privatized its entire water and wastewater sector, thereby handing over almost 100 per cent of its water and wastewater services to transnational water utilities such as Suez, and foreign investment consortia such as the Ontario Teachers' Pension Plan.

In December 2010, the Chilean government announced plans to sell the state percentage of shares in water utilities. There is concern that Aguas Andinas, Essbio, Esval and Essal will be 100 per cent privatized, a move that has been resoundingly opposed by unions and social justice organizations in Chile.

Privatization ties run deep in Chile’s water utilities. In January 2011 Jorge Lesser García-Huidobro was named president of Essbio’s board of directors. García-Huidobro was a former director for Coca-Embonor Cola S.A., a company that is engaged in the franchise, distribution and sale of products under licence from The Coca-Cola Company in Chile and Bolivia.

Chile’s water sector has proven to be a windfall for these companies and investors, many which make steady annual returns of 25 per cent. These profits are subsidized by the government of Chile, which guaranteed the water companies a return of at least 10 per cent. Meanwhile, the citizens of Chile have seen their water rates rise steadily. As a result of privatization, Chile’s water rates are now the highest in Latin America.

Water consumption in households has dropped significantly as a direct result of these high rates, while the government continues to subsidize the exploitation of water by the private sector. There have also been major job losses since privatization as well as documented levels of rate inequality in different parts of the country.

Importantly (to refute those who say that privatization brought the miracle of water services to Chile), privatization has not meant an improvement in the coverage or access to water resources of the population. The percentage of the population covered by drinking water and sewage services is almost exactly the same before privatization, (in 1998) as it was 10 years after (2008). The only area where there has been improvement has been in the treatment of wastewater and that has been entirely paid for by the consumer in steadily rising rates.

This important report concludes by noting that 30 years after its experiment with total water privatization, Chile is faced with a serious set of issues around the violation of basic human rights, growing conflicts over declining supplies, water insecurity for the future and environmental degradation. This is a failed experiment and must be exposed as such to the world.

Maude Barlow, National Chairperson, The Council of Canadians
INTRODUCTION:
BETWEEN HUMAN RIGHTS AND MARKET RULES

Sara Larrain, Executive Director, Chile Sustentable Program

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1 This introduction gets its information from the books: “Agua: Donde esta y de quien es”, Programa Chile Sustentable, 2003; “Recursos Hidricos en Chile: Desafios para la Sustentabilidad”, Programa Chile Sustentable, 2004; and from diverse constitutional law projects and reforms concerning water resources between the years 1996 and 2010.
Water is the most essential element on planet Earth. Without water there is no human, animal, or vegetable life. That is why in most places and cultures, water is the origin and basis of life. For the same reason, access to such is considered, by many cultures and nations, a fundamental human right.

However, water is a scarce world resource and it is distributed in an unequal manner. 70% of planet Earth’s surface is water and the remaining 30% corresponds to continents. Of the total amount of water existing on this planet, 97% is salt water and only 3% is freshwater; but only 1% of such is available for the ecosystems and for human and animal consumption. The remaining 2% is frozen in glaciers and in the Poles.

Water constitutes the articulating element of all living systems on the planet, beyond being a unique natural resource, finite and indispensable for all living organisms. It is also a fundamental element for the cultivation of food and for a large part of economic and productive activities of man.

Currently on our planet there are water availability and quality problems, since 20% of the world’s population lack enough water for a clean and safe life; and it is expected that by the year 2025 the lack of water will affect 30% of world population due to the growth in population and as a consequence of Climate Change. Beyond that, today, 5 million people die every year due to illnesses associated to contaminated water; 2.5 billion people do not have cleansing availability and the water privatization processes have not helped to improve the situation.

These figures show how water is increasingly becoming a scarce resource on a worldwide level, especially in arid zones and in those regions where environmental degradation has interrupted its natural storage. There are two factors that affect freshwater’s availability and quality on the planet: the increase in human activity and contamination.

Chile is one of the privileged countries in terms of availability of superficial water resources on a worldwide level, and counts one of the major reserves of this resource in the North and South Ice Camps, in the southern zone. However, water is irregularly distributed on a national level due to its territories geographic and climatic diversity. While the northern zone of the country is very arid, with an availability of water resources of less than 500 cubic meters annually per habitant (m³/habitant/year), in the southern zone a great abundance of it exists, reaching levels of 160,000 m³/habitant/year of water availability in some regions.

The regulations for access and administration over water sources in Chile are determined by the Water Code of 1981, enacted by the military regime at the time, which has “a strong pro-business bias; one that allowed water property privatization and, for the first time in Chile’s history, the separation of land control from water control in order to allow for its unrestrained purchase and sale”, transforming it into mere merchandise.

The actual conflicts concerning water access in the country are structurally linked to the application of the administration model established in said Code, which focuses assignment criteria of the water into criteria of offer and demand, thereby placing water resources under major pressure, especially in the zones where these are most scarce. The “free-market” system on the different uses of water has had the effect of rights concentration by the electric, mining and exporting sectors, considered “motors” of national development, at the detriment to the majority of the population’s access to this resource.

This one-sided practice-of-rights favoured by the Water Code of 1981, empowered water management according to the rules of private property, legally backed-up by the Constitution of 1980.

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2 The water Code was design and put in force by the military regime, with lack of public discution, because this undemocratic regime has no National Congress, nor people representatives, nor political parties.

The shortage of water in the northern zone of the country, and the inappropriate regulations concerning access to and ownership of water, have led to confrontations in the last few decades between the indigenous local communities and peasants against mining companies, whose exploitations and ventures are concentrated in these arid regions. If no solutions are found for these conflicts in the next few years, when higher copper prices are foreseen and therefore more mining expansion, surely the impacts, which today affect the regions of Tarapaca, Antofagasta and Atacama, will get worse also impacting until their collapse, the indigenous communities that have habited these fragile areas for centuries, as well as preventing local activity development based on the protected areas and the notable landscape values of the area.

By the same logic, the increased exploitation of surface and groundwater resources in the middle of the country by mining, hydroelectric and agribusiness, has resulted in the degradation of the most important watersheds, creating a growing tension between mining and agriculture activity and between tourism and hydroelectric projects. It has also caused a shortage of drinking water in rural villages, affecting rural communities, many of which have to be supplied by water tank trucks in summer and in periods of drought.

Finally, the concentration of water ownership in the hands of hydroelectric companies in the south, and contamination of these by the pulp and paper manufacturing plants has created serious conflicts between power generators and Mapuche/Pehuenche communities in mountainous territories, and between the cellulose pulp industry and urban and coastal communities, which have been severely affected by catastrophic events of water pollution that have damaged local economic activities such as tourism, fishing and marine farming.

The most critical aspect in the Water Code of 1981 is that it defines water as “a national public good”, but at the same time as “a market asset”, authorizing the privatization of water through the granting of rights for free and in perpetuity, not setting limits on said grant. Under this scheme, the General Directorate of Water (DGA), a state directory responsible for water management, granted exploitation rights to privates, without any payment whatsoever for patents for its award and resource use, even when the solicited water is not used.

According to the Chilean Water Code, once water rights are given to an individual or a private company, the state no longer intervenes and the reallocation of these resources is done through what is called the “water market” where the private owner of the water rights can rent, buy or sell them, the same like any other asset.

This transaction mechanism between private water rights favoured an extreme concentration of ownership of this resource; to such an extent that currently only three companies concentrate 90% of the ownership of water rights for power generation nationwide.

In the mining sector water rights are also held by private companies, mostly multinationals, which have accrued rights of surface and groundwater in areas of high water scarcity in the north of the country. In the case of the Antofagasta Region for example, mining uses over one thousand litres per second of surface water and has almost 100% of the groundwater rights.

In the field of potable water and sewage, the process of privatization and transnationalization of water was designed during the military regime and implemented in the democratic transition, during the governments of Eduardo Frei, between 1994 and 1999, and Ricardo Lagos, between 1999 and 2005.

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4 This situation was reversed with the Water Code Reform in 2005, a payment for a patent was established for the non-usage of accumulated water rights.

5 Law project by Minister Bilharz, during the Bachelet Administration to change the constitutional provisions relating to the ownership of water, Ministry of Public Works, October 2008.

6 Equivalent to 12,000 litres per second, according to General Directorate of Water Antofagasta (2009).
The privatization and denationalization of water rights of this sector was held at the same time as the privatization of water companies. Currently, all of those which serve the major urban centers, in all of the regions, are private; with the only exception being EMAPA, still under the ownership of the municipality of Maipu, east of the city of Santiago in the Metropolitan Region.

The privatization and transnationalization of water utilities is one of the reasons why drinking water services in Chile are the most expensive water services in Latin America, which favour large water multinationals such as Suez and Agbar, and to a lesser degree national business consortiums in mining (as Antofagasta Minerals owned by the Luksic Group) and the international finance sector, including the pensions funds.

Water rights in Chile, after being granted by the State to private hands, free and in perpetuity, without any charges for the use of the water or any specific taxes, nor payments for discharges of sewage, except in urban sectors integrated to the sewage system, became subject to the market rules of supply and demand as established in the 1981 Water Code as a means of access to water resources.

The only corrective mechanism to this market logic was the payment for the “non usage” of the water rights introduced in a recent amendment to the Water Code in 2005, which aims to discourage its useless accumulation. This instrument, however, since lacking appropriate environmental regulation within the Water Code, has led to the proliferation of projects in order to avoid the license payment for non-use. It has also led to increased transactions in the water market, generating in both cases increased pressure on rivers and water basins, in a context where an important part of the rivers have lost their ecological flow, and are in evident state of collapse due to contamination or overexploitation of water resources.

To this, add the ensuing problems arising from a scattered institution, which hinders the integrated management of water resources, promotes the concentration in ownership of water rights, and has inadequate controls when facing conflicts of interest for accessing this resource.

The 1981 Water Code also created a new category of water rights: the consumptive and non consumptive. The difference between both types of rights is of a legal nature, and refers to the presence or absence of user commitment to return the volume of water used to the river from where it was extracted. The consumptive right refers to the right to consume water without having to return it to the source in order to be then reused by another user. This is the case in the rights requested for irrigation, mining, industrial and domestic use. However, there is always a significant fraction of this granted-for-consumption water that makes its way back into the channel, be it in a localized or diffused way, or infiltrates itself back into groundwater channels.

On the other hand, non-consumptive rights are those that are requested for water use without consumption, as is the case for hydroelectric generation. This law requires extracted water to be returned to the same river from which it was extracted, without harming existing users downstream. However, legislation is weak in controlling the occurrence of damage to users on the lower parts of the basins. Public policies have also encouraged the approval of hydroelectric ventures, even when there is evident environmental damage with dams, which affect local communities and their economies.

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7 According to figures from CEPAL (2003). Moreover, the state subsidizes the utilities with subsidies covering the payment of fees for lower income households.
8 Suez Lyonesse des Aux (France) y Aguas de Barcelona (Spain).
10 Such was the case in the construction of the Ralco Central in the south of Chile, which flagrantly violated the National Indigenous Law and international provisions related to the rights of the people, devastating ancestral lands, cemeteries and other resources of the natural and cultural heritage of the Mapuche people. The Chilean government gave priority to the National Electricity Law and the interests of the company involved (Endesa Spain), as part of an energy policy that was also devoid of environmental, social and political sustainability elements.
Secondly, the Water Code defines this resource as a “national public good”, but at the same time as an “economic asset”, thereby authorizing its award to individuals by way of granting rights for usage, which by Chilean law are defined as real rights; that is, ownership rights over the waters for their use and enjoyment by the holder of such, in accordance with the requisites and rules established by the Water Code. These rights granted by the state, moreover, are protected by constitutional guarantees of property rights. In Article N° 24 of the Political Constitution of Chile of 1980, it is stated that “The rights of individuals over the water, recognized or constituted in accordance with the law, grant their holders the ownership of them”.

The beneficiary of the water rights must declare where and when they will use it, if they will use it for the requested purposes or for alternative uses thereafter, thereby being able to keep the rights indefinitely without having to actually use the water. This situation changed with the Water Code reform of 2005, which included payment for the non-usage of water rights; nonetheless, it was dismissed to include charges for water rights and there were no costs imposed for the granting of new rights, or fees for their enjoyment over time.

Once these rights of usage are granted, the state does not intervene, except to verify that they are being used. The concession of rights allowed for definite access to water to large agricultural enterprises, but also favoured large companies in the hydropower, mining and exporting sector to the detriment of the traditional rights of rural communities and local populations to access a fundamental resource of life. This has resulted in a progressive concentration of ownership of water resources in few hands, access problems for the population, rising rates and worsening water stress problems and irreversible degradation of watersheds in regions where water is scarce.

A recent study by the General Water Directorate (DGA) concerning the water situation between the regions of Tarapaca in the north and Maule in the center-south of the country, shows an extreme deficit situation in the Region of Antofagasta and an increasing deficit from Atacama to the south; a pitched battle between agriculture and mining, and strong competition between mining and the other productive activities. Both regions, according to the DGA, will require optimization of consumption and the import of water resources. The scarcity situation, affecting the basins of the rivers Loa and Copiapo, is terminal and will extend to other northern and central basins of the country due to the expansion of mining and the foreseen impacts to the area due to Climate Change.

If Chile does not address structural reforms in the 1981 Water Code in the short-term, the State will not be able to face these challenges, aggravating the vulnerability of local communities and productive sectors and intensifying social and environmental conflicts over water.

In summary, it’s possible to conclude that after 30 years of applying the 1981 Water Code, said regulation presents serious problems of access for basic human needs, water security and environmental sustainability in the management of this resource, whose consequences are the proliferation and deepening of water conflicts in the country, and the loss of democratic governance on this vital natural public good.

11 The use right is granted to individuals as provided for in Article N° 5 of the Water Code.
14 IPCC, Working Group III, V/A (2007) and Geology and Geophysics Department, Universidad de Chile (2007).
CONCENTRATION OF WATER OWNERSHIP FOR CONSUMPTIVE USE

Most water rights for consumptive use are in the hands of the export sector, particularly the agro-industry and mining. There are wide variations in the water use in the various regions, which depend on the predominating productive sectors. While in the Arica and Parinacota Region there still exists a fragile balance between domestic, mining, industry and agriculture, in the Antofagasta and Atacama Regions mining use predominates; and from the Coquimbo to the Araucania Regions irrigation and hydroelectricity usage dominates. In the Metropolitan Region and the Valparaiso Region domestic use is a bit more significant than in neighbouring regions, and finally, in the Aysen and Magallanes Regions mining also has relevant usage (Figure 1).

Water consumption in the different economic sectors experienced growth of nearly 100% between 1990 and 1999, and 160% between 1990 and 2002, a trend that continues today.

The General Directorate of Water (DGA) projects an increase in water demand in all regions of the country by the year 2017, especially in the central regions (Figure 2). This represents a major challenge for management and water policy; to which we must add the constraints (higher temperature and less rainfall) imposed by Climate Change.

The mining sector, for example, develops its activities in the arid northern regions of the country, where there are severe problems of water stress. 75% of all mineral production is in the hands of private companies, most of them transnational, which means little income for the country. Mining, at the beginning of the decade, consumed 3.5 million m$^3$ of water per year, which has continued to increase, also aggravating the environmental impact, such as drying watersheds, ponds, wetlands and salt flats; deteriorating ecosystems and generating desertification. This has affected local and indigenous communities, destroying their agriculture, livestock and local economies and causing mass migration to the cities\(^\text{15}\). Water consumption by mining, in the past, has also been a source of border disputes with Bolivia, as in the case of the Silala River.

\(^{15}\)Mining activities have even caused the retreat of the sea, due to deposit tailings sustained without adequate treatment, as has happened in the city of Chañaral, III Region of Chile (www.desastreecologico.cl).
In the next 25 years, a significant increase in mining in the Antofagasta Region is projected, and therefore an increase in water consumption from 66% to 72% in the same time frame. At the same time, a decrease in drinkable water consumption, from 4% to 3%, is expected over the same period. In the Atacama Region an increase in water consumption by mining industry is foreseen, from 9.8% of actual consumption to 25.4% in 25 years. By contrast, in the agricultural sector there should be a decrease from current consumption of 74% to 53% over the same period (Figure 3).


![Figure 2: Actual and Future Demand for Water by Region](image)

![Figure 3: Current and Future use of Water for the Productive Sector](image)

This strong increase in water demand by the mining industry in coming years will generate critical situations in some regions of the country. According to a recent study by the Chilean Copper Corporation (COCHILCO), done in 2009, wherein it stressed that the Antofagasta Region awaits an extreme deficit in terms of water consumption by 2025. This will force the mining industry to optimize their production processes, using sea water, or importing water massively from other regions of the country.

In the case of the Atacama Region, an increased water deficit is expected by the year 2025, with strong competition between mining and agriculture. This will force the mining industry to optimize their production processes, using sea water, or importing water from other regions to prevent further environmental problems and to resolve their conflicts with other water users, especially the agricultural sector.\(^\text{16}\)

In the four northern regions of Chile, COCHILCO has identified eight critical watersheds, concerning water resources: Salar del Huasco, Michincha and Coposa water systems in I Region of Arica and Iquique; the Loa River and the Salar de Atacama in II Region of Antofagasta; the rivers Copiapo and Huasco in III Region of Atacama; and the Choapa and Limari rivers in the IV Region of Coquimbo; where the major mining projects in these regions also operate (Table 1). This book on water conflicts in Chile illustrates several cases of mining ventures that affect local economies in these eight critical watersheds.

### Table 1: Critical Watersheds and Mining Operations

<table>
<thead>
<tr>
<th>Region</th>
<th>Basin</th>
<th>Principal Mining Operations</th>
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<tbody>
<tr>
<td>I Region</td>
<td>1- Salar de Huasco</td>
<td>Collahuasi</td>
</tr>
<tr>
<td></td>
<td>1- Michincha-Coposa System (High Plateau Basins)</td>
<td>Quebrada Blanca</td>
</tr>
<tr>
<td></td>
<td>2- Michincha-Coposa System (High Plateau Basins)</td>
<td></td>
</tr>
<tr>
<td>III Region</td>
<td>3- Loa River</td>
<td>El Abra</td>
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<tr>
<td></td>
<td>4- Salar de Atacama</td>
<td>Codelco Norte Division</td>
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<td>Soquimich (SQM)</td>
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<td></td>
<td></td>
<td>Chilean Lithium Society, Gaby, Zaldivar y Escondida</td>
</tr>
<tr>
<td>III Region</td>
<td>5- Copiapo River</td>
<td>Candelaria</td>
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<tr>
<td></td>
<td>6- Huasco River</td>
<td>Caserones Project</td>
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<td></td>
<td></td>
<td>Punta del Cobre Society</td>
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<tr>
<td>IV Region</td>
<td>7- Choapa River</td>
<td>Los Pelambres</td>
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<td></td>
<td>8- Limari River</td>
<td>Andacollo</td>
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</tbody>
</table>

Source: COCHILCO, 2007. Water and mining management in Chile

However, neither from public policy, nor from business management, are there any forthcoming solutions to this situation for the forthcoming years. On the contrary, given the projected expansion in the level of investment in mining in the coming years, especially in the gold and copper sectors, there is the expectancy of increasing conflicts over water in said regions (Figure 1).

