The clear waters of the Vichada River originate in the Altillanura and travel 1,055 km through the Meta and Vichada Departments before flowing into the Orinoco River, near the Tuparro River. The relatively large and linear basin (2,621,190 ha) includes seasonal savannas, tropical rain forest, gallery forest, and flooded savannas linked to the main channel of the river. The main threats are expansion of agriculture, intensive oil and gas exploitation in the upper part of the basin, illegal farming, and land ownership conflicts.

Characteristics of the Vichada River Basin

The Vichada River Basin received an overall B- grade (61%). Of the nine indicators assessed, all were excellent (>80%) or good (60-80%) except for human nutrition (50%) and mining in sensitive ecosystems (25%), the latter reflecting the level of mineral and hydrocarbon exploitation in the western headwater portion of the Vichada River Basin, mainly in the Puerto Gaitan municipality. The contradiction between the excellent indicator scores for the current state of ecosystems and landscapes and the very low scores for indicators of mining in sensitive ecosystem suggests that either exploitation activities are not yet impacting the river basin or that monitoring is not capturing these impacts, making this an issue that will be useful to track in future report cards. No biodiversity data was available for this version of the report card, but it is anticipated that new information on river dolphin abundance will become available for future report cards.

Moderately good health for the Vichada, despite pressure in the headwaters

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The Vichada River Basin is experiencing unprecedented oil and gas extraction

The Vichada Basin is a place of great cultural diversity where farmers and indigenous communities of the Guahibo, Piapoco, Cubeo, Curripaco, Piaroa, and Puinave ethnic groups live on expansive green savannas. Over the last decade, the number of oil and gas wells drilled each year in the Rubiales oil field, located 167 km from Puerto Gaitan, has increased almost 50-fold, placing unprecedented pressure on the western portion of the Vichada River Basin. With a current production rate of 264,000 barrels per day, the Rubiales oil field is one of the largest in Colombia. The expansion of this industry has resulted in the rapid development of road infrastructure, expansion of towns, job production, migration to the region, and a rise in land ownership conflicts. Proper land use planning and benefits sharing mechanisms are urgently needed in this region to improve sectoral planning and avoid adverse environmental and social impacts.

A need to know more

The extensive biological diversity found in the basin demands significant investments in biodiversity assessments and monitoring to supplement important yet fragmented biodiversity records. Additionally, more information is needed on the topics of agricultural and livestock certifications, fisheries, river-related cultural values, and the state of water resources in protected areas in order to include related indicators in subsequent report cards.