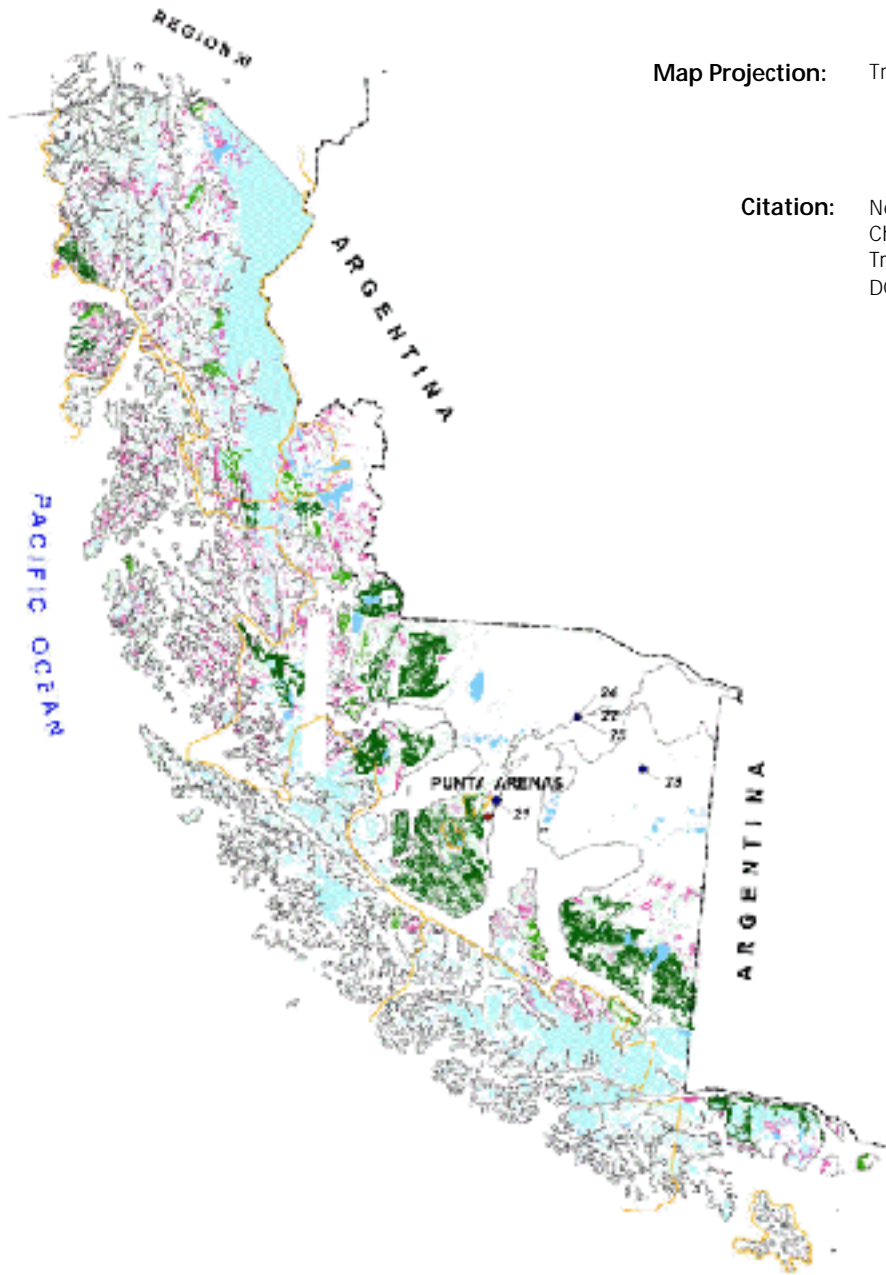


Chile's Frontier Forests: Frontier Forests, Other Vegetative Cover, Protected Areas, and Forest Activities in Administrative Regions XII



Map Projection: Transverse Mercator

Citation: Neira, E., H. Verscheure and C. Revenga. 2002. Chile's Frontier Forest: Conserving a Global Treasure. WRI, CODEFF and UACH, Washington DC.

Analytical Overview:

The Official Land Register and Evaluation of the Native Vegetative Resources of Chile used topographic maps at a scale of 1:50,000 provided by the Military Geographic Institute of Chile (Instituto Geografico Militar).

The land register project produced 641 native vegetation maps. According to the objectives of the CONAF (Corporacion Nacional Forestal-- the Chilean government agency responsible for forest management) land register, the country was divided into zones which were mapped at different scales as follows:

Administrative Regions I, II, III, and IV = 1:250,000 scale
Administrative Regions V through X = 1:50,000 scale
Administrative Regions XI and XII = 1:100,000 scale
Region XII Fiords = 1:250,000 scale

The land register was based almost entirely on aerial photographs at varying scales depending on the region. Scales ranged between 1:20,000 and 1:70,000.

The extremes of the country, the desert areas to the North, and the canals and fiords to the south were mapped based on satellite images at a scale of 1:250,000 with a 79 meter resolution. Aerial photographs were also interpreted.

Nine land use categories were developed, with some forest sub-categories. In addition to classifying the different land use categories and the vegetation density for the different stands identified in the aerial photographs, other attributes also were measured in the field. All of the information was digitized and entered into a Geographic Information System (GIS).

This map was produced by Global Forest Watch partners Comit  Nacional Pro Defensa de la Fauna y Flora (CODEFF) and Universidad Austral de Chile.

Description:

This map shows the different vegetative land cover types in Chile's Administrative Region XII. This region is one of the least disturbed regions in Chile. It has 2,625,013 hectares of native forest, of which 36 percent are considered frontier forests¹. Frontier forests are defined as mature forests or dense timberline forests which are of at least 5,000 hectares, are made up of native species, and are intact or have been only slightly altered. This region has low human population density and fewer forest-related industrial developments compared to other regions of the country.

This map also shows the national (yellow outlines) and private (black outlines) protected areas in these regions, as well as the location of the main development projects² and forestry companies affecting native forests. At the regional level, Region XII has almost 14 percent of its frontier forests protected, however, when compared to the rest of the country, this area only represents 2.9 percent of the of frontier forests protected. As in Region XI, despite the large tracts of protected frontier forests, some forests types in Region XII are still unprotected by the national system of protected areas.

As of 2001, there were five development projects all owned by the company ENAP in Region XII that may negatively impact frontier forests. These include the Kimiri Aike-Cabo Negro gas pipeline in Punta Arenas and San Gregorio districts (numbers 21 and 22 on map); the Catalina Sur - San Gregorio poliduct in the Primavera and San Gregorio districts (numbers 23 and 24 on map); and the Posesi n - Cabo Negro gas pipeline also in San Gregorio (number 25 on map).

FOOTNOTES:

¹The map contains two categories of frontier forests, according to the minimum block size (or the minimal surface area of forests that meets Global Forest Watch's definition and criteria for frontier forest)-- those that have a surface area of at least 5,000 hectares, and those with an area of at least 10,000 hectares. These block size thresholds were determined by the Global Forest Watch- Chile Technical Advisory Committee in consultation with Chilean foresters and biologists.

²The development projects included here are only industrial projects. Forest management projects are shown in the map, but are not listed individually.