On its own, the agricultural sector consumes nearly 85% of all water granted for consumptive use nationwide, accounting for 18.5% of Chilean exports. Of these, the majority corresponds to grapes, apples and other fruits destined for European Union countries and the United States. The agribusiness exporters are all private, and their main impacts are pressure on water resources, water contamination by intensive use of pesticides, herbicides and fertilizers, and health damage to the workers in

\(^{16}\) Gallardo Halat, Maria Fernanda. “Elaboracion de estrategias de gestion de las aguas en faenas mineras”, 2002.
the agricultural industry (mainly seasonally employed women\textsuperscript{17}). To this we add the overexploitation of groundwater, with serious impacts on the catchment wells that supply water to Rural Water Associations, who lose access to groundwater, due to the refill crisis that this overexploitation causes.

\begin{figure}[h]
\centering
\includegraphics[width=\textwidth]{figure1.png}
\caption{Business Plan Period 2009-2013, Copper and Gold Mining}
\end{figure}

\begin{figure}
\centering
\includegraphics[width=\textwidth]{figure1.png}
\caption{Business Plan Period 2009-2013, Copper and Gold Mining}
\end{figure}

In vast regions of the country, agricultural irrigation is still inefficient, not exceeding 30\% of effective utilization, leading to problems of water flooding, salination of soils, loss of arable topsoil and pollution of rivers and groundwater with agrochemicals.

**CONCENTRATION OF OWNERSHIP OF WATER AND WATER SERVICES**

Currently, the largest demand for drinking water in Chile (50.5\%) occurs in the Metropolitan area where almost 40\% of the national population lives, followed by the V and VIII Regions, with consumption of 11.7\% and 8.8\%, respectively. These regions were the first ones affected by the process of privatization of water services started in the late 1990’s, during the administration of the Coalition Parties for Democracy, led by Eduardo Frei.

Nonetheless, the planification of the country’s water services privatization process began in the late 1980s, with the reform of the state water companies system, under the liberalizing orientation plan that was introduced by international financial institutions like the Inter American Development Bank (IDB) and the World Bank. In that context, the main reasoning behind utility reform were twofold: that the problems of access and water coverage would be faced better if public water companies were in private hands, as they would ensure more efficiency; and that in order to privatize, it was necessary to promote competitiveness, and thusly deregulate the sector and remove entry barriers so that transnational companies could invest.

The new utility legislation guaranteed companies, among other things, 10.3\% investment return\textsuperscript{18}, in order to secure the investment and retention of the private sector in the drinking water services market.

\textsuperscript{17} People in the central farming zone have a rate of congenital malformations that is more than three times the national average, mainly due to parental exposure to pesticides used in intensive agriculture.

\textsuperscript{18} Maturana, Hugo. “Defensa del servicio del agua: una postura sindical”. In: The Right to Water in South America, Chil-
Thusly, between late 1980 and early 1990 a system of 13 independent operating companies was created (one for each region), mainly public, that through a licensing system served the needs for water and sewage for 92% of the national population\(^1\).

The breakup of the utility system opened up the way for further privatization, by giving them legal entity status, with indirect government management. Nevertheless, even in 1995, the biggest holder of consumptive water rights for drinking water services was the Treasury, with 50.1% of the available flow.

This picture changed dramatically starting in 1998, during the presidency of Eduardo Frei Ruiz-Tagle, with the sale of 40% of the Empresa Sanitaria de Valparaiso (ESVAL) to a consortium made up of English-based Anglian Water and Endesa Spain, for U.S. $410 million. Subsequently, Anglian bought the Spanish transnational company its part.

In 1999, the Frei administration transferred 43% of the Empresa Metropolitana de Obras Sanitarias (EMOS) to a consortium formed by the French transnational company Suez Lyonnaise des Aux and Aguas de Barcelona (Agbar), a subsidiary of the former. This group now owns 55% of the assets of the Metropolitan Utility, which is managed by the company Aguas Andinas. That same year the Frei government sold 51% of Empresa Sanitaria de los Lagos (ESSAL) of the X Region of Los Lagos, to the Spanish company Iberdrola. Then, in the year 2000, 42% of the Empresa Sanitaria del Bio Bio (ESSBIO) in the VIII Region of Concepcion, was given in concession to the British firm Thames Water, which then came to control 51% of the company.

<table>
<thead>
<tr>
<th>Region</th>
<th>Company</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>ESSAT</td>
</tr>
<tr>
<td>II</td>
<td>ESSAN</td>
</tr>
<tr>
<td>III</td>
<td>EMSSAT</td>
</tr>
<tr>
<td>IV</td>
<td>ESSCO</td>
</tr>
<tr>
<td>V</td>
<td>ESVAL</td>
</tr>
<tr>
<td>VI</td>
<td>ESSEL</td>
</tr>
<tr>
<td>VII</td>
<td>ESSAM</td>
</tr>
<tr>
<td>VIII</td>
<td>ESSBIO</td>
</tr>
<tr>
<td>IX</td>
<td>ESSAR</td>
</tr>
<tr>
<td>X</td>
<td>ESSAL</td>
</tr>
<tr>
<td>XI</td>
<td>EMSSA</td>
</tr>
<tr>
<td>XII</td>
<td>ESMAG</td>
</tr>
<tr>
<td>Metropolitana</td>
<td>EMOS</td>
</tr>
</tbody>
</table>

Table 2: Water Companies in Chile: the First Wave of Reforms

Source: Bravo, Patricia. En “Agua: Donde está y de quien es”. Chile Sustentable Program, 2003

With the privatization of these four companies, 73% of the potable water and sewage system of the country came to be in the hands of transnationals. Subsequently, 51% of the shares of the Empresa de Servicios Sanitarios (ESSEL) in the VI Region of O’Higgins, were bought by Thames Water. In short, by 2002, the private sector, and more specifically the transnational companies, owned 83% of

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\(^{19}\) Matus, Nancy. “La privatización y mercantilización de las aguas: normas y regulaciones que rigen al sector sanitario. Dificultades y desafíos”. In: The Right to Water in South America, Chilean Alliance for Just, Ethical and Responsible Commerce (ACJR), Santiago, Chile, 2002.
the Water Services Companies in the country\textsuperscript{20}. The main transnational companies that controlled the water market in the sector of water utilities at the time were Suez Lyonnaise des Aux, Thames Water and Anglian Water.

These privatization processes were carried through without any citizen consultation and unbeknownst to the massive rejection to such transfers, as happened in the VIII Region of Bio Bio, where 99.09% of the 136,783 ESSBIO users spoke out against privatization.

The privatization of water companies meant higher levels of inequality and conflicts in access to water for human consumption, due to increasing rate hikes. According to figures compiled by non-governmental organizations in Chile, and in particular the Organization of Consumers (ODECU), privatization, in its first stage, generated differences of up to 400% for water rates throughout the country, the largest increases being in the central-north zone.

A direct consequence of these increases was the reduction of water consumption from $25m^3$ to $17m^3$ between 1999 and 2002, not because of greater efficiency in resource use, but because households did not have sufficient income to meet rising potable water rates. Added to this was the loss of jobs in the Water Services Companies as a result of massive layoffs, which increased from 30% in 1999 to 60% in 2002\textsuperscript{21}.

To solve the problem of access to water utility services in low-income sectors, the state gave a direct subsidy to families to pay for these services, which constituted an indirect subsidy to the water companies.

Evidence shows that private participation in the Water Services companies has not meant an improvement in the coverage, or access to water resources by the population. Users also pay 100% of the cost of treating sewage, which is a source of additional and permanent income to the water companies utility companies. These revenues are generally much higher than their initial investment.

\begin{table}[h]
\centering
\caption{Ownership of Water Rights for Human Consumption in Chile: 1995-2002 (private and public (fiscal))}
\begin{tabular}{c}
\hline
Year & Fiscal & Privados \\
\hline
1995 & 50.1\% & 49.9\% \\
2002 & 83\% & 17\% \\
\hline
\end{tabular}
\end{table}


In the year 2002, during the Ricardo Lagos Administration, the Coalition of Parties for Democracy, concluded the process of privatization of the public water companies by awarding the Empresa Sanitaria del Maule (ESSAM) in the VII Region El Maule and Empresa Sanitaria de Araucania (ESSAR) in the

\textsuperscript{20} Gebauer, Dante. “La transformación del Estado: del modelo social al liberalismo”. In: The Right to Water in South America, Chilean Alliance for Just, Ethical and Responsible Commerce (ACJR), Santiago, Chile, 2002.

IX Region of Araucania to the private sector, using the formula of 30 or 35 year renewable concessions. But the bid failed, because only Thames Water (owner of ESSBIO and ESSEL) attended in the case of ESSAM, and the ESSAR tender was declared void. 

Thereafter, between 2003 and 2004, the Ricardo Lagos Administration handed over to private companies the last public water service companies that existed between Tarapaca and Coquimbo (I to IV Regions) in the north. He also privatized the Aysen and Magallanes public water companies (XI and XII Regions) in southern Chile. These public companies were acquired by national private consortiums such as the Luksic Group, owner of large mining holdings such as Antofagasta Minerals, wineries and financials; the Solari Group, dominant actor in the area of retail, financial and agricultural; and by the Financial Consortium Icafel - Vectra.

In this manner, the last privatization process gave public water services to large national consortiums, maintaining the free-market logic of water administration, plus more concentration of water property in private hands. This last move by the Lagos government meant the privatization of almost 100% of the public water services in the country by 2004, the only exception being the municipal company EMAPA in the commune of Maipu, in the Metropolitan Region, and the small Rural Water Associations, which are regulated by a special legal framework which is currently under review.

<table>
<thead>
<tr>
<th>Region</th>
<th>Company</th>
<th>Consortium or Company</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>ESSAT</td>
<td>“Aguas Altiplano”, controlled by Santander Investment (Spain)</td>
</tr>
<tr>
<td>II</td>
<td>ESSAN</td>
<td>“Aguas de Antofagasta”, controlled by the Luksic Group (Chile)</td>
</tr>
<tr>
<td>III</td>
<td>EMMSAT</td>
<td>“Aguas Norte Grande”, controlled by Icafel, Hidrosan and Vectra Consortium</td>
</tr>
<tr>
<td>IV</td>
<td>ESSCO</td>
<td>Controlled by Ontario Teachers Pensions Plan (Canada)</td>
</tr>
<tr>
<td>V</td>
<td>ESVAL</td>
<td>Controlled by Ontario Teachers Pensions Plan (Canada)</td>
</tr>
<tr>
<td>VI</td>
<td>ESSEL</td>
<td>Thames Water (England) y Electricidade (Portugal)</td>
</tr>
<tr>
<td>VII</td>
<td>ESSAM</td>
<td>Controlled by Ontario Teachers Pensions Plan (Canada)</td>
</tr>
<tr>
<td>VIII</td>
<td>ESSBIO</td>
<td>Controlled by Ontario Teachers Pensions Plan (Canada)</td>
</tr>
<tr>
<td>IX</td>
<td>ESSAR</td>
<td>Controlled by Santander Investment (Spain)</td>
</tr>
<tr>
<td>X</td>
<td>ESSAL</td>
<td>Iberdrola (Spain) y “Aguas Decima” in the Valdivia Province, controlled by Suez Lyonnese (France) and Aguas Barcelona (Spain)</td>
</tr>
<tr>
<td>XI</td>
<td>EMSSA</td>
<td>Controlled by Icafel, Hidrosan and Vectra Consortium</td>
</tr>
<tr>
<td>XII</td>
<td>ESMAG</td>
<td>“Aguas Magallanes”, controlled by Santander Investment (Spain)</td>
</tr>
<tr>
<td>RM</td>
<td>EMOS</td>
<td>“Aguas Andinas”, controlled by Suez Lyonnaise Des Aux (France) y Aguas Barcelona (Spain)</td>
</tr>
</tbody>
</table>

Source: Chile Sustentable Program, based in: (a) data from the companies; (b) Matus, Nancy in “Recursos Hidricos en Chile: desafíos para la sustentabilidad”, according to data provided by CEPAL, 2000, and (c) Superintendency of Sanitary Services (SISS), 2008

In recent years, as part of a new cycle of private investment in the context of free trade agreements (FTAs), and particularly in the context of the FTA with Canada, the large water services companies ESBBIO in Concepcion, Aguas del Valle in La Serena, ESSAM in Maule and ESVAL in Valparaiso (originally awarded to British companies Thames Water, Anglian Water and National Financial Consortium in the 90’s) have been purchased by the Ontario Teachers Pensions Plan (OTPP), a Canadian

22 Carmona, Ernesto. The Owners of Chile. Editorial La Huella, Santiago, Chile, 2002.
23 Tarapaca, Antofagasta, Atacama and Coquimbo Regions.
24 Aysen and Magallanes Regions in the Chilean Patagonia.
25 Multistores Falabella, Homecenter Sodimac, Banco Falabella and shareholder of National Airline (LAN Chile).
teacher’s pension plan. There within, the companies Aguas Altiplano in Arica, Aguas Araucania in Temuco, and Aguas Magallanes in Punta Arenas, were sold by the Solari Group to Santander Investments in 2009. The transfer and sale of these companies were carried out without taking into account original sale or grant conditions, with huge gains “for the move”. For example, the National Financial Consortium pocketed three times the value of what it had paid for ESVAL and Aguas Del Valle, after having been less than five years in the sector.

The reasoning of Eduardo Frei Administration (1994-2000) to privatize public water services, was the need to incorporate private capital into the sector, given the considerable increase in potable water supply and sanitation services that the state would have had to engage in at the time. However, an objective analysis of the Superintendence of Sanitary Services (SISS) of what happened in the last decade shows no substantial changes in coverage in neither water supply nor sewage, which maintained the high levels achieved in the past by the public companies. The only exception was the treatment of wastewater, which was mainly done under private sector management (Table 5).

Table 5: Comparative Water Services Coverage between 1998 and 2008

<table>
<thead>
<tr>
<th>Service</th>
<th>1998 Before privatization</th>
<th>2008 10 years after Privatization</th>
</tr>
</thead>
<tbody>
<tr>
<td>% Drinking Water Coverage</td>
<td>99,3%</td>
<td>99,8%</td>
</tr>
<tr>
<td>% Sewage Coverage</td>
<td>91,6%</td>
<td>95,3%</td>
</tr>
<tr>
<td>% Wastewater Treatment Coverage</td>
<td>16,7%</td>
<td>82,6%</td>
</tr>
</tbody>
</table>

Source: Superintendence of Sanitary Services (SISS), 2008

New legislation in the water services also guaranteed to private companies a return on investment of 10,3%. This guaranty intended to secure the investment and retention of the private sector in water services, improving and increasing access and coverage to drinking water, whereas in practice this has not been so, since the percentage in coverage has not changed significantly between 1998 and 2008, except for that related to the treatment of wastewater, where there has been progress. But while private water companies appear to be making large investments in wastewater treatment plant construction, the reality is that those who financed the work were ultimately the consumers, through a steady rise in rates, and with the addition of charges for sewage treatment in their monthly water and sewer bills.

Studies done by the National Federation of Water Services Workers (FENATRAOS) based on figures from the Superintendence of Sanitary Services (SISS) show that before privatization, between 1989 and 1998, rates for drinking water and sewage rose from 18 American cents to 78 American cents per cubic meter. However, after privatization, the rise in rates for drinking water and sewage has reached U.S. $ 1.10 per cubic meter in Santiago, to U.S. $ 1.60 in La Serena, to U.S. $ 2.07 in Punta Arenas and to $ 2.60 in Antofagasta.

27 Same as Note 7.
30 Average rates.
Thusly, by transferring total investment costs to users, transnational water companies' profitability remained in a steady rise, some of them reaching more than 25% return on their assets in the last few years\(^\text{32}\) (Table 6).

<table>
<thead>
<tr>
<th>Nº</th>
<th>Company</th>
<th>Return on Assets of Utilities</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>2005</td>
</tr>
<tr>
<td>1</td>
<td>Aguas Andinas</td>
<td>19.9%</td>
</tr>
<tr>
<td>2</td>
<td>ESSBIO</td>
<td>14.3%</td>
</tr>
<tr>
<td>3</td>
<td>ESVAL</td>
<td>8.8%</td>
</tr>
<tr>
<td>4</td>
<td>Aguas Nuevo Sur Maule</td>
<td>8.5%</td>
</tr>
<tr>
<td>5</td>
<td>Aguas Araucanía</td>
<td>15.9%</td>
</tr>
<tr>
<td>6</td>
<td>SMPA</td>
<td>6.2%</td>
</tr>
<tr>
<td>7</td>
<td>ESSAL</td>
<td>12.3%</td>
</tr>
<tr>
<td>8</td>
<td>Aguas del Valle</td>
<td>17.3%</td>
</tr>
<tr>
<td>9</td>
<td>Aguas de Antofagasta</td>
<td>20.3%</td>
</tr>
<tr>
<td>10</td>
<td>Aguas del Altiplano</td>
<td>23.8%</td>
</tr>
<tr>
<td>11</td>
<td>Aguas Cordillera</td>
<td>19.7%</td>
</tr>
<tr>
<td>12</td>
<td>Aguas Chañar</td>
<td>32.1%</td>
</tr>
<tr>
<td>13</td>
<td>Aguas Magallanes</td>
<td>23.0%</td>
</tr>
<tr>
<td>14</td>
<td>Aguas Décima</td>
<td>15.8%</td>
</tr>
<tr>
<td>15</td>
<td>Aguas Patagonia de Aysén</td>
<td>25.7%</td>
</tr>
<tr>
<td>16</td>
<td>Servicomunal</td>
<td>8.9%</td>
</tr>
<tr>
<td>17</td>
<td>Aguas Manquehue</td>
<td>13.8%</td>
</tr>
<tr>
<td>18</td>
<td>Servilampa</td>
<td>1.3%</td>
</tr>
<tr>
<td>19</td>
<td>Aguas los Dominicos (1)</td>
<td>10.0%</td>
</tr>
<tr>
<td>20</td>
<td>Coopagua</td>
<td>8.2%</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>15.7%</strong></td>
</tr>
</tbody>
</table>

Source: FENATRAOS 2009, based on Superintendence of Sanitary Services-SISS, 2009

**CONCENTRATION OF OWNERSHIP OF WATER FOR NON-CONSUMPTIVE USES**

The process of privatization of water property generated by the application of the Water Code of 1981, in which the Chilean State granted for free and in perpetuity water rights to mining, forestry, agro-industrial and hydropower companies, was a huge subsidy from all Chileans to those productive sectors. This award also produced extreme levels of concentration of ownership of water rights and the displacement of peasant and indigenous communities from this essential component of their territories. It also meant the loss of the right to water for most Chileans, to whom that resource belongs, defined as “national public good”.

