

The Southern Coast Highway Project: A government infrastructure project representing the single greatest threat to Chile's Temperate Rainforests

**Text Credits: Edited by Christina MacAlpin for the Coastal Range Coalition.-
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The Southern Coastal Highway, planned and built by Chile's Ministry of Pubic Works along the 319 km coastline of the Lake Region of Southern Chile, would stretch from Valdivia to Puerto Montt, cutting across the country's last intact temperate rainforest and the ancestral lands of indigenous communities. The highway project threatens the integrity of the forest and jeopardizes the survival of the species and Mapuche -Huilliche people that depend on the ecosystem. The construction of a coastal highway makes no sense in light of the existence of an alternative route in the interior that could better serve the regions transportation needs with lower construction, maintenance, and environmental costs and opposition to the project by its alleged beneficiaries, the inhabitants of the coastal forest. Despite statements by key government officials admitting the negative environmental effects and expected high costs of the project, work has begun on the first section of the highway south of Valdivia.

Why, when no apparent reason exists, is the Chilean government proceeding with the Southern Coastal Highway? The activities of the government and logging companies indicate that the main reason for building the highway is to allow primary growth logging and conversion of native forests to monoculture plantations of exotic species, incentives similar to the reasons for road construction in the National Forests of the United States: one timber company has already clear cut nearly 12,500 acres of forest within the affected area. But the Mapuche-Huilliche people in the area have another vision for their rainforest. They hope to see continued benefits from this locally and globally irreplaceable resource by developing a national tourist reserve in the rainforest and a transportation infrastructure to bring tourism to the area that will have a much lower impact on the region's ecosystem.

The 2nd Largest Remaining Coastal Temperate Rainforest in the World

<p>On a species level, the Valdivian Temperate Forest has an extraordinary level of endemism: 50% of the vines, 53% of the hemiparasites, 36% of the reptiles, 33% of the mammals, 30% of the birds, 75% of the amphibians, 50% of the fresh water fish that are found in the region are unique in the world. Of the regions animal species, 84% of fish, 1% of amphibians, 31% of reptiles, 25% of birds, and 81% of mammals are threatened or endangered.</p>

Both in extent and in diversity of species and ecosystems, Chilean native forests are irreplaceable on a global level: these forests represent one-third of the remaining primary

temperate rainforests in the world. At the same time, among Chile's native forests, the Valdivian Temperate Rainforest along the Southern coast of the country contains the second largest expanse of globally rare coastal temperate rainforest in the world after the forests of northwest North America. The biogeographic isolation of the region since the end of the Tertiary and subsequent glacial and interglacial cycles during the Quaternary have produced forest ecosystems and species in the that can not be found anywhere else in the world.

Many of the globally endemic and rare plant and animal species that are found in the region, such as the Magellanic woodpecker, the worlds smallest deer, the pudu, arboreal marsupials, the voqui pilfuco vine, and Coastal Olivillo trees, are threatened. For example, in the last 200 years, the range of the worlds only population of Coastal Olivillo tree has been reduced from its northern limit of 30 degrees South to its current limit of 39 degrees South.

The high biomass, habitat variety, existence of relict genera, species endemism, and unique vegetation assemblages of the Valdivian Temperate Rainforest have led many international scientific and conservation organization, including the World Wildlife Fund, World Resources Institute, Birdlife International, Natural Resources Defense Council, and Conservation International to classify the region as a global biodiversity priority in need of urgent protection. Specifically, Conservation International considers the Valdivian Temperate rainforests one of 25 biodiversity hotspots in the world.

Threats to the Valdivian Temperate Rainforest

A study of the Valdivian Temperate Forest Ecoregion in Chile and Argentina used information from over 90 experts on the Valdivian Forest Ecoregion to define 12 major forest types within the region west of the Andes and between 35 and 48 degrees South. 61.5% of the region was covered with primary forest in 1550 and that now only 32% of the land area hosts primary forest. The distribution of remaining forest varies greatly across sub-regions, with almost all of the losses concentrated along the coastal range and in the central valley. (MAPS)

In the last 500 years, the size and diversity of Chile's coastal temperate rainforest has greatly diminished. Unfortunately, the areas with the greatest biological value and ecological significance are within the areas with the most forest degradation: the Valdivian Forest west of the Andes between 36 and 41 degrees South has the greatest species richness, complexity, and number of endemic species and is the same area where approximately 80 percent of the original forest cover has been lost.

