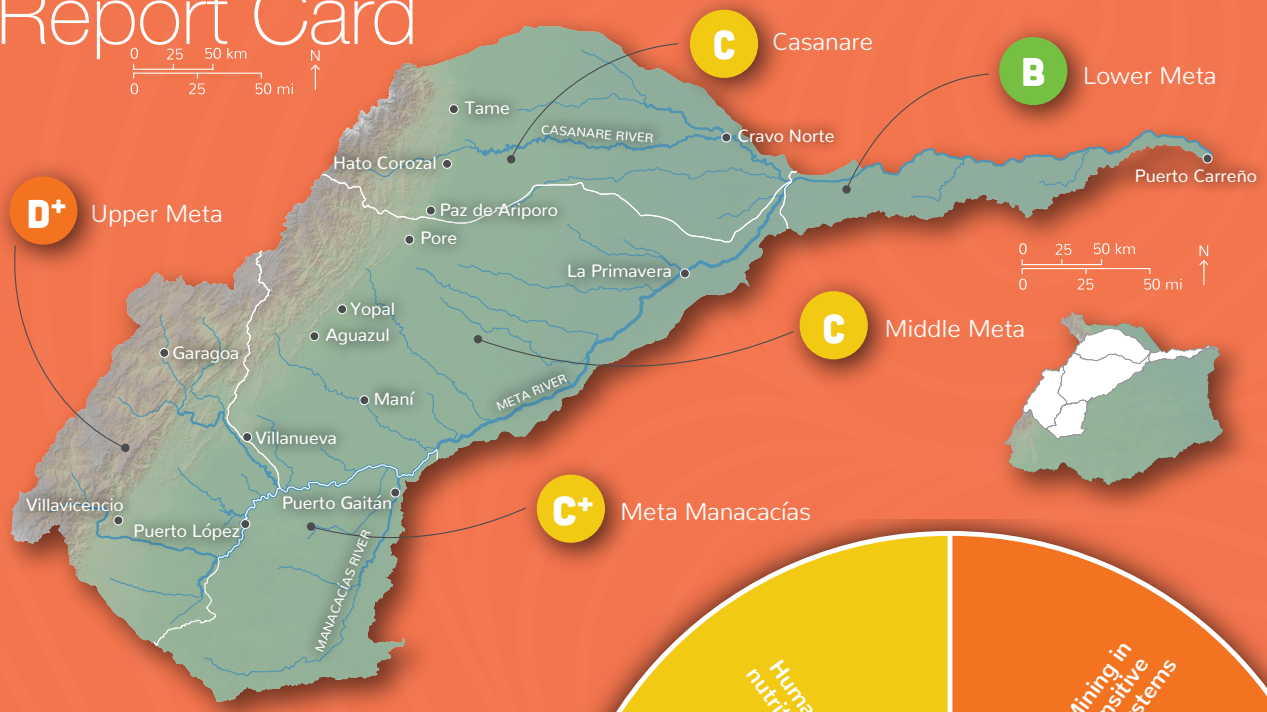
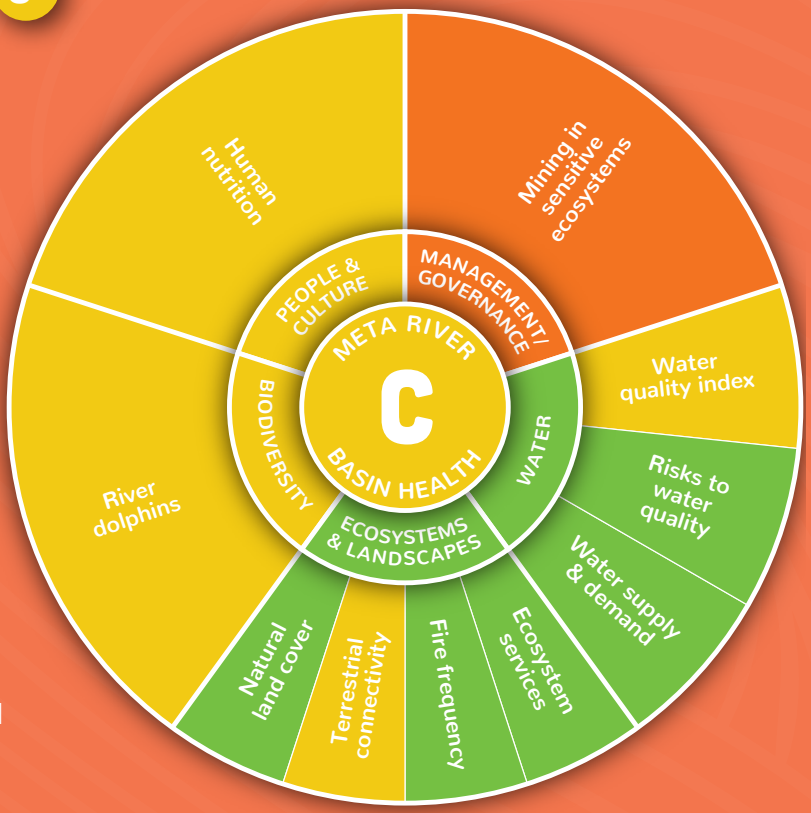
Meta River Report Card 2016