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The process of privatization, deregulation and significant transnationalization of the ownership of water resulted in the loss of public control over the sources of water and over the environmental and economic management of water, giving rise to a crisis of governance of this resource in Chile. Currently, the State has few powers to deal with situations of increasing scarcity of water, especially in the northern and central zones of the country; to which we can add growing local, regional and national conflicts associated to the access and use of water.

In the case of water rights for non-consumptive use, mainly for electricity generation, the property has been concentrated in large multinational companies such as Endesa, now under the domain of Enel, an Italian conglomerate; the American AES Gener; and the Chilean Colbun, owned by the Matte Group. According to the General Water Directorate (DGA), the company Endesa is the largest holder of water rights for non-consumptive use in Chile. In 1999 DGA report, the company had a wealth of 6,256 m$^3$/second, equivalent to 80,4% of the total national water rights for non-consumptive use (Table 7).

These water rights, which were originally property of the once state-owned power generation company Endesa, were transferred to the national private sector during the military regime, which then sold the business to the Spanish company Endesa Spain, being acquired in recent years by the state Italian company Enel. In those transactions by the electric company water rights were included.

In 1993, according to DGA figures, and in accordance with the rules of the Water Code of 1981, 120 water use rights had been granted and 240 water rights were in process. However, the country exploited only about 70 water rights, generating some 30,000 megawatts. The other rights were not being used.

### Table 7: Principal Owners of Water Rights for Non-Consumptive Use

<table>
<thead>
<tr>
<th>USUARIOS</th>
<th>SECTOR</th>
<th>CAUDAL</th>
<th>% DEL TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Endesa</td>
<td>Energía</td>
<td>6,256</td>
<td>81%</td>
</tr>
<tr>
<td>Compañía General Industrial</td>
<td>Industria</td>
<td>370</td>
<td>4,80%</td>
</tr>
<tr>
<td>Chilener S. A.</td>
<td>Energía</td>
<td>320</td>
<td>4,16%</td>
</tr>
<tr>
<td>Pelueneche</td>
<td>Energía</td>
<td>188</td>
<td>2,40%</td>
</tr>
<tr>
<td>Fisco Riego</td>
<td>Estatal</td>
<td>107</td>
<td>1,39%</td>
</tr>
<tr>
<td>Jorge Wachhinitz R., CMPC:</td>
<td>Celulosa</td>
<td>100</td>
<td>1,30%</td>
</tr>
<tr>
<td>Enrique Rettig</td>
<td>s/i</td>
<td>90</td>
<td>1,17%</td>
</tr>
<tr>
<td>Codelco Chile</td>
<td>Estatal Minería</td>
<td>77</td>
<td>1%</td>
</tr>
<tr>
<td>Unión Nacional de Cooper. Exportadoras de Algas</td>
<td>Pesca</td>
<td>54</td>
<td>0,70%</td>
</tr>
<tr>
<td>Hidroeléctrica Guardia Vieja</td>
<td>Energía</td>
<td>46</td>
<td>0,59%</td>
</tr>
<tr>
<td>Chilactra</td>
<td>Energía</td>
<td>45</td>
<td>0,58%</td>
</tr>
<tr>
<td>Sociedad Austral de Electricidad</td>
<td>Energía</td>
<td>30</td>
<td>0,39%</td>
</tr>
<tr>
<td>TOTAL</td>
<td></td>
<td>7,683</td>
<td>100%</td>
</tr>
</tbody>
</table>


The Endesa Interconnected System (SIE) for power generation is the main holder of the Central Interconnected System (SIC), which supplies electricity to 92,4% of the national population between Taltal in the northern Antofagasta Region and the Island of Chiloé in Los Lagos Region in the south. This evidently constitutes a monopoly in power generation, which is possible and is closely linked to the water rights monopoly.
The process of commercialization of water in Chile has impeded public access to a basic right such as water, legally defined as a “national public good”, and has generated severe impacts on communities and ecosystems on a national level.

The five main problems caused by the water privatization process for electricity and water services companies up until 2010 have been:

1. The concentration and denationalization of 90% of the water in the water utility sector;
2. The concentration of 90% of non-consumptive rights in the hands of three hydroelectric companies;
3. The establishment of the most expensive water pricing system in Latin America;
4. The loss of rights for the majority of the population of a common good, defined as “a national public good”, and the dispossession of peasants and indigenous farmers;
5. The loss of public control over the ownership and management of water, generating a structural problem in the democratic governance of water, and thereby increasing local, regional and national conflicts for this resource.

In order to reverse this situation and promote the needs of the population over the interests of enterprises, substantive reform is needed in legislation and in the orientation of current government policy on water in Chile. The 2005 Water Code reform, that implemented a system of patents payment for the non-usage of water resources granted to the private sector, in order to discourage the hoarding of water rights, was completely inadequate.

The dispersion of authority over water management in various public tenders has also hampered the implementation of comprehensive policies on the resource, and impeded proper oversight. Chile does not count with citizen participation spaces in its public policy to enable citizen's actual impact on decisions concerning public goods; this gap leaves water-user associations and the general population without tools to defend the public interest over large companies in the sector.

The Chilean experience shows the importance for countries to safeguard sovereignty over water resources as a basic resource for life and a fundamental human right; and avoid policies that lead to its privatization and commoditization.

To include the views and rights of native peoples and the participation of civil society as a whole it is essential for the re-orientation of water policies in Chile, and as to redefine this resource as a collective good, fundamental to people's lives and of nature; and thereby inalienable and not marketable.

Historically, and of much interest in recent decades, water has been a factor in local and international disputes due to its scarcity, the increasing problems of accessibility, and denationalization and transnationalization of the ownership and management of water. The intervention of international financial institutions in the reform of regulatory frameworks for privatization of water resources, and the inclusion of this vital element in international trade negotiations and investment (through the services sector in the World Trade Organization (WTO), in the Regional Free Trade and Investment Agreements, as well as in the bilateral treaties signed between Chile and the United States, Peru and the United States, or between Chile and the European Union) have increased levels of liberalization and policy deregulation in which we find water resources.

The liberalization of services in the field of WTO and trade agreements, investment and services, seek to eliminate all regulations that protect the interests of people and communities in their access to water, or that hinder its commercialization. Chile, same as other Latin American countries, needs to counter the trends toward privatization of water resources. At the same time, it needs to design and implement sustainable water management, that considers conditions of political sustainability along with community participation in the decision-making process; equity in coverage and access of people and communities to this resource. Also is urgent to recover sovereignty over water and drinking-water services and sanitation at an accessible cost. All of this is in the context of environmental sustainability based on the protection and preservation of watersheds and ecosystems as well as surface water and groundwater.

On an international level, it is also essential that Chile positions itself against the inclusion of water and water services in the WTO negotiations, and particularly outside of the negotiations of services, known as General Agreements on Trade on Services (GATS), where one of the main objectives is to include drinking water services, sewerage and water treatment as market areas, with widespread access to private capital in this sensitive sector.

The change from the conception of water as an essential basic right and a social good, towards the concept of “economic good” and merchandise that can be bought and sold, is present in the Chilean Water Code of 1981 and in various documents in the international financial sector. This view states that the management of water resources requires the formalization and clarification of ownership of water by the States, the implementation of the total cost of utility services in order to improve service efficiency, and the generation of resources for reinvestment.

However, despite the failures of the private formula for potable water services in many developing countries, the financial sector continues to promote privatization and fees based on total costs as a strategy to expand access to the entire population; although curiously they do not mention private company profits as a limiting factor for achieving universal access to water and sanitation.

At present, models of privatization on the distribution and treatment of water, take into account ownership and management systems by way of four modalities: (a) contracting of private companies to manage water services and sanitation under an administration payment system, (b) long-term concessions which privatize water services and profits, (c) privatization of water management, through perpetual-right awards for water resources, (d) privatization of water rights and of the distribution and treatment system. The latter system of total privatization of ownership and management of water is the one that was implemented in Chile.

Although international financial institutions like the World Bank and the International Monetary Fund have recommended the implementation of private structures for water management, currently most world irrigation and drinking water services still remain under public ownership and governance. In the case of drinking water services, only 10% of them have been privatized in large cities. In Latin America, that is the case with Santiago (Chile), Mexico City (Mexico) and Buenos Aires (Argentina).

In order to accelerate the implementation of water privatization strategies, financial institutions also boosted from 2003 onwards several mechanisms, such as the "Action Plan for Infrastructure", which considers water key to the economic growth of the countries; and the "Investment Plan and Drainage Strategy for the Agricultural Sector and Food Security", which argues that the problem of access to water resources lies in the mismanagement and lack of skills and financial means in the sector of agriculture. Both plans sought to encourage private participation in said sectors.
Regulation and management of water by trade in the agriculture market concentrates water ownership in the hands of large enterprises, giving priority to the exporting agribusiness, at the expense of traditional agriculture, which is auto-subsistence oriented or for national consumption. The agro-industry is also based on the production of high value crops in the short term, which usually concentrate benefits within the business sector while outsourcing environmental and social costs on local economies.

In energy, the financial sector has reinstalled the issue of mega hydroelectric dams in political discussions, arguing that dams give “great services”, if water is looked at as a renewable resource and as a clean development mechanism. However, this argument ignores the serious environmental and social impacts caused by the construction of mega dams on ecosystems, communities and local economies; and mainly on farmers and indigenous people, who lose their territories and are forcibly displaced.

The liberalization of water and associated services, placed as a condition for international financial cooperation, and integrated in the WTO negotiations, has also been presented as a means to achieve the Millennium Development Goals, which aim, among other objectives, to ensure that 50% of the poor have access to clean water by the year 2015. The Millennium Development Goals, ratified in 2000 by all United Nations countries, provide that 280,000 people a day have access to safe water in rural areas and urban slums, and that a further 384,000 people a day have access to sanitation, over the next 15 years.

But in actuality there are serious problems of availability and water quality, and great challenges for the conservation and access to this vital resource: more than 1.1 billion people lack access to safe drinking water; another 2.5 billion lack sanitation; and annually, 5 million people die from diseases associated with contaminated water. Even worse, trends indicate that the problem will get worse, from having 20% of the global population without enough water for a healthy life, to having 30% of the world population under these conditions by the year 2025. In a scenario of increasing privatization and concentration of water ownership and related services (and thereby getting more expensive), this problem could worsen.

Right alongside the health and social problem, there is now a major environmental impact. Pollution and inefficient water use have caused widespread degradation of terrestrial ecosystems and water systems, as well as increasing desertification processes. All of this significantly reduces the availability of water on a global level in the short, medium and long term.

Within this context, numerous citizen organizations in Chile at a local and national level, in clear with the world water movement, have addressed water privatization policies based on four assumptions:

1. Water is the common heritage of mankind and nature, and therefore should be maintained as a common good; its access and use should be under public management.

2. Water is essential for maintaining life and therefore constitutes a human right. It is therefore necessary to protect its quality and availability for human communities and the preservation of ecosystems.

3. Water is not a commodity, but rather a good for public service and use and therefore should not be privatized, nor left to the discretion of market speculation, nor for profit.

4. Water should be excluded as an object within the goods, services and investment sectors in the WTO and trade and investment agreements.
From these postulates, civil society organizations have criticized the proposals by the financial sector, focused on a model of ownership and management of water that transfers water control to the business and the market; which prioritizes it’s productive and industrial use to the detriment of the rights of subsistence of local communities and the preservation of ecosystems; and which promote technological models that concentrate private power and control of water, above water and food security.

Consequently, the broad outlines of citizen action for sustainable and equitable management of water resources worldwide are:

1. To stop the processes of water privatization on a planetary level;
2. To move towards the creation of legal and regulatory frameworks to ensure community and public ownership of water and its democratic management;
3. To ensure the design of management plans and integrated watershed management, to facilitate equitable access to water and ecosystem conservation.

They also wish to advance towards an International Convention which would define and establish the legal status of water as a common good and heritage of mankind.

These lines of action are clearly delineated in the Declaration of San Salvador, in which it is demanded that water be managed based on fundamental democratic principles like social justice, sustainability and universality, and from which foundations the Inter American Network for Water and Life Defence (Red Vida) was created in 2003.

In the Latin American region, the citizens’ movement has made great progress in national agendas for water, slowing down the process of commoditization of water resources, and in some countries accomplishing to reverse the privatization process. Within these experiences, the case of Bolivia should be noted, where due to the Movement for the Defence of Water and Life, in the year 2000 in Cochabamba, it was possible to initiate a process of questioning of private sector efficiency in water services and sanitation. This process finally allowed for the recovery of public management of water resources by Bolivian society.

In the case of Argentina, the Kirchner administration began a recovery process of public water services in some provinces. In Uruguay, through a plebiscite, it was possible to establish the legal status of water as a right and a common good at the constitutional level. Currently, that country is in the midst of a participatory design of a new Water Code based on integrated and participatory watershed management.

### CITIZENS TOWARDS AN AGENDA FOR THE RECOVERY AND PROTECTION OF WATER IN CHILE

In Chile’s particular case, since the first government of transition to democracy in 1990 the need to amend the Water Code, enacted unilaterally by the military regime in 1981, was expressed. Said rule provoked a strong imbalance between the common good and the interests of a few individuals, giving rise to a disproportionate concentration of water use rights for hydroelectric purposes, concentrating, as has been proven by the decision of the Court of Defence of Free Competition, 90% of such assets in the hands of only three companies. This imbalance needs to be corrected.

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34 Bill (Message) No. 6816-07 of December 2009 for a Constitutional Reform of Article 19 No. 24 of the Political Constitution of the Republic of Chile, also introducing the numeral it indicates.
Within this context, many conflicts over water have emerged during the past few years, which in the north place indigenous and peasant communities against mining exploitation. In the central zone, local communities and farmers confront agribusiness, sanitary utilities and hydroelectric companies. In the southern zone, farmers, tourism companies, fishermen and indigenous communities go up against cellulose and hydroelectric companies. All of these conflicts, some whose cases are presented in this book, have generated the creation of many citizen organizations, and recently the articulation of a National Committee on Defence of Water and Life, consisting of social, indigenous, union, church, farmers, consumers, environmental NGO’s and local communities organizations, all affected by overexploitation, shortages or contamination of water and the natural systems that host the resource.

Standing out in this movement are indigenous associations and farmers from Pampa Hermosa, Pica and Matilla, Chusmiza, Usmagama, Quillagua, Pampa Colorada, Huasco and Alto del Carmen, Salamanca, Pan de Azucar, Lagunillas and Caímanes, to name a few, who want to maintain quality and availability of water in the basins and in their territories. This movement also includes some Rural Water Associations in all regions of the country, who refuse to have their local organizations and collective management of water to become privatized.

There are also irrigator and farmer organizations that have articulated themselves in order to reject, for example, the American AES Gener Alto Maipo hydroelectric project in the Maipo river basin, in the Santiago Metropolitana Region; farmers, tourist ventures, environmentalists and residents who oppose the Endesa and Colbun mega-project in the Aysen Region; and farmer organizations, tourism companies, fishermen and people who fight against water pollution caused by Celco Arauco in the Nature Sanctuary Carlos Andwanter, in Los Rios Region, and of the same company in the Mataquito River in the El Maule Region.

They also denounce and reject the intervention of formally protected areas to enable industrial projects such as the Italian company HidroEnergia in the Puyehue National Park, in Los Lagos Region; the Australian company PacificHydro hydroelectric plants in the Los Cipreses River Reserve, in the O'Higgins Region; and the intervention of American based AES Gener company in the El Morado Natural Monument and the Lagunillas Sanctuary, in the Metropolitana Region.

Finally, the Coordination of Citizen Organizations for the Defence of Water also includes residents, farmers, peasants, native people, environmentalists and social leaders that denounce and reject the pollution of the Chañaral Bay by North American based Andes Copper Company, and then by Chilean state company Codelco, and the destruction of glaciers by the Canadian based Barrick Gold in the Huasco Valley, by Codelco Andina in the basin of the Aconcagua river, and by Minera Los Pelambres in Choapa River Basin, which has also been repeatedly contaminated by tailings from the same company.

All of these cases are milestones that have brought together local communities and citizens for the protection of water on a local, regional and national level, creating a new political impetus to the agenda of demands for water in Chile.

Some of these demands for new public policies on water resources are:

1. To ensure access to water in a timely, fair and risk-free manner to the entire population and special protection for indigenous and local communities, in order to meet the basic needs and requirements of the local economy.

2. To prioritize water use for the benefit of the majority of the population, over and above its private use for commercial purposes, which only benefits large nationals and transnationals.

3. To protect and preserve the glaciers and the other freshwater sources that feed the river basins, keeping mining and industrial activities outside of glacial and peri-glacier (frozen) areas.

4. To protect and conserve the vegetation of the watersheds, with special attention to the meadows, lakes, wetlands and river ecosystems, ensuring their preservation.
5. To re-establish ecological flows in each basin and standards of water quality to ensure the maintenance of ecosystems and of the environmental services that these basins provide to society.

6. To generate public information about the current state and availability of surface water and groundwater, and consider future water demands in sectorial and territorial development plans, projects and programs.

7. To create spaces for information and public participation on decisions on water, establishing mechanisms for participatory assessment on the environmental, social and economic plans, policies and programs for water management.

8. To implement a policy of integrated watershed management, with mandatory participation of citizen organizations and traditional users of the watersheds, with special attention to indigenous and peasant communities.

9. To control the use and ownership of water rights, according to environmental sustainability, equity in access and efficiency criteria.

10. To ensure national sovereignty and constitutional rights of local communities on the use and management of water, preventing their alienation and commoditization.

From the Chilean legislature also came some proposals for changes the Constitution and the Water Code since the first government of transition to democracy in 1992, which emphasise the importance and urgency that it had for citizens and their representatives to solve the problems generated by the 1981 Water Code. These proposals led to the dispatch of a first amendment to the Water Code by the government of Patricio Aylwin Administration, which, after 13 years of discussion and with many changes, was approved in 2005.

