A fluvial landscape: the Andes -Amazon-Atlantic connection

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The Amazon is an intricate river system that originates in the high elevations of the eastern flank of the Andes. From their glacial sources in the Andes, rivers flow towards the Atlantic, and, in the process, form a complex network of aquatic habitats, including oxbow lakes, streams, and flooded forests. As rivers flow across this mountainous landscape, they gather, carry and deposit sediments into alluvial plains in the lowlands, and support the most biodiverse ecosystems on the planet. Dams, roads, and other alterations to connectivity can interrupt this pathway and severely impact biodiversity, fisheries, and the habitats that support thousands of wildlife species and people.

Main tributaries of the Amazon

13%

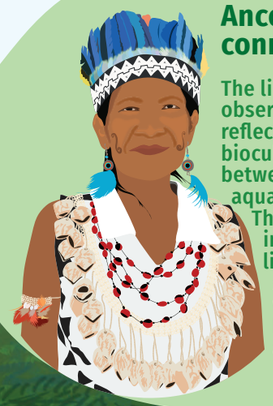
of the Amazon Basin corresponds to territories located above 500 m above sea level.

Andean-Amazonian foothills zone

Creating floodplains

Sediments from the Andes contain nutrients that are deposited on the floodplain during the high water season. The vast majority of sediments carried by rivers come from the Andes and contain much of the phosphorus and nitrogen that enriches the soils and supports the basin's amazing plant diversity.

Ancestral connections



The linguistic diversity observed in the Amazon reflects the strong biocultural connections between humans and aquatic ecosystems. Thus, freshwaters are integral to people's lives and culture and sustain traditional ways of being and knowing for millions across the basin.

Disrupting the flow of water

Dams and highways are among the main drivers affecting the connectivity between the Andes and the lowlands.

Waterways

Amazonian rivers function as pathways for many migratory fish species including those that perform continental migrations from the estuary to the foothills, inter-basin migrations across different sub-basins, or short-scale migrations between rivers and oxbow lakes.

Up to 1,000 km offshore, water from the Amazon can be observed in the Atlantic Ocean.