Despite the environmental value of the region, the most pristine and biologically important areas lack government protection. While 11.7% of area west of the Andes between 35 and 48 degrees South has received special status for protection by the government, 90% of the protected areas are above 600 meters in the Andes or above 43 degrees South, outside the richest areas of biodiversity. Even the protected areas face threats of degradation: Chilean political leaders, academics, and environmental

organizations broadly recognize that the government does not strictly enforce forest legislation and that almost no cases end in actual sanction for the offenders.

Historically, the causes of the decline in primary forest cover in Southern Chile have been logging and clearing of forest land, followed by conversion to monoculture plantations of exotic species such as eucalyptus, logging for woodchips, firewood, and lumber, conversion to pasture or agricultural land, overgrazing, and urbanization. Currently, the Chilean governments plan to construct a highway along the Southern Coast Highway poses the greatest threat to the integrity of the Valdivian temperate rainforests. Within the greater area of the Valdivian Temperate Rainforest, approximately half-a-million acres of the Coastal Range Temperate Rainforest remains roadless and intact. This status is due in large part to historic isolation and the difficulty of access. The planned Southern Coastal Highways most significant impact would be to open this area to the logging and forest conversion that have decimated coastal forests north of the Lake Region and now continue in the Lake Region.

Facts about Chile's Native Forests: Singular & Critically Endangered

- ❖ Chile's native forests include the world's second largest remaining expanse of temperate rainforest.
- ❖ Most of the species in Chile's native forests are found nowhere else in the world. The araucaria tree that is native to Chile represents the world's oldest surviving tree species, estimated to be 200 million years old.
- ❖ In one 10 year period (1985 to 1995), Chile lost 4.5 million acres of productive native forest. The base-line of native forest conversion to non-native tree farms over the last 10 years in Chile has been approximately 300,000 acres per year.
- ❖ Expansion of non-native plantations has been the principal cause for loss of native forests in Chile. Based upon the historical rate by which non-native tree farms displace native forests, a 4.5 million acre expansion of plantations in Chile could result in the disappearance of more than 2 million acres of native forests.

The Southern Coastal Highway Project

If completed, the Southern Coastal Highway:

- ❖ will become the major driver of deforestation for the coastal rainforests if it is built as planned;
- ❖ will threaten the cultural survival and persistence of the indigenous Mapuche-Huilliche communities;
- ❖ is already being built without environmental review and in contravention of Chile's environmental and indigenous laws;
- ❖ has been planned without opportunity for citizen participation or debate;
- ❖ would provide enormously costly infrastructure to a timber industry oriented at woodchip exports and conversion of old growth native forests to eucalyptus plantations.

The Goals of the Ministry of Public Works

The Ministry of Public Works justification for the Southern Coastal Highway Project is to: 1) integrate so called “internal frontiers” geographically isolated areas, a concept was created by former dictator General Pinochet; 2) develop an alternative north-south national transportation route; 3) develop new areas of tourist interest; 4) incorporate ecologically important areas, facilitate their control, preservation, and public access; and 5) provide social benefits for coastal communities. These objectives contrast with the lack of land planning, protected areas, consideration of the extremely fragile coastal ecosystems and the indigenous population and the fact that no employment will be created by the project since the construction will be carried out mainly by the Army Corp of Engineers.

The Effect of the Coastal Highway on the Coastal Forests

The highway's major impact would be to open the area to logging and forest conversion. North of the Lakes (X) Region, nearly all coastal forests have been eliminated or reduced to degraded fragments. The process of forest conversion to plantations now continues in the Lake's Region and will be channeled along the new route if it is opened. Currently, less than 20% of native forest logging occurs within legal management plans, and of this only a tiny percentage can be considered sustainable. Thus, expansion of logging into the coastal range will replicate the patterns of high-grade logging and clear cutting seen in the country's accessible forestlands.

Environmental Review

A serious study of alternative routes, a comprehensive EIA, and new Project Status have not been completed, with the final result that construction is underway without environmental review. Approximately 30 km of the 319 km highway is already under construction, of this, an environmental impact assessment has been completed for **only 6 km**. Earlier commitments by the government of Chile to submit the entire project for environmental review have not been kept. The government is now proposing to conduct an environmental assessment for only one other small segment of the project.