Legislative proposals to reform to the Chilean Constitution on water, was presented by deputies and senators since the beginning of the transitional government in 1990, were as follows:

1. The “Amendment to Article 19, No. 24 of the Constitution, regarding the legal status of ownership of water” presented on April 7, 1992, by the Deputies Mario Acuña and Ruben Gajardo;

2. The reform on the forfeiture of the right to use water, admitted on February 9, 1996, by Senators Mariano Ruiz- Esquide, Andres Zaldivar, Carmen Frei, Sergio Paez and Manuel Antonio Matta;


4. The project that “Introduces amendments to the Water Code”, presented on November 19, 2008, by Deputies Marcelo Diaz, Marco Espinoza, Antonio Leal, Adriana Muñoz and Jose Miguel Ortiz;

5. And finally the project that “Amends Article 19, No. 24 of the Constitution of the Republic, in order to establish that water has the quality of “national public good” presented on 16 December 2008, by Deputies Rene Aedo and Francisco Chahuan.\[35\]

In addition to the earlier reforms, which relate to control of water, the legislature sent bills to incorporate water policy in ensuring access, geographical conditions, and protection of water in solid state. Among them we must emphasize the "Draft Law on Protection of Glaciers" dated May 16, 2006, by Senators

\[35\] Bill (Message) No. 6816-07 of 2009. Project on Constitutional Reform to Article 19 No. 23 y 24, by the Ministry of Public Works.
Antonio Horvath, Guido Girardi, Alejandro Navarro, Carlos Bianchi and Carlos Kuschel; the project to ensure access and use to water, admitted on December 10, 2008 by Senator Antonio Horvath; and the constitutional reform draft to establish that the “exploration and exploitation of water use rights must be established by law, and according to the geographical, climatic and the actual availability of water resources in each watershed” dated October 7, 2008 by Senator Ricardo Nunez.

The large number of bills, and the great diversity of political sectors that have presented them, clearly demonstrate consensus on the objectivity of the existing problems to water access and water management in Chile; and the limited powers of the State and public policy to meet the challenges of democratic and sustainable management of this resource.

Even though powerful minority sectors oppose any reform in water and glaciers policy in the country, the political legitimacy that the legal and constitutional reforms that have been proposed in the past two decades have is evident, both from civil society, and from the Executive and the National Congress. The persistence in the presentation of projects in the transitional period, and that the initiatives have come from different political parties in the Chamber of Deputies (Lower House) and Senate (Upper House), are also remarkable.

Now, after a minimum and partial reform to the 1981 Water Code in 2005, achieved after more than a decade of parliamentary procedure, which introduced the obligation to justify new water rights applications; to incorporate a mechanism for “payment for non-usage”, to discourage the hoarding of water rights; and empowered the state to establish a minimum hydrological flow, which was called “ecological flow”; Chile faces major water conflicts, which pose profound challenges for the democratic governance of this “national public good”.

This because the 2005 reform was insufficient to stop the over-use and degradation of watersheds, and did not establish priorities of use or environmental conditions for the fixing of environmental flows and restoring watersheds; nor did it include mechanisms to recover the rent of public goods and resolve serious conflicts over water governance.

In order to cope with the conflicts over water the Bachelet Administration in 2007 prompted the formulation of an “Integrated Watershed Strategy”, which was sought to be implemented in three pilot basins: the Copiapo River, the Cachapoal River and the Baker River. Implementation began with difficulties due to a lack of clear objectives, weak institutional coordination and a lack of implementation goals. Strengthening this strategy and expanding its implementation to other basins, is undoubtedly a priority in order to progress towards democratic concordant strategies for the protection and sustainable use of watersheds and water resources.

At the proposal of integrated watershed management the government added, in 2008, the creation of an Interministerial Water Committee based in La Moneda (Government House), and with the participation of the Ministers of Public Works, Agriculture, Health, Energy and Environment in order to respond more articulately to the challenges of governance over water resources, and initiate a coordinated resolution of such in the various regions of the country.

In this context of greater public involvement in water management, the government established, in 2009, stocks of water reserves in some key rivers of the country, where the state still holds water rights. This in order to ensure for biodiversity conservation and local tourism development in those basins. The first decrees benefited water reserves in the Petrohue and Cochamo Rivers.

36 Concerning the protection of glaciers, which was also presented on August 16, 2005, by then deputy Leopoldo Sanchez, a bill that would prohibit the execution of investment projects in glaciers.
37 Same as Note 34.
At the same time as these national initiatives, in its international positioning, and in the context of the V World Water Forum in Istanbul, Turkey, in March of 2009, the government of Chile had a major shift in its liberal position on water and its commercial management, signing for the first time in its history, along with 16 other countries, a Ministerial Declaration which recognizes “the access to water and sanitation as a human right and agrees to perform the necessary action for the progressive implementation of this right.”\(^{39}\) At this forum, it also demanded, in conjunction with other nations, a discussion forum on the implementation of this right within the United Nations system.

However, the new governmental positioning in the framework of a watershed policy, and the emerging reforms and institutional articulations, were not enough to mitigate the structural crisis affecting water resource management in Chile. In such context, and given the proposals for constitutional reform in 2008 and 2009 by diverse sectors of the parliament\(^ {40}\), with support from civic organizations, unions and the church, the Bachelet Administration formulated and sent to Congress a constitutional reform bill at the end of its mandate\(^ {41}\).

The reform, called “Draft Law on Constitutional Reform to Article 19 No. 23 and 24” of the Ministry of Public Works (MOP), Bill No. 6816-07 (2009), took into account the parliamentary proposals and citizen demands that focused on the objective of allowing more equitable access and distribution of water; on giving priority to the multiple uses of it; on promoting the implementation of water reserves from rivers; and on preserving watersheds and the social, economic and environmental services that water and watersheds provide to communities and local and national development.

The government proposal, notwithstanding the inclusion of the status of “national public good” of water and glaciers, and considering the development of a new Water Code, did not establish the direct recuperation of water property for the public domain, as indicated by the proposals for constitutional reform by the parliamentarians.

However, with these proposals the state was late in coming onto a stage where the levels of conflict currently affect not only local communities and businesses, and environmental groups against groups that profit from water degradation and the destruction of watersheds. In Chile, the current water conflicts also generate conflict between the economic sectors themselves for the use of water and the environmental services that the watersheds provide for agriculture, tourism, the climate, etc.

Despite this late submission by the Bachelet government for constitutional reform on water, the Commissions of Agriculture, first, and of Constitution and Justice, of the House of Representatives, later, approved the draft amendment in the first quarter of 2010. However, the legislative process was frozen in mid March 2010 when the newly elected government of Sebastian Piñera began.

The aforementioned due to the focus of the new government authorities and the leadership of the General Water Directorate (DGA) and its advisory committee, dominated by the Instituto Libertad y Desarrollo (Freedom and Development Institute), under the control of the Independent Democratic Union (UDI) party, a strong supporter of private systems and of the free market system for water, and a strong defender of the reforms in the sector by the military regime.

This new political context nullifies any possibility of continuing political reforms on water management initiated in the Bachelet Administration. Moreover, there is a risk that some of the reforms will be removed, and to revert to an agenda for further liberalization and deregulation.

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Simultaneously, with the constitutional and regulatory reforms undertaken between 2007 and 2009, communities in conflict over water, environmental organizations, farmers, indigenous people, the church, rural water services associations groups and unions from water companies, along with community leaders active in the transformation of public policies on water, got together on a national level articulation called the National Coordinator in Defence of Water and Life, and initiated the establishment of regional coordination for the protection of water; particularly in northern and central regions of the country, in order to address the impacts and conflicts generated by the existing legal framework on water resources.

These citizen articulations are clearly an important step in building a broad political process to restore proper governance from the social, environmental and political crisis in that water management finds itself in Chile.

This joint citizenship becomes even more relevant in the context of an Administration that has road blocked the continuation of water management reforms; and in the context of the impacts that Climate Change anticipates for Chile, such as reduced water availability due to reduced rainfall, increased temperatures and the melting of glaciers. These changes, identified by scientists from the Intergovernmental Panel on Climate Change of the United Nations, mean more uncertainty and risks in the availability of water for agriculture, power generation and water supply for industry and households.

This scenario was corroborated by the “Study of Climate Variability in Chile for the XXI Century”, which concluded that the projected changes in temperature and precipitation can cause serious social, economic and environmental problems, by an increase in flooding due to rivers overflowing in winter (because of more rain, instead of snow); but a drastic reduction of water reserves for irrigation and public consumption in the summer.

The Bachelet government’s recognition of the structural crisis of the legal and institutional framework on water in Chile, and of the governance problems existing concerning this resource, “was recognized and described in the presidential bill that argued for the necessity of a constitutional reform”. This was a tremendous political achievement of the citizen movement for the recovery and protection of water in Chile, as the diagnostic elements of the government for reform took in all the evidence collected by social organizations.

The presidential message on the bill for the Constitutional reform recognizes that “given the importance of water, as a vital element of subsistence; strategic and necessary for the development of multiple economic and productive activities, especially considering that in scenarios of scarcity it takes on a geostrategic connotation and one of national security; it is imperative that our Constitution recognizes water as national public good, so as to raise such into a constitutional commitment, whichever the state be in which they are found, be it liquid, solid and/or gas remaining in that category, without question whatsoever, our white gold: glaciers and snow”.

The foundation of the constitutional reform also states that although Article 19, number 24, of the Chilean Constitution establishes an obligation and limitation on the right of individual property over water, the social function of water (“as required by the general interests of the nation, national security, utility and public health and the conservation of the environmental heritage”). This social function of water over and above water use rights “is not in any way found neither in the Constitution nor in the Water

42 The Intergovernmental Panel on Climate Change (UN IPCC by its acronym in English) has identified a number of expected impacts for Chile, such as the increase in average temperatures between 2° and 4°C (moderate and extreme scenarios), reduced rainfall of between 20-25% between II and X Regions, and 40% in the middle of the country, and acceleration of the melting of glaciers.
43 Conducted by the Department of Geophysics at the Universidad de Chile for the government in 2006.
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That is why the constitutional reform bill states that “it is essential to enshrine in the Constitution the mechanisms of formation, recognition, transfer, resignation, revocation and loss of rights of individuals over the water as well as the ability to reserve water”\(^{45}\).

With regard to the imbalance in access, ownership and management of water caused by the 1981 Water Code, both the governments of Lagos and of Bachelet, acknowledged in various documents that Law No. 20,017 of 2005, that reformed the 1981 Water Code, only partially corrected the problems created by said legislation, establishing some new powers for the administration of the state over water resources. But they also recognize that “many of the necessary corrections could not be implemented due to constitutional deficiencies”\(^{46}\) that still exist on the subject.

It is even more undeniable then, the need for constitutional reform, given that current law clearly recognizes the rights of water use, established and recognized in accordance with the law, despite the definition of water as a “national public good”. Thusly, the reform does not affect “the certainty and legal security of the owners of real rights of water use to undertake or develop economic and productive activities with clear and precise rules, that ensure the investments are made for such purposes”\(^{47}\), but returns to the state the opportunity to initiate a reform process to guard for the common good and to respond to the request for protection of watersheds.

Moreover, constitutional reform also opens the possibility to facilitate “access to water resources to people who had very little chance of acquiring the right to use water by original act of authority”\(^{48}\), or by buying rights in the existing water market.

Finally, the constitutional reform draft submitted to Congress by the Bachelet Administration, coinciding with the proposals entered by the parliamentarians, sets out the possibility that the country will advance toward a new regime on water access and water management, ensuring greater social equality, greater economic efficiency and greater environmental sustainability in the management and use of this vital element. Textually, the bill states that “The law will establish the procedure of formation, recognition, transfer, resignation, termination, revocation and forfeiture of the rights of individuals over water, same as, the ability to reserve from surface or groundwater flows. The exploration, exploitation and establishment of water usage rights will be established by law in accordance to the geographic and climatic diversity of the country and the actual availability of water resources.”\(^{49}\)

After 30 years of application of the Water Code established by the military regime in 1981, and after 20 years of transitional governments, in which time it has been tried, with difficulty, to change the rules of the game concerning water resources, it is evident that the great imbalance of power existing in Chilean society, and the weaknesses in the political representation system, make legal changes in the management of water, based on the common good and environmental sustainability, very difficult.

Notwithstanding, the background of the reform proposals put forth by Chilean society in recent decades will be illustrative and substantive in the necessary future changes in water policies in Chile, same as the drafts, minutes and acts of the long legislative process of the last 13 years, of Law 20,017 for reform of the Water Code of 2005, and of the proposed constitutional reform sent by the Bachelet government to Congress in January 2010.

It has been noted that during the Sebastian Piñera Administration, between 2010 and 2014, the Executive will block the processing of constitutional reform, since his approach to public policy on natural resources, and particularly his focus on water resources, is dominated by the ideology of a free water

\(^{45}\) Same as Note 43.
\(^{46}\) Same as Note 43.
\(^{47}\) Same as Note 43.
\(^{48}\) Same as Note 43.
\(^{49}\) Same as Note 43.
market, and by the players who have held this doctrine. Nevertheless, citizen organizations and political sectors that have driven changes in water management in Chile have already achieved a milestone in the water agenda, which in essence, must remain a political demand and a factor of social articulation.

As the citizen proposals express in each of the water conflict cases in this book, and as the members of the National Coordination for the Defence of Water and Life believe, a Citizen Agenda for the Right to Water, equitable access and sustainable use of water as a common good, must be included in a future national water policy, not existent today. This policy must establish sustainable planning and management of water and watersheds; and must introduce significant changes to the current legal-judicial framework. A Citizen Agenda for a national water policy should also consider the design of policies for efficient and sustainable management of water resources in agriculture, mining and energy sectors.

A national water policy based on criteria of sustainability, efficiency and equity, also requires defining the uses that society deems more beneficial, adapt the institutional system and the planning, allocation and management technologies of water resources. Additionally, we must progress in developing a set of special regulation on sustainable water management and conservation and implement a national education strategy to generate a new water culture in the country.

A policy for sustainable water management means conserving water resources in the watersheds, necessary for the maintenance of ecosystems and to consider and safeguard the long term social interests, including future generations. It is therefore essential to design transparent mechanisms for citizen participation in the decision-making processes, along with timely information to support such decisions.

From the citizen’s perspective, a policy for the sustainable management of water resources should consider at least five major tasks:

1. **The first one is to propose in an explicit manner the protection and conservation of river ecosystems in the country, to ensure the maintenance of biodiversity and water quality.** This requirement is a substantial goal to achieve the maintenance of watersheds, same as the sustainability of human communities.

   On an ongoing basis, the maintenance of water resources and river systems requires having public information on the current status, availability and quality of surface and ground water resources. This will only be possible if the state conducts water balances and take corrective measures and precautions on the handling and use of water, in order to prevent damage to people and ecosystems. This would mean creating and formalizing public information spaces on water resources. In order to develop responsible and effective participation, citizens must have access to information of the current status and the availability of water in a timely way and in understandable language.

   Maintaining water resources also requires public policies to consider future water demands in the plans, projects and/or programs; this requires advancing towards strategic planning for sustainable management of surface and ground water, the restoring of contaminated streams and establishing quality standards to prevent pollution. Planning and management of water resources are essential for their protection, and to timely and adequately respond to the various demands for water.

   The uneven availability of water resources in various regions of the country, and the extremely low water availability in the North of Chile, make it necessary and urgent to develop and implement planning tools that allow for the safeguard and assure for the various uses of water, protect river ecosystems, dinking water, agricultural uses, fisheries and recreation, among others. This planning should include the specifics of the ecosystems of each one of the regions, establishing regional priorities and strategies for the conservation and sustainable use of watersheds.
2. The second task, given that water is an essential good for life, is to get the state to ensure access to water in a risk free, timely and fair way to the entire population. The provision of water to human communities is a responsibility of the State, regardless of the role that various water services companies can play in the management of the resource.

The purpose of this State public responsibility requires the recovery of the legal status of water as a national public good, that is, belonging to all Chileans, and cannot be given as property to private hands, free of charge, in perpetuity, and without criteria that prioritize the needs of the population and the maintenance of environmental flows to ensure the integrity and functioning of watersheds.

The current definition of allocation of water rights to private actors also needs to be re-defined, asking for clear justification to those who request it. The exclusive use of water can only be granted where there is precise justification, and after an environmental assessment by type of project. Additionally, it must take into account the availability of water in the area and in the basin. The right to water use must also be temporary, renewable and in no way be given in perpetuity to the solicitor.

By the same token, temporary assignment and preferential water use due to extreme situations, such as droughts and disasters, should also be established in order to prevent the outweigh of economic interests over the needs of the population. This will prevent indigenous communities, farmers and small towns to be left without access to water in extreme situations, due to pressure from the productive sectors and services deemed more profitable.

3. The third task is to explicitly determine and regulate the obligation to protect environmental flows in each basin, in order to satisfy and protect the needs of river ecosystems and their biodiversity. The concept and methodology for establishing environmental flows needs to be redefined, determining them on the basis of independent environmental assessments and maintaining public records of such. Authorities must have the information and power to protect river ecosystems, thereby ensuring future development.

4. The fourth task is to design and implement a policy of participatory integrated watershed management, that takes into account the challenges of conservation and the coexistence of different urban areas, for recreation or production, with the participation of all affected. The objectives of integrated management are to optimize the use of renewable natural resources, to seek equitable distribution and to establish permanent solutions to conflicts among users. This management option can cope with pollution problems, reduced vegetation coverage and lack of infrastructure for water management; and prevent erosion, sedimentation, silting and degradation of river ecosystems. This task also requires developing quality and emission standards that respond effectively to solve the actual contamination situation of water in the various basins, in order to recover the bodies of water that are damaged.

5. Finally, there is a fifth challenge in reference to the regulatory framework for the sustainable use of water in the various productive sectors of the country; this means a major challenge for regulatory design. In the agricultural sector, it is urgent to improve the efficiency of irrigated agriculture, which currently does not exceed 30%. This represents substantial improvements in irrigation education and infrastructure, and the use of more efficient systems, especially in the areas of greatest shortage. At the same time, the sector must modify their production systems so as to avoid wide spread pollution of surface water and underground aquifers by agrochemicals.

In the energy sector, at present, the mega hydroelectric installations generate serious and irreversible impacts on watersheds, ecosystems and communities, as evidenced by the conflicts in the central and southern zones as presented in this book. The energy supply needs to encourage the use of non-conventional renewable sources (mini hydro, geothermal, wind, solar, tidal and biomass
energy) and energy efficiency, through promotion instruments and regulations for the management of demand. In the energy sector policy changes that allow for distributed generation are also required, low-power energy injection and net measurements, in a way that every region and every citizen can become an energy producer. This objective would also diversify the players involved in power generation, and make the electrical national system more solid and stable.

