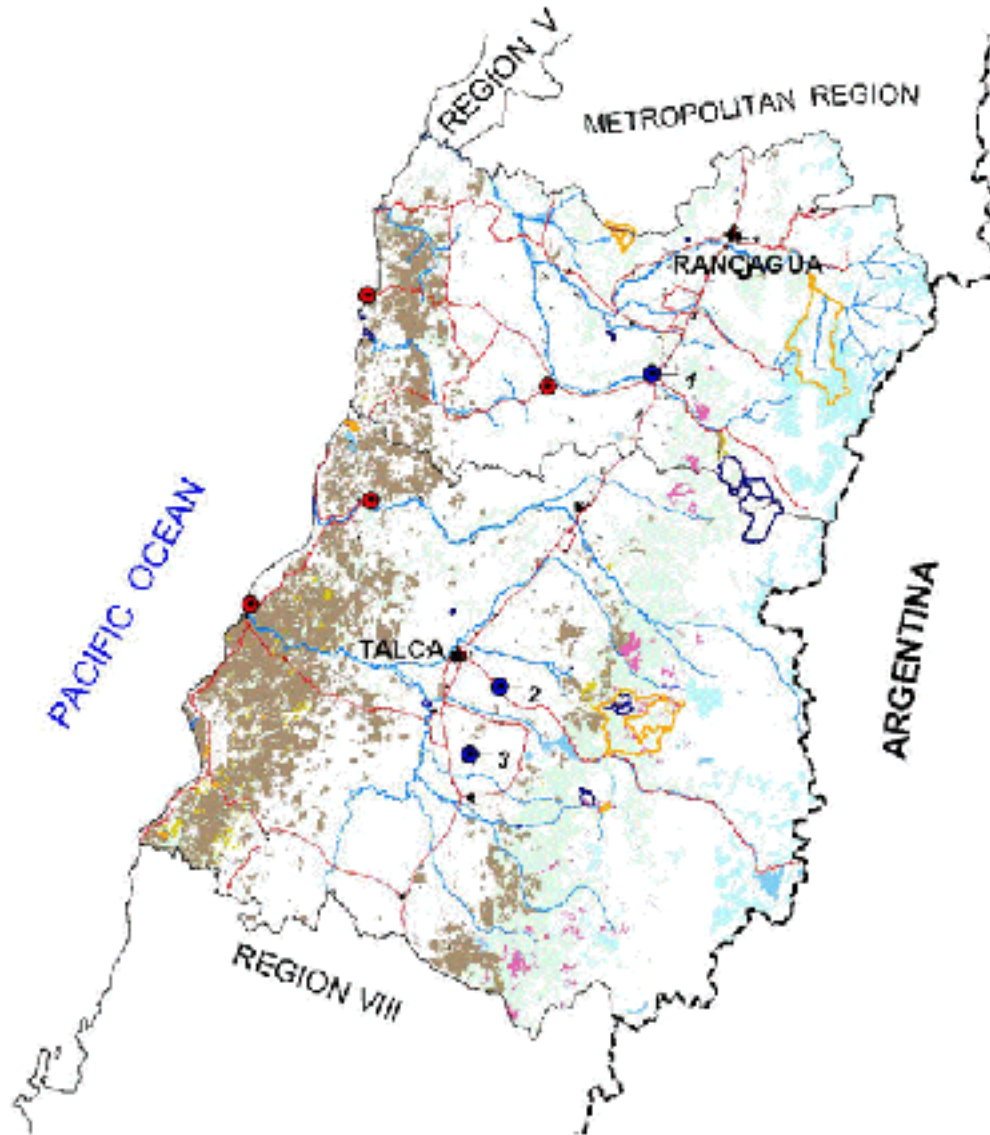


# Chile's Frontier Forests: Frontier Forests, Other Vegetative Cover, Protected Areas, and Forest Activities In Administrative Regions VI and VII and VIII



**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 Regions VI and VII. It highlights the areas of forests and those occupied by forestry plantations. The forests in Administrative Regions VI and VII have been extensively altered and degraded; forestry plantations of exotic species such as pine and eucalyptus have expanded over the years and have replaced the native forests (areas shown in brown on the map).

Regions VI and VII have no remaining frontier forests. 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.

Forty-nine percent of native forests in Region VI and forty-two percent in Region VII are altered or degraded. However, these regions contain important fragments of old-growth forest. These fragments are not large enough to be considered frontier forests, but are crucial in maintaining important and unique ecological processes. Because in many cases these fragments are the only remaining parcels of particular native forest types in the country, they are key elements in maintaining the biological diversity of these ecosystems and can play a key role in forest restoration initiatives.

Region VI has 1,084 hectares of remaining old-growth native forests in continuous blocks ranging from 6.25 hectares to just under 5,000 hectares. Region VII has 22,575.4 hectares of old-growth forest fragments, which amounts to 6.1 percent of the Region's native forests.

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 projects<sup>1</sup> and forestry companies affecting native forests. As of 2001, Regions VI and VII had three industrial projects which may negatively impact native forests. These projects include the placement of electricity transmission lines in the San Fernando district by the company Transelec (number 1 on map), the Loma Alta hydroelectric plant in San Clemente owned by Pehuenche S.A. (number 2 on the map), and the paperboard production plant owned by CMPC in the Yervas Buenas district (3).

### FOOTNOTE:

<sup>1</sup> The development projects included here are only industrial projects. Forest management projects are shown in the map, but are not listed individually.