Trade Related Issues: Perverse Subsidies and Consolidation of Forest Sector Development Based on Destruction of Chile's Native Forests

The exploitation of Chile's native forests is inextricably linked to exports of wood products to markets in the United States. The wood products industry historically has accounted for approximately 12% of Chile's exports (outranked only by mining and industrial exports) and approximately 3% of the country's GDP. The United States is Chile's top trading partner and the primary importer of wood products from Chile: in 2001, more than 22% of Chile's “forestry exports” went to the United States. Since the vast majority of the wood products exports to the U.S. come from trees harvested on Chile's non-native tree farms, U.S. demand for wood products creates an incentive for destruction of Chile's native forests.

The dominant wood products imported into the U.S. from Chile are moldings, door and window components and frames, clear wood blocks and “cutstock” made of radiata pine. Based upon a comprehensive analysis of U.S. wood products imports from Chile for the two years between March 1999 and April 2001, North Pacific Group is the largest importer of the dominant wood products imported into the U.S. from Chile. According to molding

manufacturer El & El Wood Products, molding containing radiata pine was installed in nearly 95% of the tract homes constructed in the last 20 years in Nevada, Arizona and southern California.

The destruction of Chile's native forests has been a issue in trade negotiations between the U.S. and Chile during negotiations of the US – Chile Free Trade Agreement. U.S. Executive Order 13141 requires that environmental concerns be incorporated into all trade liberalization negotiations and agreements. As a result, the U.S. has urged Chile to incorporate civil society into decision making and enforce environmental laws that protect its forests, but the Southern Coastal Highway Project casts serious doubt on Chile's intent to uphold its environmental commitments to the international community.

The Coastal Highway is a Penetration Road Designed for the Timber Industry

Given the destruction of native forests to produce wood products exports, the Coastal Highway would function as a penetration route built to serve those companies focused on the exploitation of native forests for woodchips and conversion to plantations. The northern terminus of the highway is a commercial port whose facilities are primarily used for the export of woodchips and fish meal. Therefore, the project would provide industries supplying this port with extensive new forestlands. The highway would also serve to feed a major pulp mill to be built near the city of Valdivia.

The highway's northern portion, where work has begun, will function to provide access to an area entirely owned by one timber company focused on the conversion of temperate rainforests to eucalyptus plantations. This company, Bosques S.A., owns an approximately 150,000 acre area of forestland within the direct route of this project they have already clear cut nearly 12,500 acres over the last 4 years, including areas with *alerce* trees protected by national law and listed in CITES, and have been cited and charged twice with forest law violations by the Chilean Forest Service (CONAF). Neither of these cases, however, has resulted in sanctions to date. Additionally, the company has avoided its legal responsibility to submit an environment impact study, which is required for all logging operations greater than 500 hectares.

The weakness of Chile's environmental and forest laws, and the almost complete lack of enforcement of those laws could put at risk the remaining stretches of Chile's temperate rainforest. The construction of this massive infrastructure project in a fragile and critically important area with no environmental review exemplifies the kind of implicit subsidies which can function to create an uneven playing field for trade as well as the making of an environmental tragedy.

Perspectives of Scientists and Environmental and Regional Organizations

Deep concern has been expressed by Chilean scientists and environmental and regional organizations regarding the project's potential impacts and the need for a discussion of alternatives. This is particularly true as the project has begun to severely impact an area which is one of the country's most urgent priorities for biodiversity conservation as listed in CONAF's (National Parks and Forest Service) "Red Book" of priority sites, as well as two designated Tourism Protection Areas.

The Ecology Society of Chile has clearly expressed in a public letter in June of 2001 that: “The Coastal Range Forests within this latitudinal range are a remarkable reservoir of the world’s biological diversity and the major concentration of endemism within the South American temperate forest region. This is due to the area’s particular biogeographic history, that can be traced to the pre-glacial periods and favorable climatic conditions provided by the proximity of the Pacific Ocean. The current degradation of the coastal forests, indicates that over the medium-term we will have to regret the loss of an important portion of the region’s bio diversity.”

Some groups in the US, have launched campaigns against the import of wood products that lead to the continuing destruction of Chile’s native forests. Recently, Chicano communities protesting at the annual meeting of the North American Wholesale Lumber Association in Colorado Springs, Colorado publicized that Nor Pac, the leading importer of wood from Chile, has contributed to the destruction of Chile’s native forests and the usurping of lands from Mapuche-Huilliche people.