In the mining sector it is necessary to reassess current water use patterns in fragile ecosystems where water availability is scarce. In the North, as shown by the cases presented in the first part of this book, mining is depleting scarce water resources and destroying wetlands, lagoons, and salt flats; threatening the integrity of the habitat and survival of the Indigenous Aymara and Atacameños population.

The mining business has had the economic and technological conditions to generate the water resources required for the expansion of its activities for years, but has been indifferent and irresponsible in meeting this challenge. Mining projects should not continue drawing water from meadows and groundwater in the North, but use seawater, and additionally meet mandatory standards for recycling and total reuse of water. They must also incorporate technologies that ensure the sealing process to prevent the evaporation of water from their labours and to stop the runoff of contaminated water into the environment.

Conflicts over water presented in this book permit to establish the coincidence between the water requirements of productive sectors in Chile and the water conflicts in various regions of the country. They also show the enormous pressure that companies exert on ecosystems and communities, and with few exceptions, the weakness and failure by the State to implement existing legislation.

Faced with this, there is clarity and unity in the proposals that conflicting organizations and communities give for resolving pollution, scarcity and inequity issues in accessing this common good.

A focus on rights in order to democratically resolve the conflicts over water in Chile is needed, and to restore water as a common good, as a human right, and as a basic resource for life that needs to be managed in a public and participatory manner. This implies an extension of the concept of public, not only restricted to the State’s responsibility regarding access, quality and water management, but an extension of the public toward co-responsibility and social control in the sustainable management over water resources. Without water it is not possible to sustain a healthy and dignified life, nor attain social wellbeing, nor sustain the economic, social and cultural development of the country.

Chile needs to urgently address the social, environmental and economic conflicts over water, with an Agenda for Water Rights, Environmental Sustainability and Social Peace. For this, the country must move towards legal frameworks that at the constitutional level ensure the right to water as a common good, and avoid policies that promote its privatization, monopolization and commoditization. These policies have intensified the exploitation of fresh water sources and degradation of watersheds, causing severe social and environmental conflicts, and violating human and development rights.

We are confident that access to water, its sustainable management and water security will increasingly drive ethical demands and political priorities of Chilean society in the coming decades. This will happen within a scenario of increased conflict over access to water, and facing increased water restrictions as a result of Climate Change. That is why the time to design a new system of management and conservation over water resources in Chile is today and not tomorrow.
CONFLICTS OVER WATER IN CHILE:
NORTH, CENTER AND SOUTH

For text references and additional information on the water conflicts, please see large edition of the book “Conflicts over water in Chile; between human right and market rules” published in March 2010, available in electronic version in www.chilesustentable.net
LAUCA NATIONAL PARK: WATER EXTRACTION ATTEMPTS BY THE STATE
(Putre Municipality, Parinacota Province, Region of Arica and Parinacota)

In recent years there has been strong pressure to transfer and divert water from Lago Chungará, Laguna Cotacotani, and from the high Andean wetlands (bogs), in order to supply the growing export agriculture in the valley of Azapa, and also potable water to supply the coastal zone of Arica. The appetite for water resources has been joined by efforts to disaffect Lauca National Park in order to begin mining and water exploration from wells illegally constructed in the 1990’s by the Ministry of Public Works (MOP).

Since the 80’s, the MOP and private persons have tried to extract water from the area, but local communities have prevented them from doing so. Firstly, in 1985, the Supreme Court ruled in favour of environmentalists and indigenous people, claiming that the State could not draw water from the National Park due to its status of national and international protection. Then, in the early 90’s, President Patricio Aylwin stopped a second attempt in order to avoid problems with the indigenous people and the government of Bolivia, which threatened to complain to the Organization of American States, since they are shared basins. But the General Water Directorate (DGA) persisted in trying to extract groundwater from 6 wells, from an aquifer of 45,000 million cubic meters in Lauca National Park, arguing that it was a confined aquifer; a project that was approved by the Regional Environmental Commission (COREMA) in 2004 during Ricardo Lagos Administration. The environmental institution was thusly used to overcome indigenous law and several international Environmental Conventions Agreements on Biodiversity, the Washington Treaty, the Vienna and UNESCO World Heritage, signed by Chile. The project was later stopped by citizen action.

But six years later, in June of 2010, President Piñera announced the decommissioning of 31,500 hectares of Lauca National Park to allow for private mining in the area, in order to produce 240,000 tons of fine copper per year. An announcement that provoked immediate opposition from the Aymara Coordinator, the Autonomous Council of the Aymara People of Arica, the Council of Indigenous Peoples of Arica and Parinacota, since said lands belong to Aymara owners and have been legally protected since 1984 as a National Park, in the Lauca Basin case; as a Natural Monument, in the case of Salar de Surire; and as a National Reserve, in the case of “Las Vicuñas”, all part of the National System of Protected Areas of the State (SNASPE). Besides, the Indigenous Act, since 1993, contains provisions to safeguard the domain of land and wetlands of the Aymara ethnicity and protect the waters that supply them.

Within the legal framework that cause structural impacts on highland Aymara communities, highlights the 1981 Water Code, the 1982 Mining Code and the nonexistent Law by SNASPE\(^{51}\), and the ineffectiveness of the legal tools for indigenous people (implemented in 1993) to develop their own local economic development strategies, based on an integrated vision of natural heritage and its balance within. The opposition by the Putre community and Aymara organizations, supported by environmental groups, has managed, over the past 30 years, to reverse several approvals by the General Water Directorate (DGA) for water extraction, but following President Piñera’s recent announcement, mining pressure was increased.

\(^{51}\) Despite Chilean Government approve a special Law for Protected Areas for Conservation, this Law was never put in operation. As a consequence of this situation today each Protected Area have an specific decree of protection, but there are no a Legal System to cover all these Areas.
The defence of Lauca Park represents an example of what social organization can achieve, even when public policy and present authority don’t assure the protection of aquifers, indigenous rights nor areas protected by law. Today it remains to be seen whether the current State administration will honour the "rule of law" or allow for the imposition of corporate mining interests in this indigenous and protected area.

2 BHP THREATENS THE LAGOON AND PAMPA LAGUNILLA IN AYMARA INDIGENOUS LANDS
(Pozo Almonte Municipality, Province of El Tamarugal, Tarapaca Region)

The miner Cerro Colorado, a subsidiary of BHP Billiton, faces off in this region (120 km east of the city of Iquique, in the Municipality of Pozo Almonte) with the Aymara community of Cancosa, because the over-exploitation of groundwater by part of the miner, which has seriously degraded the environment where the community lives, draining wetlands and water wells, and affecting agriculture and grazing, and thereby severely damaging the local economy.

The Cerro Colorado project obtains its water from underground streams, by way of four adduction wells located in Pampa Lagunilla. The average consumption of the project is, according to the company, 90 litres per second. However, the company established rights by public deed and registered only 35 litres per second, a lower figure than actually used. The conflict in Pampa Lagunilla expresses a structural problem generated by the Chilean Water Code, which shows that the authority, in this case the General Water Directorate (DGA), has awarded more water rights than is possible to explore. The Pampa Lagunilla sector is a great high Andean wetland, which should in principle have, but doesn’t, special protection by Law No. 19.145 of 1992, which prohibits the establishment of rights to individuals on aquifers that feed meadows and wetlands in Region I and II (now Arica, Parinacota, Tarapaca and Antofagasta).

The natural heritage of Pampa Lagunilla, a base for tourism, agriculture and traditional farming to the Aymara community of Cancosa, suffered damage by drying in almost the whole area. That’s why the DGA fined BHP Billiton 1,500 UTM (monthly tax units)\(^{52}\). However, even though the public body acknowledges the damages, it has given more water rights, on top of existing ones. Due to the environmental damage, Cancosa dwellers have migrated to urban areas in search of unskilled wage labour and literacy for their children. But despite the depopulation and physical disintegration, the community has strengthened to defend part of its territory in recent years, which it aims to re-occupy.

3 SQM MINING EXPANSION IN "PAMPA HERMOSA" THREATENS THE SALAR OF LLAMARA
(Pozo Almonte Municipality, province of El Tamarugal, Tarapaca Region)

This conflict over water shows the incompatibility of the mega-mining venture by Soquimich (SQM) with local economic development. In order to reduce costs, SQM explored without using the adequate technology, impacting the Salar de Llamara and the environmental values of the land, from the exploration stage and even before the environmental impact study was finished.

The SQM project looks to increase its production of iodine in its "New Victoria" industrial area to 11,000 tons annually. This requires further drilling of water wells and increased intake of surface water. In its Environmental Impact Assessment (EIA), the company said it would set up a wa-

\(^{52}\) Equivalent to US 150,000 dollars
ter intake point away from the boundaries of the National Reserve Pampa del Tamarugal aquifers, but failed to mention that the uptake would come from the same aquifer that feeds the Reserve. In this conflict there is a complex legal structure, derived from a series of irregularities in water rights, where the participation of public and private persons is being investigated by the courts.

In January 2009, the General Water Directorate (DGA) stated that SQM acted without authorization in its excavation work in the Salar de Llamara, and fined the mining company. But the "judicialization" issue has prevented a timely reaction on the environmental impacts already observed in the Salar, a major area of biodiversity protection, indigenous heritage and special tourism zone.

The community has requested that the illegalities committed by SQM in the implementation phase of the EIA, and the strange legal case involving the DGA, research carried out today by the Attorney North Central Metropolitan Region, be clarified. Local organizations have demanded to form a working group that includes the company, government services and the communities in the Tamarugal basin, in order to access real information about the SQM claims and reach a consented decision between the communities and the State to ensure the correct use of water resources for the local economy. However, despite the damage already done and local demands, the Regional Environmental Commission (COREMA) adopted the expansion of the mining project in August of 2010.

PICA AND MATILLA THREATENED BY WATER EXTRACTION FOR COLLÁHUASI, QUEBRADA BLANCA AND CERRO COLORADO MEGA-MINING

(Pica Municipality, Province of Tamarugal, Tarapaca Region)

Water extraction for large mining, from the basin of the Salar del Huasco, confronts residents and farmers in the oasis of Pica and Matilla in the desert region of Tarapaca, with the State and mining companies. The Salar del Huasco is one of the few sources of fresh water from the plateau of the Tarapaca Region, which has declined critically over the past two decades, following the arrival of mining companies Doña Ines de Collahuasi, Quebrada Blanca and Cerro Colorado to the area.

The local community, which faces constant water reduction due to the presence of the mines, does not trust the statements of the General Water Directorate (DGA), nor the studies presented by the mining corporations. Additionally, to substantiate its fight to defend the Salar del Huasco, it denounces and shows the damage that resulted in salt flats mining in Coposa and Michincha, which have completely dried up. The intensive use of water by mining threatens the availability of water for its fruits crops (lemons, mangos, guavas, oranges and grapefruits) in Pica and Matilla, aside from tourism, the cultivation of quinoa, breeding and grazing of llamas in Guatacondo, Copaquire, Alconcha and the streams in Huinquitispa and Yabricoyita.

The National Environment Commission (CONAMA) identified the Salar del Huasco as "the highest priority site for conservation of biodiversity in the Region of Tarapaca", in 2002. The DGA has indicated that the requirements in the major aquifers in the area exceed the availability of groundwater, however, it states that it is required by the Water Code to establish a formula to intensively exploit the groundwater, taking care not to undermine the right of third parties and the environment.

Among the proposals of the Pica and Matilla communities to resolve the conflict, stressed is the need for the State to ensure the realization of independent and credible environmental impact studies, as well as the reform of the Mining and Water Codes, since both pieces of legislation adversely affect the rights of peasants and indigenous people to their ancestral lands and territories.
CHUSMIZA AND USMAGAMA: INFRINGEMENT AND RECOVERY OF ANCESTRAL WATERS BY THE AYMARA PEOPLE  
(Huara Municipality, Province of El Tamarugal, Tarapaca Region)

The conflict, which pits communities of Chusmiza and Usmagama versus the Mineral Water Bottling Chusmiza, goes back to 1915, when Natalio Papic set up a bottling plant in the area, ceding water rights on his land in exchange for the community to allow him to extract and process a small amount (0.38 litres per second) for bottling. This was how the mineral water bottling company Chusmiza began, leaving a road open to the public, and also setting up community hot springs. In 1960 the bottling plant was sold to Luis Papic, then senator, and although there were some conflicts with the company, the community was always able to keep the agreements and their rights in good standing. But when Papic died in 1991, his son took control of the company, and was joined by Guillermo Atria and Juan Villarzu, senior executives of the state mining company CODELCO, as partners and they closed the public road.

In response, the community tries to register their water rights in the General Water Directorate (DGA), but makes a mistake: instead of asking for the regularization of "recognition of their ancestral rights", they requested water rights. Consequently, in the absence of adequate legal advice, the process took eight years.

The conflict over Chusmiza and Usmagama ancestral waters expose the vulnerability of indigenous communities before the mechanisms used for outright expropriation using the Water Code, despite the protections established by Indigenous Law No. 19.253, of 1993, to which we can add the force of Convention No. 169 of the International Labour Organization (ILO) since September 2009.

This long judicial conflict over water rights ended favourably for the community, with several court rulings declaring that they belong to them. In this case, the community organized to ask for what they considered their customary rights to water to be respected, creating a defence committee and hiring a lawyer. They campaigned and sued for years. In 1999 the Santiago Appeals Court ordered the bottler the removal of all interfering, occupying or obstructing elements on the public road. Then, in 2002, the Seventh Civil Court of Santiago ruled against the DGA and the bottler, and in favour of the Chusmiza and Usmagama community, accepting the petition for annulment of public law against the administrative decisions of the DGA. Finally, in 2009, the Supreme Court recognized the ancestral rights of the indigenous community on all waters of the slope.

CODELCO AND SOQUIMIC DRY AND CONTAMINATE THE WATER IN THE QUILLAGUA OASIS  
(Municipality of Maria Elena, Province of Tocopilla, Antofagasta Region)

The indigenous community of Quillagua is facing a socio-environmental conflict with mining companies CODELCO Norte (Chuquicamata) and Soquimich (SQM) due to the drying and contamination of the Loa River, caused by both companies. Since 1997 the waters of the Loa River have been severely polluted (mainly with heavy metals and xanthate) by the Sloman mining waste disposal site near the Talabre village, and tailing leaks, seriously affecting the Loa River basin, and generating the irreversible destruction of the Quillagua Oasis and the local economy. Although CODELCO denies liability on this fact, several investigations, including one by the Agricultural and Livestock Service (SAG), in the year 2000, concluded that "the origin of xanthate can only be due to the mining industry, specifically copper and molybdenum mining".
The disaster of the contamination of the Loa River by Codelco, plus the drying up of such (of which miner SQM is also responsible), has irreversibly destroyed productive activities (farming of shrimp, alfalfa, vegetables and livestock) in the Quillagua Oasis area, causing a massive people migration.

The Water Code, by separating the domain of ground water, encourages for an escalation of water right applications by mining companies. The legal precedence of mining activity is expressed in relation to the rights to explore for mineral resources. The Mining Code gives everyone the ability to search for and dig any land regardless of ownership. In the absence of having an integrated territory, indigenous communities cannot carry out their own development strategies, and are exposed to economic models based on mono-exploitation of their natural resources by outsiders. Chilean authorities have failed to reverse the social, economic and environmental crises caused by the over-exploitation of the Loa River and the pollution of its water by mining. In the year 2000 the State declared the availability of rights of use of surface water in the river Loa exhausted; then CODELCO developed a project to remove water from the underground, with uncertain impacts on the total river flow.

Today the town of Quillagua is on the verge of disappearing. In 1940, 400 families lived there, who had access to 660 litres of water per second, through titles. Today, less than 100 families live in Quillagua, and the eventual availability of water is of only 90 litres per second. The community has made a series of demands for action concerning community water supply and management, sustainable agriculture and livestock production but a lack of an adequate response from the State has made their situation increasingly precarious.

7 PAMPA COLORADA: MINERA ESCONDIDA TRIES TO INCREASE WATER EXTRACTION IN THE SALAR DE ATACAMA BASIN

(Municipality of San Pedro de Atacama, El Loa Province, Antofagasta Region)

In the conflict provoked by Minera Escondida’s attempt to intensify the extraction of water in the Indigenous Development Area Atacama La Grande, the Atacameños communities successfully confronted the company and the State, managing to prevent degradation of the area. Minera Escondida presented for environmental assessment, in 2007, the project "Water Supply Pampa Colorada", which sought to extract 648 million cubic meters of groundwater from aquifers in the upper watersheds located in the Pampa Colorada area, Municipality of San Pedro de Atacama. In an attempt to address the impacts on the ecosystem, Minera Escondida offered to mitigate any impacts by artificially refilling water in order to maintain the wetlands and feed rates constant in this area. However, experience gained in other areas of northern Chile showed that the solution was inappropriate, given that the wetlands do not have a hydro geological structure to respond to any type of recharge, and the impact (given its connection to the groundwater), could lead to its demise.

One of the core legal bodies in the study and evaluation of this project was related to the Water Code and the Law 19.145 (1992), which protects meadows and wetlands of Regions I and II, between Arica and Antofagasta. That’s on what, in the project’s environmental assessment, the General Water Directorate (DGA) based its rejection, noting that the Water Code does not allow new water extraction in areas of aquifers that feed meadows and wetlands of the North, so the project was legally inadmissible. At the same time, aware of the negative view of public services on the project, 16 parliamentarians signed draft agreement No. 473: "Rejection of Environmental Impact Study Pampa Colorada Water Supply" on October 9, 2007.
This conflict was resolved favourably for the Atacameños communities of Peine, Socaire, Taladre, Camar and Toconao, given that the Regional Environmental Commission (COREMA) of Antofagasta environmentally rejected the project. In this case it is important to notice the proper role played by the State as guarantor of territorial and water rights of local communities.

8

ANDES COPPER COMPANY AND CODELCO DESTROY THE SALADO RIVER AND THE CHAÑARAL BAY AREA
(Municipality of Chañaral, Chanaral Province, Atacama Region)

The conflict over water pollution of the Salado River and the Bahia de Chañaral has been going on for more than three decades and pits Chañaral citizen groups and environmentalists against the state mining company CODELCO for severe pollution, caused by the exploitation of the El Salvador mine in the fifties. At that time, having filled the reservoirs that stored mine tailings from the Potrerillos mine, they proceeded to empty the tailings into the sea through the Salado River. The tailings from the mine El Salvador continued thereafter, which began exploring in 1959; first by the American company Andes Copper Company, and later by state-owned CODELCO.

