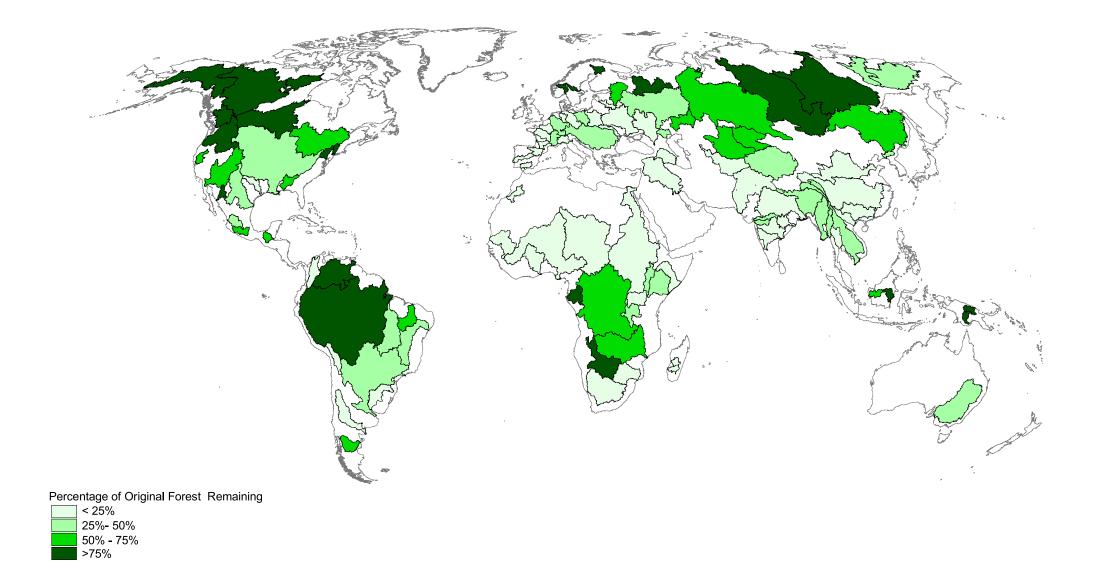
Watersheds of the World - Remaining Original Forest Cover



Map Projection: Robinson

Citation: Revenga, C., S. Murray, J. Abramovitz, and A. Hammond, 1998. Watersheds of the World: Ecological Value and Vulnerability. Washington, DC: World Resources Institute.

Analytical Overview:

The Original Forest and Current Forest extent maps were produced by the World Conservation Monitoring Center using many global and regional biogeographic maps. These maps were developed for inclusion in the World Resources Institute report, The Last Frontier Forests: Ecosystems and Economies on the Edge, published in 1997.

Source:

Revenga, C., S. Murray, J. Abramovitz, and A. Hammond, 1998. Watersheds of the World: Ecological Value and Vulnerability. Washington, DC: World Resources Institute, based on data from Bryant, D., D. Nielsen and L. Tangley, 1997. The Last Frontier Forests: Ecosystems and Economies on the Edge. World Resources Institute.y

Description:

Forests and other vegetation are crucial components of the watershed, as they maintain water quality and moderate water flows, reducing runoff during high-water periods and maintaining flow during dry periods. In addition, forests provide habitat for many terrestrial species. In many floodplain areas, forests also provide much of the food and breeding grounds on which fish and other species depend. The extent of historical deforestation is thus a useful indicator of watershed degradation. This map shows the percentage of original forest cover remaining in each basin. This percentage was calculated by dividing the extent of current forest cover in square kilometers by the extent of original forest cover in square kilometers for each basin. Current forest refers to closed canopy forest in existence today. Original forest cover refers to an estimate of the extent of closed canopy forest in existence 8,000 years ago, assuming current climate conditions. 42 watersheds have lost more than 75% of their original forest cover. Fifteen of these have lost more than 95% of their original forests. Most of these basins, with the exception of the Tigris and Eupprates, are found in Africa, Central America and Europe.

It is important to note that some areas denoted as having remaining original forest cover, particularly in Western North America, Mexico, and Scandinavia, are actually covered by intensely managed fiber plantations. The management practices in these plantations can have detrimental effects on water quality and aquatic species. Therefore, these data should be interpreted with caution.