Concerns of Mapuche-Huilliche Communities

The project would directly impact the ancestral territory and communities of the Mapuche-Huilliche indigenous people, cutting across at least ten coastal communities. In direct violation of Chile’s indigenous law, neither the communities, nor their organizations were consulted before road construction began, nor have they been consulted since. According to one Mapuche-Huilliche leader, Carlos Paillmanque, the most serious impacts of the highway will be the breakdown of communities, loss of sacred sites, and the loss of the resources on which the local people depend.

In a declaration on February 14, 2001, 9 Mapuche-Huilliche Coastal communities unequivocally expressed their opposition to the project due to the expected negative impact on their territories and culture. In their declaration they have clearly expressed their opposition to the coastal highway, project that it does not fulfill their real needs, expressing concerns about what the route is going to cause once is done: “The timber companies will come to massively exploit our native forests and convert them to timber plantations of pine and eucalyptus, these exotic species destroy our environment and are incompatible with our way of life. The tourism companies will take our most beautiful places.” Their traditional and representative body, the *Junta de Caciques de la Butahuillimapu* has also declared its opposition to the highway on many occasions.

“We are against the coastal highway, because it will contaminate the water and degrade the forest. I wouldn’t be surprised if the people who come here throw their trash all over the place because highways sadly serve as dumps these days.” – Matías Huenupán, Mapuche-Huilliche leader

“This is a form of eviction, and means the death of the Mapuche-Huilliche People and our culture, disappearance of the forests, of all the things that we come from, the fauna is going to be lost. We take care of our forests, because they are part of our life. We are part of our soil, we belong here, We appreciate all of this, a clean environment, unpolluted air, clean water, if our forest disappears due to the exotic plantations, everything will disappear.” - Anselmo Paillamanque, Mapuche-Huilliche traditional chief (Cacique) of the Junta General de Caciques de la Butahuillimapu

The Coastal Coalition

Environmental, regional, indigenous and scientific institutions organized in the Coastal Coalition (CCCC) have sought to engage the Ministry of Public Works in a constructive dialogue and have studied and proposed an alternative in-land route for the highway which would reduce costs, increase social benefits and greatly reduce environmental impacts. In May of this year, the National Director of Transportation and the Minister of Public Works publicly stated that a route change of this nature was under consideration. In late May, the government abruptly terminated negotiations with the Coastal Coalition and proceeded with plans to construct the coastal highway.

Negotiations and Government Commitments

Pablo Anguita, ex-National Director of Transportation has stated, “the original project would have severely affected South America’s major reservoir of primary forests”. Pointing to the unexpected difficulties of the project he noted that, “The area was at risk, since the road was very complicated, and involved many large excavations, causing rock slides along the road.” (El Metropolitano 8/04/01) A study contracted by his department also recognized that, “the project will cause the loss of environments as well as flora and fauna with special conservation status.”

Carlos Cruz, Chilean Public Works Minister was recently interviewed by CNN in Spanish and stated, “I think that an important part of the country’s environmental capital is provided precisely by the zone of forests south of Valdivia, where there are ancient alerces and olivillos, and forests of other species, all of which are very valuable for the conservation of our flora and fauna.” Ivan Navarro, Regional governor, when explaining the rationale for the potential changes in the official route, stated, “The route’s earlier design involved crossing areas which are extremely difficult geographically, which considerably increase the costs of the project.” (El Diario Austral, Osorno 26/03/2001).

Shortly after these statements appeared in the national press, the dialogue with the Coastal Coalition was abruptly terminated by the government, the Director of Transportation forced to resign and construction renewed on the original project. Press reports pointed to political pressures as the cause of this turn-about, and no technical explanations have been offered by the Ministry.

The Role of the Canadian Chilean Commission for Environmental Cooperation

On June 21, 2002, the Chilean Center for Environmental Law (CEADA), on behalf of the NGOs of Southern Chile, requested that the Canadian-Chilean Commission for Environmental Cooperation (CCCEC) consider the lack of enforcement of environmental laws in Chile as a failure to meet the requirements under Article 14 of the Canadian-

Chilean Agreement on Environmental Cooperation (CCAEC). The submission to the Commission reports violations of Chile's environmental law by Chile's Ministry of Public Works, Highway Authority, and the Bueno River Corporation. CEADA requests that the Commission investigate and document the situation and recommend sanctions for the offending parties.