The city of Chañaral, today, has a high incidence of cancerous tumours and various respiratory, skin and eye illnesses due to the tailings dumped throughout the city and along the coast, which have much higher concentrations than internationally accepted standards of copper, iron, arsenic, zinc, cyanide, lead, aluminum, mercury and molybdenum, among other heavy metals. The regulatory framework currently in force, established by Law No. 19.300 of General Bases of the Environment, did not define specific management tools for mining, but established, through the System of Environmental Impact Assessment (SEIA), a procedure to require sectorial or natural resources regulations of environmental significance for the various productive activities.

The State’s position, in the case of Chañaral, has been characterized by denial of environmental pollution and the corporate defence of CODELCO. The Regional Environmental Commission of Atacama has leaned towards the denial of scientific evidence and to manipulating the media about the impacts to the Chañaral population. The government has argued that the area is uncontaminated and has put on several recreational activities in contaminated areas, despite warnings from the Ministry of Health.

In 1987, a group of Chañaral residents filed a protection suit before the Court of Appeals of Copiapo over the serious damages caused by CODELCO in the area. In 1988, the Citizens Committee for the Defence of the Environment and Development of Chañaral joined the action with the signing of more than 70 representatives of social organizations and trade unions, having been taken up in a final ruling by the Supreme Court, which forced CODELCO to stop spilling their waste into the sea and to build a tailings dam. But even though the tailings dam was built, nothing has been done to repair the damage to the environment.

The community has pushed for the completion of scientific studies, which would show the state of health and the effects of pollution on the population, and the need for the company to take responsibility over their environmental liabilities and to remedy and compensate people for the damage caused. The Charañal Community demands the urgent need for having any relevant legislation regarding the use of water by large-scale mining, one that requires the mining companies to use efficient technologies for reducing water use and water containment, so that the treatment tailings do not continue destroying the environment and impacting the health of the population.
PASCUA LAMA: BARRICK GOLD DESTROYS GLACIERS AND USURPS ANCESTRAL TERRITORIES
(Municipality of Alto del Carmen, Huasco Province, Atacama Region)

The controversial binational Pascua Lama mining project confronts the Canadian transnational Barrick Gold against local and indigenous farming communities of the Huasco Valley, who are directly affected by said project, as well as citizen, environmental, church and human rights organizations that support them and who, for years, have fought to overturn the project, approved during the Ricardo Lagos Administration, by the Atacama Regional Environmental Commission (COREMA) in 2005.

The Pascua Lama mining project seeks to extract gold, silver and copper in the border area between Argentina and Chile in the Atacama Region. The mine sites are located in areas owned by the Diaguita indigenous community the Huascoaltinos, which opposes the project because it alters their habitat and impacts their lifestyles and customs. Part of the communities of Alto del Carmen, Huasco and Vallenar, also oppose mining in the area because it affects several glaciers in its area of influence, and intervenes in the birth of the Transito and Chollay River basins, threatening water sources that irrigate the Huasco Valley.

The consultancy Golder Associates, hired in 2005 by the same Barrick Gold, found that during the exploration phase the company destroyed two thirds of the Toro 1, Toro 2 and Esperanza glaciers. In spite of this, Barrick continues to assert that it has respected the integrity of said glaciers. The project was environmentally approved by the COREMA Atacama in 2005, after the Argentine and Chilean governments signed an agreement (details still unknown to the general public) concerning new taxes on project development in the territories covered by the Binational Mining Treaty (signed by presidents Frei and Menem in 1999).

In late 2009, after the General Water Directorate (DGA) granted the missing permissions, the company began mining. However, Barrick Gold and the Chilean government will face international prosecution by the indigenous Huascoaltinos community, in whose territory the project is located, and whose complaint has already been taken up by the Inter American Court of Human Rights. The Huascoaltinos' rights are established in the Indigenous Act of 1993 and in the ILO Convenant 169, in force in Chile since September of 2009.

COPIAPÓ: DRY DUE TO THE INDISCRIMINATE GRANTING OF WATER RIGHTS BY THE CHILEAN STATE
(Municipality of Copiapo and Tierra Amarilla, Copiapo Province, Atacama Region)

The abusive usage and non-scientific supported usage of the Copiapo River basin for several decades, has now, as a result, a river and city with a terminal water crisis. This situation keeps various players in conflict, such as the General Water Directorate (DGA), the State agency responsible for the management of water resources; mining and agribusiness companies in the Valley of Copiapo, who, despite the water crisis, are demanding more water to expand their productive activities; and in the other side the Regional Coordinator for the Defence of Water and Environment in Copiapo, the citizen body that tracks and monitors government policy and the crisis of water resources in Copiapo.

The Copiapo community recalls that where today there is only a dry riverbed, before there were forests and a river flowing through the city. In the Atacama Region, of the three rivers that existed in the past, today only the Huasco River survives; the Salado River disappeared, because of mining pollution.
by the Northamerican Andes Copper and state-owned CODELCO; the Copiapo River disappeared, due to over-exploitation of surface water by agriculture and mining; and there is only water left in the Huasco River, thanks to the defence of local communities.

In Copiapo, in addition to mining and agribusiness (grapes, for example), also operates the Aguas Chañar Water Company, which reported that the drinking water wells used to supply the city may only be used in the next 3 years. To the above it must be added that if all of the granted water rights (by the DGA) were used, there would be a deficit of 16,000 litres per second in a river that is already collapsed. Since 1984, after the enactment of the Water Code by the military regime, the amount of rights given by the various governments has increased, having its largest increase from the year 2003 in the President Lagos Administration. Thusly, the primary responsibility for the over-exploitation of water resources are the successive governments that, since the enactment of the Pinochet military regime Water Code in 1981, have had to give water rights to agro-industries and mining applicants, without having scientific studies as back up, nor the legal tools that would permit the General Water Directorate (DGA) to denied the consention of water rights to the private companies that ask for this natural resource. And give the State weak authority to restore the water sources and aquifers in order to maintain the functioning of the basin.

Due to the evidence of the water crisis, citizens began to organize and lobby the authorities for a solution, forming the Coordinating Committee for the Defence of Water backed up by various social strata. Among the proposals from the community is the need to reform the Political Constitution of Chile, in order to give water constitutional status as a “national public good” and the reform of the Water Code. They have also stated that if the productive sectors require more water, especially mining, they should install desalination plants in the areas.

11 LOS PELAMBRES MINING COMPANY POLLUTES THE RIVER AND DESTROYS GLACIERS IN THE CHOAPA RIVER BASIN

(Municipality of Salamanca, Choapa Province, Region of Coquimbo)

In the Choapa River Basin, in the Coquimbo Region, there are a number of environmental conflicts between local communities and mining companies; the main cause is water. Miner Los Pelambres, owned by Antofagasta Minerals (owned by the Luksic group) is the company that has the biggest amount of toxic spills into the waters in the Region of Coquimbo. From August 2008 until now many incidents and toxic spills have been recorded, one of the most devastating ones being the 2009 spill, when 13,000 litres of copper concentrate spilled directly into the Choapa river.

These toxic spills legally contravene various existing health and environmental regulations in Chile. However, Chilean State’s actions against pollution in more than 140 kilometers of the Choapa river, (from the mine site to the ocean) has generally been weak and favouring the mining sector.

Currently, Miner Los Pelambres is on a head-to-head confrontation with the population of Salamanca and its surroundings, given that the community has had to suffer the environmental and economic damage of said pollution. Additionally, between 1998 and 2008, the miner has destroyed several rock glaciers in the same river basin of Choapa, equivalent to 3 million cubic meters of fossil water, according to a glaciologist research done by the University of Waterloo (Canada).

Given these impacts, the public began a process of increasing self-organization across the province and called on various government officials to begin a dialogue, in order to show the situations to which local communities are exposed. The experiences and lessons from these communities regarding environmental and social impacts, and the indifference of the State, require institutional reforms and the formulation of public policies to control and allow for the reversal of this situation. It is also urgent to
create a public group that is informed, with authority and clear responsibilities, and the necessary independence to be able to discipline mining activity within legal boundaries, thereby preventing industry’s economic power from continuing to harm other productive activities as agriculture and hindering local development in the different basins and regions nationwide.

12 DEPLETION OF WATER IN THE EL CULEBRON AQUIFER BY CARMEN DE ANDACOLLO MINING COMPANY

(Municipality of Coquimbo, Elqui Province, Coquimbo Region)

Agriculture and mining have lived side-by-side for decades in the Region of Coquimbo, but now excessive expansion of mining has placed unsustainable pressure on renewable and non-renewable natural resources. One of the conflicts facing the public and farmers in the area, grouped under the El Culebron Aquifer Defence Committee, against the miner Carmen de Andacollo, has its origins in the competition for water resources.

The mining company Carmen de Andacollo, dedicated to the exploitation of copper, is developing an expansion project called "Hypogene Project", aiming to quadruple its current production of copper concentrates up to about 80 thousand tons per year, extending the life of its mining exploitations by 21 additional years.

The conflict between the local and mining communities was generated by changes at the point of extraction of water from said project. Originally, the Environmental Impact Assessment (EIA) submitted by the company, stipulated that the project would be supplied water from the Quebrada de Talca (located off the river Elqui), which was later modified by the mining company, opting to draw water from the underground aquifer El Culebron, located in the Pan de Azucar area. This amendment was made public after the public participation process (that is stipulated in the project's environmental assessment processing). The Hypogene Project's EIA was approved by the Regional Environmental Commission (COREMA) of Coquimbo in 2007, opening a conflict between the organized community of farmers against the mining company and the State.

The conflict over water resources in the underground aquifer El Culebron and the threat of depletion of this important source of fresh water is clearly associated with the unfortunate legal framework for access and water management established by the Water Code, in force since 1981.

In the region of Coquimbo there are at least 8 wetlands, considered the main aquatic ecosystems of the coastal network in the district; and these are centers of high biodiversity and importance given the arid desert of the region. Among them, the wetland El Culebron is at risk of disappearing due to over-exploitation of water. To stop the mining claims of the Carmen de Andacollo mining company, farmers have initiated two legal actions: a Reclaiming & Reconsideration Appeal in the National Environment Commission (CONAMA) to revoke the environmental approval of the project, and two Reclaiming & Reconsideration Appeals in the Santiago Legal Court against the General Water Directorate (DGA), which is the public body that approved the extraction of water for the benefit of the mining company.
LOS PELAMBRES MINING COMPANY (LUKSIC GROUP) USURPS AND THREATENS DRINKING WATER RIGHTS IN CAIMANES
(Municipality of Los Vilos, Choapa Province, Region of Coquimbo)

The El Mauro tailings dam developed by Miner Los Pelambres, owned by Antofagasta Minerals, has endangered the people of Caimanes and sparked a sharp dispute over water between the Pupio Valley residents and the mining company of the Luksic Group. The conflict is rooted with the approval of the project “Expansion Minera Los Pelambres” by the Regional Environmental Commission (COREMA) Coquimbo, which initially considered the construction of 3 tailings dams, but then the mining company replace them for El Mauro Tailings Dam Project, of enormous size.

The supply and distribution of drinking water for villagers in the Caimanes town, east of the city of Los Vilos, has traditionally been managed by the Community Rural Water Association, locally governed. However, since late 1990, access to and supply of water in this community has been threatened by the construction of the El Mauro tailings dam. The mining company has built several structures that have altered the territory, the largest intervention being the dam itself, which stores 1,700 million tons of toxic tailings, leaving the community without natural spring water resources, and the possible mortal risk of eventual failure of the dam wall.

The community of Caimanes and the irrigators of the Pupio Valley denounced the illegality committed by the General Water Directorate (DGA) of the government of the time, which ignored water rights that were had by farmers and irrigators upon the Pupio Stream, and applied the Water Code arbitrarily, benefiting the Los Pelambres company, which previously had no water rights in the aquifer.

At the beginning of the conflict, the community was united to prevent the construction of the dam. However, this union was broken by the intervention of the company, who used various strategies to divide up the population. It also managed to take over some land in the Pupio Valley, paying between 15 and 25 million pesos to some villagers who sold their lands. Today the town is divided up into two neighbourhood committees, one for, and one against the mining and tailings.

Having exhausted all administrative options, the community and farm owners were forced to start the "judicialization" of the conflict, which after almost 10 years was won by the farmers, whose rights were recognized by the Courts and the company was ordered to demolish the structures and return the water. But since the dam was already built and the company had destroyed and closed down the spring which fed the Caimanes village and the Pupio Valley, those affected (before taking the case to the Supreme Court) signed an agreement with the company, receiving a compensation of 23 million dollars; which included giving up their land to miner Los Pelambres.

Notwithstanding, and in conjunction with national environmental organizations, the affected neighbours of Caimanes presented the case of the El Mauro tailings dam to the Latin American Water Tribunal, achieving a favourable ruling for the community, although the sentences in this case are not legally binding in Chile. At the opening of the dam, in 2008, and after having spent the money received by Los Pelambres miner, many farmers were in poverty, unable to generate income and uprooted from their land.
The U.S. company AES-Gener intends to build a hydroelectric mega-complex in the Cajon del Maipo, a mountainous area of the metropolitan region of Santiago that supplies irrigation to all of the Maipo Valley as well as supplying drinking water to the almost 6 million people of the Santiago city. In conflict are the interests of the U.S. electrical company and the Citizen Coordinator for the Maipo Rivers Defence, composed of teachers, students, farmers, hikers, women's organizations, artists, entrepreneurs, tourism and social organizations that live or are users of Maipo river basin. The Canal Associations of the Maipo River, the Chamber of Tourism and several councillors of the Municipality of San José de Maipo also joined in opposing the project.

The Alto Maipo hydroelectric complex attempts to build two mega "bypass" power plants that intervene all the rivers feeding the Maipo River. The project was approved by the Regional Environmental Commission (COREMA) of the metropolitan region during the first half of 2009. The company argues that it is only about "bypass" plants, but their own studies show that the proposed dams will repress 1 million 800 thousand cubic meters of water by piping; and the water from the Volcan and Yeso rivers will be diverted along a 70 kilometres long tunnel, up to the bottom of the Maipo River, at the height of El Manzano, leaving the basins of the Volcan, Yeso and Colorado Rivers with a severe water deficit; and the Maipo River with a large decrease of water, which will generate the desertification of an area of more than 100,000 hectares. The operation of the AES Gener project also puts at risk the continuing supply channels that irrigate the 107,068 hectares of excellent crop lands in the large territory of San Bernardo, Calera de Tango, Padre Hurtado, Maipu, Peñaflor, Talagante, Isla de Maipo, Buin and Paine Municipalities, an activity that provides tens of thousands of jobs in agriculture and agribusiness in the Metropolitan Region.

AES Gener hydroelectric plants will also interfere with the operations of the company Aguas Andinas, which supplies drinking water to 80% of the population of 6 million people in Greater Santiago. The 70 kilometer tunnel will also cross under the Natural Monument El Morado and the Lagunillas Sanctuary, part of the National System of Protected Areas of the State (SNASPE), putting at risk the San Francisco glacier and lagoon, and the high plains and wetlands, the base of the local shepherd and peasant economy.

The Citizen Coordinator for Maipo Rivers Defence, in conjunction with Canal Associations of the Maipo River, the Agricultural Society and councillors of the Municipality of San José de Maipo, held meetings with the Ministers of Interior, Energy, Public Works, Environment, as well as with the directors of the General Water Directorate (DGA) and the Directorate of Hydraulic Works (DOH), to inform them directly about the impacts of the hydroelectric plants of AES Gener on the basin, public infrastructure and agriculture in the Maipo Valley. The Citizen Coordinator also presented to the DGA Metropolitan Region the request to establish a water reserve in the Maipo River, according to the powers given to the DGA in Law 20.017 (article 147), which amended the Water Code in the year 2005. It also warned of the risk of death associated with the operating of the plants, including water surges hitting the Santiago families who come to the river every weekend for recreation in the Cajon del Maipo. However, none of the legal or technical arguments put forth by the citizens were listened to by government.
The conflict over the location and extraction of water for the proposed AES-Gener project expresses the shortcomings of the existing Water Code; the absence of a land use and watershed strategy; the breach of regulations on protection of biodiversity; the absence of a policy of strategic management of water resources; and the economic business lobbying pressure on local players. This conflict also demonstrated how the director of the National Forestry Corporation (CONAF), Catalina Bau, illegally and without regard for a CONAF Metropolitan Region ruling, authorized the clearing of native endangered species, protected under the Native Forest Act, passed a year earlier by the government. It also reflects political discretion of the administration of the State, over and beyond technical and legal criteria; and shows how political authorities of the Bachelet Administration, particularly the Minister of the Internal Affairs, Edmundo Perez Yoma, and the Minister of Energy, Marcelo Tokman, supported the Alto Maipo project before its environmental assessment was finished; evidencing the lack of independence of the Environmental Evaluation System.

As soon as the environmental authority approved the Environmental Impact Assessment (EIA) of the two hydroelectric power stations, in March of 2009, organizations opposed to the project initiated administrative actions to invalidate the decision and began plans to continue their opposition to AES-Gener, this time in the courts.

15 HYDROWAC COMPANY THREATENS THE LAGUNILLAS SANCTUARY AND THE COMMUNAL USAGE OF THE ESTERO SAN JOSE STREAM
(Municipality of San José de Maipo, Cordillera Province, Metropolitana Region)

The Hydrowac Company is trying to intervene in the natural heritage and water of the San José Stream in order to earmark it for hydro generation, threatening current environmental, economic and social uses of the basin. The project faces strong opposition from the community and irrigators of San José de Maipo, since the intervention of the San José Stream, inside the Lagunillas Sanctuary threatens the economy of the area, diminishing the availability of water for human and animal consumption, irrigation and tourism, as well as the balance of the productive natural heritage of the area.

Hydrowac Company is owned by businessman Jorge Wachholtz, who was personally awarded, under the 1981 Chilean Water Code, (writed by the Pinochet Regime) 1.3% of all non-consumptive water rights in the country. These unacceptable appropriation of water rights, by Wachholz included 2 cubic meters per second of the flow from the San José Stream, in the south of the town of San José de Maipo in the Maipo river bassin. With such flow Hydrowac aims to build 2 “bypass” hydro electrical plants, of 8 megawatts and 5 megawatts, respectively, which would dry up the San Jose stream inside the Lagunillas Sanctuary, from its source in the area of Tres Esteros within the Lagunillas Sanctuary to its mouth in the Maipo River. The project would seriously affect the water supply of the village of Santa Maria del Estero, and the supply to 4 irrigation channels: Canal Comunero, Canal Morenino, Canal Cruz Roja and Canal La Palita, which irrigate farms and feed the community’s public infrastructure of San José de Maipo town, the cemetery, the stadium, the municipal camping and the National Health System hospital; affecting the water rights of the town council and of more than 300 farming families and residents of San José de Maipo.

