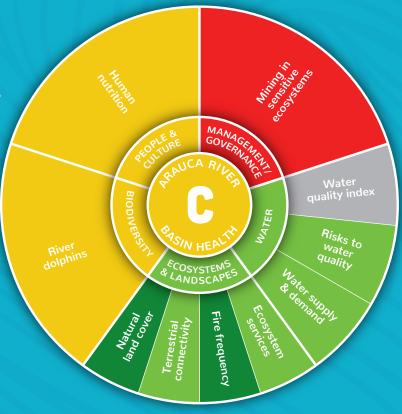


## **Characteristics** of the Arauca River basin

The Arauca River is the northernmost tributary of the Orinoco River Basin. It originates in the Andes and much of its 1,001 km length forms the border between Colombia and Venezuela. While the Arauca River Basin is dominated by flooded savannas, it is also home to seasonal savannas, paramos, and Andean rainforest. Key threats within the basin include rising levels of deforestation, agriculture, petroleum infrastructure, and chemical spills. The Arauca River Basin Report Card covers the Colombian portion of the rivers which forms the headwaters for the Venezuelan Cinaruco and Capanaparo Rivers.

# The river connects two nations and faces challenges

The Arauca River Basin received an overall C grade (51%). Of the nine indicators assessed, results varied widely, with generally better results for indicators representing the categories Ecosystems & Landscapes and Water. Lower scores were received by indicators representing Biodiversity, People & Culture, and Management/ Governance, with the indicator of most concern being mining in sensitive ecosystems. However, many of the lower scoring categories also had the fewest indicators due to data limitations. Also, no water quality sites in the basin are currently included in IDEAM's National Network Monitoring Program, so this indicator could not be included due to insufficient data.



#### What do the scores mean?



## **Floods** threaten the way of **life in the Arauca River**

For the communities that inhabit the nearly 3,000 ha of the Arauca River islands and adjacent lands, there is no worse threat than rainfall-induced flooding These floods destroy crops, houses, roads, and other infrastructure. With population increases in this region, smaller streams are diverted to accommodate for new infrastructure which also leads to greater impervious surfaces. The combination of these factors result in reduced river connectivity, reducing flows for important wetlands, such as the Lipa Lagoon, and increased flood risk. River connectivity is important for proper river flow, animal migration, and movement of energy and matter throughout the basin. In the Arauca municipality, local communities are building infrastructure (such as dikes) and working to restore streams back to a natural state which will help mitigate the flood risk.



The Arauca River is an important transportation route for local people, though flooding from the river is one of the biggest problems in the basin.











# Arauca's hydrocarbon resources are increasingly exploited

The Arauca region is the most representative area of oil exploitation in Colombia. The first exploration activities began in the Arauca and it now has one of the most important petroleum fields in the country, called Caño Limón. This oil-field is located in the Arauquita municipality in close proximity to the Arauca River. Since coming on-line, it has produced more than 1,300 million barrels of oil and was the catalyst for oil exports from Colombia. Since the early 1980's, oil production has replaced agricultural activities in the Arauca River Basin to become the dominant economic activity in the basin, producing big challenges.

According to the National Government, 7,003 oil wells have been established in the Colombian portion of the Orinoco River Basin, making this region the most important for oil production in the entire country. While this economic sector has greatly improved the economy, it is important to consider the impacts from this activity and associated increased development. Besides the radical political and social transformations that resulted from the oil boom in Arauca, the population has increased 2.8 times since 1985. This has caused additional pressure on the basin for food resources.

### 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, information is needed on the topics of wastewater, the state of river-related cultural values, impacts of hydrocarbon exploitation, and river connectivity in order to include related indicators in subsequent report cards.

#### VALUES | FUTURE INDICATORS



