By informing the Commission of the environmental threat posed by the Southern Coastal Highway project and the inadequate response by the government to the concerns of environmental groups, CEADA hopes to that the Commission will help to ensure environmental protection of the coastal temperate rainforest in the affected area, sustainable development for the region, cooperation with inhabitants of the region, and compliance with and enforcement of existing environmental laws.

A Sustainable Transportation Alternative

An independent analysis recently completed by Cipres Engineers, entitled *Analysis of an Alternative to the Southern Coastal Highway*, conducted for the Coastal Coalition examines the costs and benefits of the government's proposal to construct a highway along the southern coast of Chile in Regions IX and X. Given the goals of the Chilean government to provide access and economic development to the interior of the coastal range, the study finds that an alternative route along the eastern slope of the coastal mountain range would require less initial investment and lower annual maintenance costs. It would also allow faster and more convenient travel for motorists and creating less of a negative impact on the environment and people of the valuable coastal temperate rainforest of the region.

While the route currently planned by the Chilean government for the Southern Coast Highway would run directly along the coast from Valdivia to Puerto Montt, the alternative route studied by Cypres Engineers would be located 35 km from the coast along the north-south axis of the coastal mountain range. Roads running from east to west from the main road to interior sectors would provide access to currently isolated areas and allow tourism in the region. The alternative route would have a less damaging environmental impact, as it would replace existing, but low quality roads and would avoid crossing the environmentally sensitive and valuable temperate rainforests that are located along the coast.

Although the coastal alternative would provide access for tourism, the interior alternative would bring tourists the region with less negative effects on the coastal environment and communities. The alternative route set forth by the study adheres to the goals of the Chilean government to create an additional roadway to the south of Chile and to connect isolated regions of southern Chile in order to allow economic development in these areas. The topography along the axis of the alternative route is better suited to construction of a major road, vehicles traveling on it would be able to travel at constant speeds of 70 km per hour, whereas the topography along some sections of the coast would reduce the maximum speed to 50 km per hour. In addition, the alternative route would provide better inland access to Puerto de Corral, allowing diversification of the regional economy beyond products that require overland transport.

The study also finds that the infrastructure costs of the coastal alternative exceed those of the alternative by 30% and that the alternative would provide an additional 100 km of

roadways in the region. The cost per km of the coastal route would be 1.97 million U.S. dollars per km, rather than 1.1 million U.S. dollars per km for the interior alternative and access roads (using World Bank exchange rate published in 2001 of 508.8). In addition, annual maintenance costs would be higher for the coastal route than for the interior alternative because annual rainfall is almost 3 times greater along the coast than on the other side of the coastal mountains. All in all, a road along the interior of the coastal range would serve travelers to and inhabitants of the coastal temperate rainforests of southern Chile better than the currently planned coastal highway.

What You Can Do

The environmental NGOs of Southern Chile need your support against the Southern Coastal Highway project. You can help protect one of the last remaining primary temperate forests in South America.

1) Call, fax, or e-mail the Chilean Embassy and express your concern over the imminent destruction of the Valdivian Temperate Rainforest of Chile by the Southern Coastal Highway Project:

Chilean Embassy

1732 Massachusetts Ave., N.W., Washington, DC 20036

(Tel.): (202) 785-1746

(Fax.): (202) 887-5579

2) Call, write, or e-mail the Minister of Foreign Relations in Chile and ask that the concerns of the Mapuche-Huilliche people be heard and that the road be relocated away from the coast:

Catedral 1158, Santiago, Chile

(Tel.): 56(2) 6794200

E-mail: minrel@minrel.cl

3) Write letters to Chilean President Ricardo Lagos and ask that the concerns of the Mapuche-Huilliche people be heard and that the road be relocated away from the coast:

President Richard Lagos

Moneda, Santiago de Chile

Chile

E-mail: sperez@presidencia.cl or psilva@presidencia.cl.

4) Contact your state representatives and express your concern over the imminent destruction of the Valdivian Temperate Rainforest of Chile by the Southern Coastal Highway Project.

5) Call or write to the Canadian Secretariat of the Chilean-Canadian Commission on Environmental Cooperation requesting that Canada act quickly regarding the Southern Coastal Highway Project:

David Anderson, P.C., M.P.

Minister of Environment

28th Floor, Les Terrasses de la Chaudiere

10 Wellington Street

Hull, Quebec

Canada K1A 0H3

(Tel.): 819-997-1447

(Fax.): 819-953-3457