This case highlights the problems in the Chilean Water Code as the system of water allocation; and the vices of the current system which has given privates a larger quantity of water rights than actually exists in diverse watersheds in the country; on top of giving water rights to speculators, such as Wachholtz, over the ancestral rights of local communities, farmers and irrigators. To date, the community of San José de Maipo, through legal action and a favourable decision from the Legal Court of Puente Alto, has managed to stop the Hydrowac surveys and studies for its hydroelectric projects in the area. Beyond that, the successful implementation of the powers of the State, in this case the National Monu-
ments Council, that applied the existing legal framework for Nature Sanctuaries, still protect the San Francisco de Lagunillas Sanctuary, the integrity of the San José Stream, and the community and town council rights over its waters.

The fierce community opposition to the Hydrowac hydroelectric plants has been expressed since the community was informed that the company was seeking to enter the premises of the area under the Provisional Electrical Concession, conferred to them by the Superintendence of Electricity and Fuels (SEC) in early 2008. In addition to meetings in the village to inform those affected, the 4 irrigation channels users, the Lagunillas Sanctuary and the neighbourhood associations also launched a campaign to collect signatures to demand the national authorities to stop the Provisional Electrical Concession and give information to the municipality, regional government and citizen organizations about the project and its impacts. To date, the community has been successful in protecting the estuary and its waters through litigation, mainly because this water source is inside a protected area.

16 AGROINDUSTRY OVER EXPLOITS UNDERGROUND WATERS IN SAN PEDRO DE MELIPILLA DESTROYING RURAL COMMUNITY DRINKING WATER SYSTEMS
(Municipality of San Pedro, Melipilla Province, Metropolitan Region)

Tank trucks supply drinking water to the population of San Pedro de Melipilla, where the supply of the vital resource to the local community goes up against agribusiness which over exploits groundwater that used to supply drinking water to rural communities. The rural area of San Pedro de Melipilla faces shortages in its drinking water wells, leading 16 communities, that engage in subsistence agriculture (cultivation of strawberries and citrus), to organize in the Social and Productive Networks of San Pedro, and develop actions to regain access to their waters since 2004.

The companies Agrosuper (farm and food preparation), Ariztia (backyard poultry), Fundo Longovilo (pig farming and fruit), Fundo Trinidad (vineyards), and Fundo El Peumo (fruit), concentrate water rights for 1,600 litres per second from the Yali aquifer, which produces 2,031 litres per second, and its current demand for 2,281 litres per second is greater than its ability to refill. In October of 2005, the General Water Directorate (DGA) decided to declare it a “restricted area” for new exploitation of groundwater in the aquifer sector Yali Alto. However, the withdrawals caused an early depletion of the aquifer, affecting rural communities whose catchments were out of the aquifer level.

In December of 2008, the Water Committee of Santa Rosa received from the DGA, after fighting for years, an authorization for the use of water as an interim for 1.4 litres per second. However, what was solicited by the community to supply their basic needs was of 10.4 litres per second. At present, the Committee is supplied by a municipality tank truck, which leaves water in community tanks every 15 days or once a month.

The locality of Culen lives with the same helplessness. In July of 2008 the Municipality of San Pedro presented the Regional Government (GORE) the project “Expansion of Water Services for San Pedro - El Yali”, but a year later, in June of 2009, the GORE informed them that they had to re-apply in 2010. Worse still is the situation in the town of El Prado, who has 300 pumps to supply water to the housing sector. They haven’t had water in the well since January of 2009. To address the emergency, they have been getting water from the local hospital well.

The organized community of San Pedro has taken various actions to draw the authorities’ attention to the conflict that afflicts them. What most worries the community leaders is to halt the rural to urban migration, the loss of its cultural identity and the severe rural environmental degradation. The strategy that drives the Social and Productive Networks of San Pedro is to move towards a citizen-action plan, to change the existing Water Code, maid by the Pinochet regime (without Congress approval) having
as a base the premise that, in Chile, it is necessary to democratize decision-making regarding water management, where the priority of human consumption should legally be above the economic uses of this resource.

17 PACIFIC HYDRO INTERVENES THE LOS CIPRESES RIVER NATIONAL RESERVE UNDER GOVERNMENT PERMISSION

(Machali Municipality, Cachapoal Province, O'Higgins Region)

The Australian power company Pacific Hydro irregularly obtained from the Bachelet Administration authorities permission to build a hydroelectric project within the Los Cipreses River National Reserve, without this area, belonging to the National System of Protected Areas of the State (SNASPE), having been decommissioned. The Regional Environmental Commission (COREMA) of the O'Higgins Region authorized, on July 8, 2008, Pacific Hydro to drain water through three kilometres, from the river Los Cipreses until the river Cachapoal, in the Los Cipreses River National Reserve. The former was in order to enable the construction of the hydroelectric plant "The Chacayes" (160 MW).

The project will capture water from the Los Cipreses River via an intake, to be sent into the Cachapoal River, through a diverting 2,920 meter-long tunnel. Both works of the projects are located within the Los Cipreses River National Reserve. Despite the intervention of a protected area, belonging to SNASPE, COREMA and the Regional Ministerial Secretaries (SEREMIS) that have jurisdiction in such area approved the project. Given that the regional officials of the National Forestry Corporation (CONAF) rejected the project because it affected a protected area, the national director of CONAF, at the time, Catalina Bau, from Santiago, distorted the scientific and technical delivery of the regional CONAF, who had rejected the draft, inconsistent with its role of protecting the National Reserve under its protection.

This conflict illustrates the weaknesses of the existing legal framework in Chile, where electricity and mining legislation places mega-enterprises above the law that protects biodiversity, as well as in other cases where it overtakes the right to water for local communities. In the case of Pacific Hydro, the lack of political will to protect de National System of Protected Areas, and strong political pressure by the company lobby intervened to approve the controversial project, bypassing the “official protection” established by the SNASPE.

Local communities organized to address this hydroelectric project, but the relationship with the municipality was weak due to the ambiguity of the Mayor's position towards the project, which weakened the actions by the local population. The main concern of the community pointed to the restrictions and impacts of the project on the local development strategies linked to tourism; the loss of commercial value of the properties; the effect of electromagnetic fields (high-frequency towers) on health; and the easements for the towers and electrical transmission lines on the territory of the community. The project was approved, despite affecting a protected wildlife area that was unaffected by law, thus adding another negative precedent to rights violations.

18 ALTOS DEL ACHIBUENO: BIODIVERSITY PRIORITY SITE THREATENED BY CENTINELA LTDA.

(Municipality of Longavi and Linares, Linares Province, Maule Region)

An intense conflict over the use of water resources in the Achibueno River, Maule Region, pits the Centinela Ltda. hydroelectric company against neighbourhood, productive and professional unions and environmental organizations, in the municipality of Linares, whose economy, because its...
landscape value and biodiversity, is used in recreation and tourism, plus tradicional communal livestock activities. The Centinela Ltda. company, owned by Isidoro Quiroga, plans to build 2 side-by-side hydro "bypass" plants (of 135 MW) in the upper basin of Achibueno. It was submitted for environmental assessment on March 24, 2009. The territory affected by the project, the company said, amounts to only 218,33 hectares, not taking into account underground works and the 2,2 million cubic meters of debris that will be deposited in the area by the making of roads and tunnels for the project, an area of high environmental value, which currently focuses on tourism.

Isidoro Quiroga, a known speculator of the water market nationwide, has not been transparent in admitting that the actual average generation capacity of his project is only 5 to 10 MW in the first plant and 30 to 50 MW in the second. That is, the average amount of energy generation they could reach would only be of between 35 and 60 MW, which is insignificant as an argument to intervene and environmentally degrade such a pristine area, established as “Priority Conservation Sites” in the “Biodiversity Strategy of the Maule Region”, and that today focuses on important tourism development.

The State public services involved in the environmental assessment sent the company a series of observations in order to clarify and correct aspects of the Environmental Impact Assessment (EIA) that did not meet the basic requirements to be evaluated; these observations by public services show evidence of the enormous number of shortcomings of the project.

The threat of intervention to the basin and the Achibueno River has mobilized the entire local community of Longavi and Linares, there being no group that supports the company stance. Social and environmental organizations (such as CODEFF Maule), unions, scouts, seniors groups of Linares, the Union of Industrials and Artisans of Linares, the Corporación Chilena de la Madera (CORMA) leaders, Teachers College, and the College of Agricultural Engineering, all grouped together in the Defence Committee of the Achibueno River, claim that the project aims to develop in a place considered and declared by the region and by the National Environment Commission (CONAMA) as a “Biodiversity Priority Conservation Site” at a regional and national level. They argue that this area also constitutes a "hot spot" in Chile's global importance for biodiversity conservation, according to international institutions such as Conservation International.

Because the factor that the Chilean Water Code facilitates a foreign player as Centinela Ltda. a destructive intervention in the upper basin of the Achibueno River, based the constitution of water property rights to the company by the Water Public Agency (DGA); the local society, represented by the Committee for the Achibueno River Defence and the community of Linares town has said that a fundamental reform is urgently needed to the existing Water Code, which allows such distortions and damage to the environmental, social and local economy. They stress that by allowing the separation of land from water, and by permitting the allocation of water for purposes contrary to local development priorities, said, this legal body has been empowered for environmental and territorial expropriations and a lack of local development options. Thereby, local territories are given for the benefit of foreign businessmen, or transnational companies, to the detriment of local landowners and communities.

19 TOXIC POLLUTION BY CELCO LICANCEL IN THE MATAQUITO RIVER DESTROYS LOCAL ECONOMY
(Municipality of Sagrada Familia, Province of Curico, Maule Region)

Repeated episodes of toxic contamination in the Mataquito river, caused by the company Celco Licancel, have faced for years farmers, fishermen and local authorities against the Angelini group, owner of Celulosa Arauco y Constitucion (Celco), the main forestry consortium of Chile and one of the three largest worldwide. The most massive toxic spill of effluents into the river Mataquito, in December 1999,
occurred from the pulp manufacturing plant, when the company spilt into the river toxic industrial waste and pollutants generated during the cleaning and maintenance of its facilities. In subsequent years, after several minor spills, in June of 2007, fishermen and farmers denounced the massive death of fish in the river Mataquito. When the authorities went to check the complaints and inspect the plant, they discovered the existence of two underground disposal pipelines for liquid industrial waste (ILW), none of which had been evaluated, nor was the authority aware of. For this illegality, the health authorities ordered the closure of the plant for 30 days.

Two weeks after this disaster, another 200,000 gallons of liquid industrial wastes were spilled into the environment from a broken pipe plant; 50,000 gallons of toxic waste found their way back to the Mataquito river again. The company noted that this was an accident and decided to indefinitely stop the plant activities. On that occasion, and due to the scandalous behaviour of the pulp company, the very President Bachelet said that the damage costs should be borne by those responsible. But Celco Licancel estimated that the closure of the plant alone will mean monthly losses of $4 million, and therefore did not take responsibility for those affected. This again demonstrated a level of impunity, where a company hurts a community without being sanctioned by the State institutions or subject to repair and/or to compensate communities in its totality for the damages. This situation of impunity, allowed that a year later, on June 3 of 2008, Celco provoked a new toxic spill in the Mataquito River, as a product of flaws in their facilities and of the emergency equipment in the plant.

For over a decade, without regard to the repeated environmental damage and local economic activities caused by Celco, the institutions of the State have not worked to safeguard the environmental and economic rights of the population affected. The Bachelet Administration, regional authorities have given priority to the continued operation of the pulp mill, despite the blatant economic and environmental damage to the local community. Moreover, the limited compensation given by Celco Licancel benefited only those sectors with greater bargaining power within the community.

Given the serious impacts of the toxic spills, the irrigation community of Lora-Quelmen, supported by the Latin American Observatory for Environmental Conflicts (OLCA), filed an application for protection before the Legal Court of Appeals of Talca. However, the Supreme Court rejected the application for protection filed by farmers. This action by the Supreme Court, concerning Mataquito river pollution, was very serious because it did not establish responsibilities for the incident, which, not being punished, could be repeated again with impunity.

In the case of repeated toxic contamination of the Mataquito River, the community has found that companies can destroy local economies and the environment and go unpunished. The government, in turn, has led to the bureaucratization and judicialization of environmental conflicts, limiting, rather than protecting, the rights of citizens to live in an environment free of contamination. In early 2010, there is still no government response on the ecological situation of the Mataquito River and its estuary to the Pacific, which was severely damaged by Celco. Today, fishing has resumed, but not yet recovered the fishing levels of extraction reached in late 2006 before the last 3 chemical spills. Nor is there any security for local communities that toxic waste spills such as those that happened, will not reoccur in the future.
HYDROCHILE THREATENS NEVADOS OF CHILLÁN BIODIVERSITY CORRIDOR AND THE DIGUILLIN RIVER
(Pinto Municipality, Ñuble Province, Bio Bio Region)

The attempt to set up hydroelectric projects in areas of high environmental value, with the justification of having property rights over water provided by the state, under the current Water Code rules, has the company HydroChile facing off against local communities in the Cordillera of Chillan.

HydroChile is a consortium of British, Australian and American capital, who wants to build 2 bypass hydroelectric plants (of 24 MW) in the Diguillin River and in the Los Boldillos Estuary. The intervention by the project would extend from the Diguillin River’s birth, in Valle de Aguas Calientes, to the entrance of the Ñuble National Reserve, a territory recognized nationally and internationally for its high environmental value. The project would include a 60 km long line of high-voltage towers from the Valley of Diguillin to San Fabian de Alico; and another 30 km long high voltage set of towers to the town of Recinto.

The greatest impact of the construction of two hydroelectric plants is the alteration of an environmentally unique place, which is an integral part of key ecosystems for biodiversity conservation in the Cordillera of Chillan. The project would affect the area of Nevados of Chillan Biodiversity Corridor and Laguna del Laja, which corresponds to the “Tourist-Interest Zone of the Cordillera of Chillan”. Additionally, the area was established by the region and the National Environment Commission (CONAMA) as “Priority Site for Conservation of Biodiversity” in the Bio Bio Region, housing there the National Center of Acclimatization and Breeding of the Huemul (Chilean deer), as well as the area El Trumao-El Candado of the “Sendero de Chile” (The Chilean Track).

The Aguas Calientes project, during the environmental assessment process, has received critical comments from public services involved in this assessment, especially the National Forestry Corporation (CONAF), who has argued that if the HydroChile company dams, by river tubing, the Diguillin River for almost 4 miles, it would harm the Nature Sanctuary “Los Huemules de Niblinto”. For its part, the municipal authority in the area has claimed that the installation of the hydroelectric project is not consistent with the plans that the community has for development, but rather, is a threat to their community development strategy.

The local community, organized into the Defense Committee of the Biodiversity Corridor Nevados de Chillan-Laguna del Laja, has reported that HydroChile projects imply the loss of an irreplaceable tourism and ecological heritage in the region. During the environmental impact assessment process of the project, local organizations presented more than 800 observations, resulting in the HydroChile company requesting the suspension of the environmental assessment process, without responding to the observations from the public. Currently, the company is expected to re-apply the project assessment by mid 2010.
The Chilean Water Code and the water market permit the entry of Norwegian state company SN Power into indigenous territories (Panguipulli Municipality, Province of Valdivia, Los Rios Region)

The Norwegian state company SN Power seeks to intervene and dam the Llancahue, Quilaleufu, Reyehueico, Carranco, Rañintuleufu, Lizard and Changli rivers in indigenous territories in the South of Chile for hydro-electric power generation, confronting mostly the indigenous communities that inhabit these basins, including the Parlamento Coz Coz, Lonkos and Werkenes of the Calafquen and Neltume lake sector, and the native communities of said territory. There are also settlers (non-indigenous farmers) affected by the projects, whom, grouped in the Small Farmers and Forest Committee of Rañintuleufu, have also expressed opposition to the hydroelectric projects.

Since mid 2006, and to date, the company SN Power has taken steps to install 3 hydropower plants in the Liquiñe Valley, in the Cordillera of Valdivia. The projects include road construction and water intakes and reservoirs to capture and control the water, with flooding areas of up to 42 hectares, and with walls up to 37 meters high. The zone, which the company seeks to influence, has a proven wealth of water resources, with lots of rivers, lakes and streams and a high environmental value for its biodiversity. For this reason, an important part of this area, in the Los Rios Region, was declared a "Biosphere Reserve" by UNESCO in 2007.

However, although the company is obliged to obey certain rules laid down in Norway, it has not governed itself by such standards in their actions in other countries. For example, in Chile not only has it not complied with the conditions of the Indigenous Act of 1993, but neither with Covenant 169 of the International Labour Organization (ILO), excusing itself since Chile, until 2008, had not ratified the agreement. Sheltering itself within that legal void, the company has reduced its investment conditions to the low standards of corporate behaviour that are set by the Chilean legal framework for foreign investments.

The government’s actions haven’t been much different. During the feasibility study stage, prior to formal submission of the Environmental Impact Assessment (EIA) to the Environmental Impact Assessment System (SEIA), the government acted by default, because although the processing and deliberative bodies of the Covenant 169 were not mandatory by September 2009, it did require, through the National Indigenous Development Corporation (CONADI), for the ensuring of the rights and procedures that were included in the Indigenous Act of 1993 for the protection of indigenous land and culture.

In spite of this, the state, through the National Service of Geology and Mining (SERNAGEOMIN), did hasten to respond to the interests of the SN Power company, and its subsidiary Trayenko S.A., giving them the 63 mining concessions requested to facilitate the entry of the company operators to the project area. On top of that, the General Directorate of Water (DGA), in 1999, granted water rights to privates on Indigenous lands, while the Indian Act was in force and running, without informing, consulting, nor protecting indigenous communities. Neither did the CONADI, responsible for indigenous territories. Nor the Ministry of Internal Affairs, responsible for the country human rights and territorial administration.

The SN Power-Trayenko hydroelectric projects in this area are rejected by the local community, and particularly by the Mapuche and Pehuenche indigenous communities. In the projected working areas there are sacred sites and cemeteries of said ethnicities, tourist interest zones, eleven natural lakes and lagoons, thermal water springs that make up the “Ruta de la Salud” (Health Route), and hundreds of tourism ventures that feed the local economy. The communities and its leaders demands and proposals lean towards the government’s role as a defender of their territories and culture, where the state should respect legally established rights, and secure that the actual indigenous laws and institutions are respected.
SN POWER INTENDS TO INTERVENE EIGHT RIVERS IN MAIHUE LAKE INDIGENOUS TERRITORY
(Lago Ranco and Futrono Municipalities, Ranco Province, Los Rios Region)

The Norwegian state energy company SN Power and its subsidiary Trayenko S.A., also plan a large hydroelectric project that would affect 8 rivers in indigenous territory in the south of Chile, causing a social conflict of proportions with the Mapuche-Huilliche communities of Lake Maihue, disrupting their way of life and traditional values.

