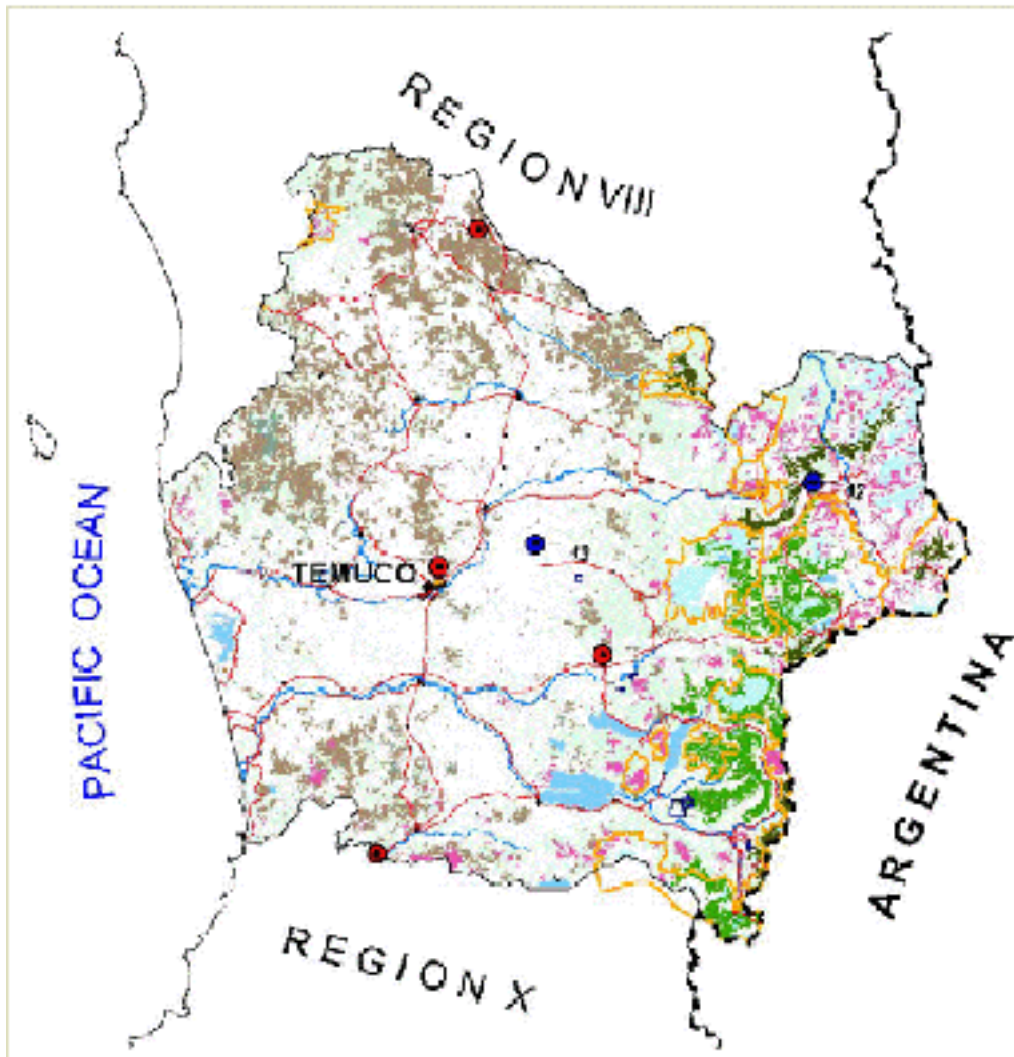


Chile's Frontier Forests: Frontier Forests, Other Vegetative Cover, Protected Areas, and Forest Activities in Administrative Regions IX



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 Comite 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 IX. The forests in this region, as in other north-central regions of the country, have been heavily altered due to land use changes, selective logging, plantations of exotic species, and forest fires. Region IX has 907,521 hectares of native forests, of which 17 percent are frontier forest. Frontier forests¹ 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's frontier forests represent only 3.5 percent of the frontier forests in the country.

The map also shows the national (yellow outlines) and private (black outlines) protected areas in this region, as well as the location of the main development projects² and forestry companies affecting native forests. Although Region IX has less frontier forest than other regions, almost half of its frontier forests are protected. However, Chile's National System of Protected Areas does not include critical areas of native forest in the coastal forests of Regions IX, even though they are currently at risk of disappearing or being severely degraded. The development projects in Region IX as of 2001 that may have a negative impact on native forests are the Ralco hydroelectric plant owned by ENDESA in the Lonquimay district (number 12 on the map) and the San Vicente Temuco oil pipeline owned by the Sociedad Nacional de Oleoductos Ltda. in the district of Vilcún (number 13 on the map).

FOOTNOTES:

1 The 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.

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