

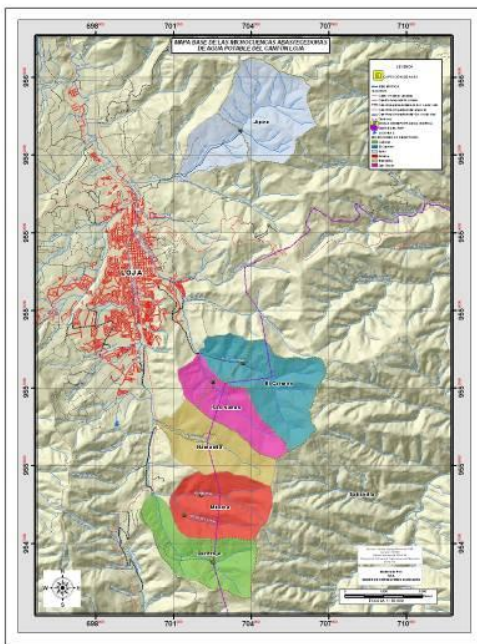
CONSERVATION OF WATERSHEDS IN THE SOUTH OF ECUADOR.

On July 19 of this year, the city of Loja passed an *Ordinance for the Protection of Watersheds and Other Priority Areas for Conservation of the Canton of Loja*. This ordinance establishes a special tax on the consumption of drinking water, to pay for the conservation of the watersheds from which the water derives. This fee varies from 3 to 7 cents per cubic meter for residential water users, to 10 cents for industrial users. These revenues will be placed in a dedicated fund, and in the case of Loja are expected to generate approximately \$250,000 a year.



The ordinance also establishes municipal authority to establish the watersheds and other priority areas for conservation of the natural resources in Loja canton as reserve areas. It further creates a process for zoning that will limit the uses of areas according to the aptitude of the soil, vegetative cover and importance for watersheds, prioritizing the collective interest over the individual.

The basis for this action was a study undertaken by Nature and International Culture (NCI) with funding support of the Overbrook Foundation, as well as Environment Resources Trust. This study evaluated the vegetative cover of the watersheds, appraised the impact of land use on the water resource, and identified the benefits of imposing an environmental service fee to better conserve the habitats, and improve water quality and quantity for the municipality.



Loja's water derives from six watershed basins adjoining Podocarpus National Park, that were originally completely covered with rich and extremely biodiverse cloud forests (see map to the left). NCI's study found that as much as forty percent of the area within some watersheds had been converted from forest to pasture and other uses, with severe lowering of water quality and quantity. This situation led to the recommendations that are now enacted in the above ordinance.

Many cities in southern Ecuador are experiencing a growing lack of drinking water, due to rapid population growth coupled with deforestation of the watersheds supplying the water. This deforestation is exacerbated by global climate change, that accentuates the vulnerability and importance of these areas that provide drinking water for populations. For example, inhabitants of Loja already suffer water rationings during some parts of the year, and smaller cities like Celica can supply only two hours of water per day during the dry months.

NCI is also actively working with all municipalities of the Province to establish a Regional Water Fund as a mechanism to finance and manage natural areas that form the watersheds of participating municipalities. This will be established as a trust fund (fidecomiso) to dedicate and administer the resources collected from water fees, and invest them in conservation projects within the jurisdiction of each municipality. Funded activities would



include: land purchase, land protection and management costs, environmental service fees, fire control, fencing, reforestation, and natural regeneration. This fund would also be able to collect contributions of businesses, private donors and international cooperation. In return for the benefits of the Fund, municipalities would be required to establish a specific ordinance that protect the watersheds, and establish a fee on water use that generate resources for the conservation of the areas.

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