The project planned by the Norwegian company, based on private water rights obtained from the Chilean state on indigenous territories under the provisions of the Water Code, provide for the abstraction of water from 8 rivers: Pillanleufu, Curriñe, Ipela, Huenteleufu, Hueinahue, Caicayen, Correntoso and Rupumeica; and based on that accumulated volume, hopes to install a plant with a capacity of 400 MW, which it has named Maqueo Project. To implement the project, the company requires the construction of water intakes in each of the 8 mentioned rivers, with an equal number of dams. The walls of these dams have a minimum of six meters, being the smallest, and a maximum of 29 meters, being the highest, and flooded areas, respectively, from 1,02 hectares to 130 hectares being the largest. The Maqueo Project will flood an estimated 160 hectares in all.

The intrusion of SN Power, through Trayenko S.A., in the ancestral Rupumeika territory, has led to a serious social conflict and a profound disruption of traditional values in the target communities, by destroying the fabric of social relations, which are recognized by the authorities, values, and ancient religious and cultural practices. The intervention strategy of the company has seeded misunderstandings, misinformation and mistrust, weakened traditional social ties among community members, based on the primacy of a commune, intentionally creating conflicts between those “pro” and those “against” the project.

The communities who oppose the project have expressed themselves by way of marches and protests against SN Power-Trayenko. One was held in Valdivia on September 6, 2009, where the communities of Hueinahue, Rupumeika, Maihue and Curriñe delivered a letter to the Governor of the Los Rios Region. The movement aimed at demanding the state to perform its duty to ensure respect for the rights of indigenous people and local communities over their territory and natural resources; and especially in regard to the right to previous, informed and in good faith consultation.

These rights are established in the Indigenous Act of 1993 and in various international agreements such as Covenant 169 of the International Labour Organization (ILO), ratified by Chile in September of 2008, and the Declaration of Rights of Indigenous Peoples of the United Nations, adopted by the UN General Assembly on September 13, 2007 (with a favourable vote from the state of Chile). Compliance with the Covenant 169 needs a reform to the System of Environmental Impact Assessment (SEIA) to include assessment of social and cultural impacts on the local community of any activity by foreign players on the territory, including the state; as well as a consulting mechanism and an effective and binding participation of the communities being affected.

Chilean law also requires, since the enforcement beginning of Covenant 169 in September of 2009, a reform of the 1981 Water Code and the 1982 Mining Law,(both imposed by the military regime, under the lacking of political parties and a Congress ) in times where there was nor human rights respect, and in which the rights of indigenous peoples are undervalued, or directly threatened.
The San Pedro hydroelectric project, by the Chilean company Colbun S.A., owned by the Matte Group, confronts the local community, since it puts in jeopardy the development of tourism and the natural heritage of the San Pedro River basin, the staple of the local economy. The project, which consists of a 144 MW hydroelectric plant in the San Pedro River, was approved in October of 2008 by the Regional Environmental Commission (COREMA) of the Los Rios Region, and includes the construction of a dam that will flood 12.5 kilometres of the San Pedro River basin, affecting all areas of agricultural and tourism enterprises, and leaving a total area of 282 hectares underwater. The "tail" of the dam would reach about 2 miles downstream from the outlet of Lake Riihue.

In the territory to be intervened by the project, a native temperate rain forest predominates, typical in the zone, but very scarce throughout the planet. For this reason the area was declared a "Biosphere Reserve" by UNESCO in 2007. Inundating more than 12 miles from the San Pedro River basin, which gives life to the Reserve, means a mega impact in the area, and implies a serious imbalance in the ecosystem as well as irreparable damage to the natural and productive heritage of the area. The environmental and scenic value of this area has allowed the development of tourism activities, which have increased sharply in the last decade. Figures by the Municipality of Panguipulli estimate that tourism generates $16.6 million dollars to the area every summer.

During the Environmental Impact Assessment (EIA) process various services issued negative reports on the project. The National Tourism Service (SERNATUR), through its national director, said “we reject the Environmental Impact Study because it is ill conceived. This project has a number of problems and could generate serious impacts in the territory, as it is set out for it Environmental Evaluation”. The General Water Directorate (DGA), meanwhile, made nearly 125 comments on the project. The principal one refers to the need for the company to reduce project impacts throughout the basin Lacar-Valdivia, and not only in the 12 km it will flood, in the San Pedro River. The National Service of Geology and Mining (SERNAGEOMIN) considered geological studies on earthquake risk missing, in an area that was heavily affected in the 1960 big earthquake.

The numerous allegations of irregularities in the handling of the San Pedro project incited a group of 53 parliamentarians to seek an investigative Commission Inquiry in the House of Representatives in the National Congress, which passed unanimously in January 2009. The findings of the Investigating Committee indicate that the evaluation process excluded critical information on the project and violated procedural and environmental norms.

The local community is opposed to the project citing the geologica instability of the land chosen for the plant. This has already been evidenced in the project construction work, where several sections of hills have already collapsed endangering workers and locals. Local community organizations, in the Coalition for the Defence of the San Pedro River, sponsored by the NGO Observatorio Ciudadano, filed a Legal Petition for Protection on March 12, 2009, which was declared admissible by the Legal Court of Appeals of Valdivia. The aim of this action was to challenge the decision of the COREMA Los Rios to allow the processing of an Environmental Impact Statement (EIS) that introduced significant changes to the original project approved in 2008. This appeal is still pending in the courts.
CELCO’S TOXIC SPILLS TURN IN ECOLOGICAL DESTRUCTION OF THE CRUCES RIVER SANCTUARY

(Municipalities of San Jose de la Mariquina and Valdivia, Valdivia Province, Los Rios Region)

The conflict over chemical contamination of the Cruces River in Valdivia, in the south of the country, is one of the most widely known conflicts in Chile and Latin America. The conflict pits Celco (owned by the Angelini Group), against the local community of Valdivia, due to the serious contamination of the Sanctuary Carlos Andwanter in the Cruces River, creating a huge mobilization in the region, and the widespread rejection by citizens nationwide.

This pulp and paper manufacturing industry was illegally approved by local environmental authorities of the region, during the Eduardo Frei Administration in 1998. When the plant was ready in 2004, and few months after the start of its operations for cellulose manufacturing, there were repeated and continuous deaths of swans and other species in the Nature Sanctuary Carlos Andwanter, at the mouth of the Cruces River, waters upstream of the city of Valdivia. Months later, an investigation by the Universidad Austral de Chile, showed that these impacts were caused by chemical contamination of the area and the disappearance of the "luchecillo", an aquatic plant that fed the fauna in the Sanctuary.

The study also showed that the source of the toxic waste into the river was the Celco factory, located upstream from the Sanctuary, near the town of San José of Mariquina. The research point out that the Celco plant, beyond producing 30% more cellulose than what was approved in the Environmental Impact Assessment (EIA), had built several illegal ducts that discharged chemical pollutants into the river. Celco spills, to date, continue to affect the natural and productive heritage in the province of Valdivia, since the affected area was an important center of tourism; but also threatens the health of the coastal population and of the city of Valdivia, since the risks of water pollution have not been assessed yet.

This conflict, known as the "Celco case" or "swans case" had all eyes upon Chilean environmental institutions, taking away all its legitimacy, because it was the environmental authority itself which partially applied the law, allowing the environmental catastrophe, warned by environmentalists, to occur. Although the Cruces River disaster led to a thorough review of the environmental institutionality in Chile, which led to a major reform in 2009, the company continues to deny its responsibility for the environmental disaster. When the discharge of industrial wastewater - approved by the government in the environmental assessment- began, on top of the illegal cellulose spills, none of the indicators of the contamination were considered serious enough for the authority responsible for protecting the Sanctuary and monitor Celco to activate preventive measures, as the environmental resolution that approved the project enforced.

Those that did file suits, alarmed by what was happening, were the Valdivians. Several scientists, veterinarians and community leaders organized, in October of 2004, a walk to the wetland sanctuary, for the purpose of publicly denouncing the disaster. In order to do that, they invited authorities, the press and television. As a result of this walk, the death and mass migration of swans made headlines in major newspapers and national televised news. The images of dead black-necked swans, displayed on television, moved people across the country. The first response came from children, who marched called by kindergartens and schools in the city of Valdivia, carrying banners and slogans to save the swans. Simultaneously, the citizen group “Action for the Swans” was formed, soon becoming one of the most vital citizen movements in the country.

Currently, the Chilean State Defence Council (CDE), and various citizen organizations, continue with class action suits in the Legal Courts of Valdivia to prove Celco’s guiltiness and force it to restore the area to its pre disaster state. Celco also faced off against fishermen’s unions and the Mehuin community because, after the environmental disaster in the Cruces River, the company should take out its toxic emissions from the river. But instead of opting to change to closed-cycle technology in order to
avoid environmental pollution, Celco plans on building a pipeline to unload their toxic waste into the coastal area of Mehuin, and the government approve the company proposal. This option threatens local fishing and the protected coastal area that sustains the economy of the Mehuin fishermen.

Notwithstanding these developments and impacts, Celco started negotiations for the fishermen to accept monetary compensation in exchange for pollution in the area. The latter in conjunction with the environmental authority lacking in responsibility for what lies ahead. In the absence of the State role and responsibility, and with a community accustomed to a subsistence economy, Celco achieved, by offering money, for a portion of the fishermen to abandon the cause, the rejection of a chemical spill in the Mehuin Bay, thereby creating a deep divide between the Mehuin fishermen and the fishing coves of the area, even provoking armed conflicts within communities. Therefore, on a national level, civil society organizations have accused Celco of abetting fratricide, and the Ricardo Lagos and Bachelet Administrations as accomplices in social and environmental destruction in the area of Mehuin.

25 CHILEAN WATER CODE AND INFLUENCE PEDDLING BY HIDROAUSTRAL INVADE THE PUYEHUE NATIONAL PARK AND VIOLATE NATIONAL LAW ON PROTECTED AREAS.
(Puerto Octay Municipality, Province of Osorno, Los Lagos Region)

Inconsistencies and irregularities in the field of administrative probity and deep gaps in the carrying out of environmental justice showed the Italian-Chilean company HidroAustral when presenting 2 hydroelectric projects inside the Puyehue National Park, in the Los Lagos Region. The zone corresponds to a State Protected Wildlife Areas System (SNASPE) for the preservation of key biodiversity natural environments. The conflict was triggered by the approval of a hydroelectric project, by the company HidroAustral, inside the Puyehue National Park, leading a clear confrontation between various players and government institutions, including the Executive, Legislative and Judicial powers. The project was approved by the Regional Environmental Commission (COREMA), amid a strong political lobby involving Clemente Perez, a lawyer for the company and son-in-law of the Minister for Internal Affairs Edmundo Perez-Yoma, who was the direct superior of the Governor of Los Lagos Region at the time, Sergio Galilea, who headed COREMA, a body that approved the hydroelectric plants inside the National Park.

The HidroAustral project was approved by the environmental regional authorities, despite being in the Puyehue National Park, and despite the area being intervened was not disaffected by law to develop the project, which contravene the Forest Act of 1931 and the Washington Convention under which the protected area was created. Both Acts of Law prohibit the commercial use of natural resources in protected areas, and condemn the disruption of the natural condition of National Parks, whose protection is also contained in the National Environmental Law No. 19,300.

Contrary to this legislation, the existing Water Code in Chile allows the State to award ownership rights over waters within protected areas. This domain over waters within the park area is exactly the foundation of the hydroelectric company to project its productive enterprise in the area. But curiously, the authority has not made use of Article 147, included in the 2005 reform of the Water Code, which allows the state to reserve flows in watersheds of national interest and in extraordinary situations, which precisely corresponds to unique areas of high environmental value.

The National Environmental Law 19,300 also contains contradictions within its mandate to conserve biodiversity, in Article 10: it allows individuals and companies to submit environmental impact studies of production projects within areas of SNASPE, structurally contradicting the mandate in national and international biodiversity conservation legislation.
One of the main players in the conflict over the irregular adoption of commercial hydroelectric plants within an area of SNASPE is Clemente Perez, a lawyer for the company HidroAustral S.A., who facilitated the establishment of the company in Chile, and led the defence of such in the Court of Legal Appeals of Puerto Montt, before the protection suit filed by Representatives (parliamentarians) members of the Environment & Natural Resources Commision of the Chamber of Deputies in the Chilean Congress, against the approval of the project.

In terms of sectorial permits for the hydroelectric project, the role of the national director of the National Forestry Corporation (CONAF), Catalina Bau, who facilitated the intervention of the National Park, was pivotal since that institution is the administrator of protected areas. This officer, contrary to existing regulations, and as a national CONAF higher authority, contradicted the position of the regional CONAF Los Lagos, which officers had rejected the project.

Against unlawful administrative acts by the National CONAF and the COREMA Los Lagos, representatives in the Environment & Natural Resources Commission of the Chamber of Deputies exercised an exemplary role in carrying out legal actions to challenge the licenses of both institutions; and then rounded up members of all political parties to establish an Inquiry Commission on the Puyehue case, inside the Congress.

Since the National Park is administered by CONAF and there are no human communities within the area, the public defence of the park, in addition to the actions by parliamentarians, was taken over by national environmental NGOs such as Chile Sustentable (Sustainable Chile), CODEFF, Fundacion Terram, Ingenieros Forestales por el Bosque Nativo (Forest Engineers for Native Forests) and Instituto de Ecologia Politica, who, along with the Union of Professionals of CONAF, led the public rejection of the intervention of the protected area, challenged the decision by COREMA and CONAF before the Comptroller General of the Republic, and generated public opinion and complaint columns in the media concerning the case. The NGOs argued that “the installation of economic or productive projects in a protected area is a disturbing example of the violation of the rule of law by the Chilean government itself”, and argued that this approach risked the whole National Protected Areas of the State System (SNASPE).

26 HYDROAYSEN AND ENERGIA AUSTRAL WANT TO DAM ALL RIVERS OF PATAGONIA, AND CONDEMN THIS REGION TO BE “THE ENERGY BATTERY” FOR MINING EXPANSION NEEDS

(Municipalities of Cochrane, O’Higgins, Chile Chico and Río Ibáñez, Province of General Carrera and Capitan Prat, Aysen Region)

Proposals by companies Endesa, Colbun and Xstrata Copper to dam rivers in the Aysen Region in order to produce electrical energy, based on the water rights that these firms have on the Baker, Easter and Cuervo Rivers, put these companies up against tourism entrepreneurs, farmers, church organizations, local and national citizen organizations who oppose environmental degradation and industrialization of the Chilean Patagonia. The scale of the project, nearly 3,500 megawatts of power, its mega-intervention in this pristine region and the distortions in the national electrical grid that would create, has generated the largest known Chilean citizen coalition against an energy project, that calls itself "The Patagonia Defence Council" (CDP).

The HidroAysen electricity company, owned by Endesa (belong to the Italian State Company ENEL) and chilean company Colbun) and Energia Austral company (owned by Xstrata Copper) plan on building six hydroelectric megaprojects in the Chilean Patagonia; five of them run by HidroAysen. HidroAysen consist of the construction of 2 dams on the Baker River (the biggest flowing river in Chile), and 3
dams on the Pascua River, in order to generate a total of 2,750 megawatts, flooding between 5,900 and 7,500 hectares (according to the company and studies of CDP, respectively); and intervening, with the transmission system of 2,300 kilometres of high-voltage power lines in order to carry power, between the Aysen Region in the southern zone, to Santiago city in the Metropolitan Region, in the middle of the country. This power line would affect thousands of public and private lands in 9 regions of the country, 66 municipality districts, 10 areas of the National System of Protected Areas of the State (SNASPE), 3 privately protected areas, 11 Biodiversity Priority Sites for Conservation and 26 wetlands, which is an unacceptable environmental and social subsidy, by chilean society, to a transnational consortium that today dominates 75% of the electricity generated for the Chilean Central Interconnected System (SIC).

The sixth project called “Rio Cuervo”, and presented by Energia Austral in order to generate 660 megawatts, has its origins in the water rights ownership from rivers Cuervo, Blanco and Condor acquired by Xstrata Copper (owner of Energia Austral) to the company Noranda, after failing his project to produce aluminum in the Aysen Region. While Energia Austral only presented a dam assessment for the basin of the River Cuervo, it is expected that the company will later present assessments for other dams in the Condor and Blanco Rivers as well, where Xtrata Copper also have water rights.

After the announcement of Endesa, in 2005, of the design and construction of 5 dams in the Patagonia, the leaders of several regional organizations decided to inform themselves and discuss the project. They organized training workshops for the community on energy, public participation, environmental impact assessment, legislation and the Endesa project itself. A debate began that resulted in the formation, in January 2006, of the "Citizens’ Coalition for Aysen Life Reserve". Then, in 2007, and as a way to generate synergies between the various players critical to the dams in the Patagonia, the "Council for the Defence of Patagonia" (CDP) is formed. Since that time the CDP is the core group that drives the "Patagonia without Dams" campaign across the country.

The coalition works in the fields of communications, citizen participation and legal, technical, political-institutional and international activism. Its main goal, today, is to prevent the approval and building of dams in the Patagonia, operating directly to the public through an intensive information, mobilization and publicity campaign, pointing to the irrationality of mortgaging the future of an entire region when there are real alternatives to ensure sufficient energy supply for Chile in the coming decades, relying primarily on efficiency and energy savings, as well as non-conventional renewable energy (ERNC). Its work has transcended, leading to a state in which dozens of organizations and groups that are not part of CDP have joined in what is now the “citizen’s movement for a Patagonia without dams”. The rejection of the dams has also been reflected in surveys (IPSOS, Fundacion Futuro and CERC, among others), in which it is established that between 53% and 57% of Chileans strongly reject the construction of dams in the Patagonia.

During its Environment Impact Assessment (EIA) process, the project of 5 HidroAysen dams, has shown several irregularities, such as being supported a priori by the Energy Minister, Marcelo Tokman, and the Minister of Internal Affairs, Edmundo Perez-Yoma, the latter generating a clear political signal to his subordinate, the Regional Governor, who discretionally authorized the project entry into the System of Environmental Impact Assessment (SEIA), although most of the public services participating in the Regional Environmental Commission (COREMA) raised objections, or rejected the initiative. Even so, the HidroAysen company has developed a funding strategy for the municipalities located in areas to be intervened by its 5 hydroelectric power plants, in order to buy goodwill and break the resistance of local organizations. Notwithstanding, due to the thousands of comments made by public services to the project in the environmental assessment process, HidroAysen withdrew its project from the Environmental Impact Assessment System (SEIA) in 2009, in order to complete the studies and respond to those comments. HidroAysen is expected to re-enter their projects, to the SEIA, at the end of 2010.