Characteristics of the **Meta River Basin**

The Meta River originates in the Andes and is the largest sub-basin of the Colombian portion of the Orinoco River (1,250 km long and 10,673,344 ha in area). Due to its size and varied land-uses, the Meta sub-basin has been split into five reporting regions for this assessment, the Upper Meta, Meta Manacacías, Middle Meta, Casanare and Lower Meta. The basin includes many ecosystem types such as the Páramo, Andean forests, flooded savannas, and flooded forests. Main threats to the sub-basin are from livestock expansion, pollution by urban areas and by the oil and gas industry, natural habitat loss by mining and agro-industry, and growing conflict between different sectors for water supply.



Poor health of Andean headwaters puts **eastern plains at risk**

The Meta River Basin received an overall area-weighted average grade of C (48%), with the Upper Meta receiving a D+ (37%), Meta Manacacías a C+ (56%), Middle Meta a C (49%), Casanare a C (47%) and Lower Meta receiving a B (71%). This represents a strong transition in the health of the basin with poorer conditions in the western Andean portion and better conditions towards the eastern plains, which is still unfortunately impacted by poor upstream conditions.

What do the scores mean?

A 80–100%	C 40–60%	F 0–20%
B 60–80%	D 20–40%	no data

Overall basin scores ranged from as low as 21% for mining in sensitive ecosystems, to 76% for risks to water quality. The overall scores for the entire sub-basin, however, do not reflect the full story about the conditions in specific areas. Poor scores in different parts of the basin result from region-specific resource exploitation patterns. For example, failing scores in the Upper Meta for terrestrial connectivity are due to historical fragmentation of the landscape.

The Casanare had failing scores for mining in sensitive ecosystems, due to mining in wetlands and riparian forests located in the Tame, Paz de Ariporo, and Hato Corozal municipalities. The Casanare received the second-worst score for water quality (37%) in the entire Orinoco Basin, likely as a result of oil and gas pressures. The Meta Manacacías basin had poor scores for fire frequency, likely due to the expansion of agro-industries. The Middle Meta had failing scores for mining in sensitive ecosystems, and low scores for the water quality index (46%) and terrestrial connectivity (46%), due to growing urban areas and new infrastructure.

The challenges of the **Altillanura** (eastern plains)

Rapid changes in land-use have taken place in the Altillanura as a consequence of agricultural expansion. Livestock production covers the largest area of land use (5.5 million ha), followed by rice crops (190,000 ha), palm oil plantations (87,000 ha), and tree plantations (30,000 ha). There are also projects to improve navigability and port infrastructure along the Meta River to increase transportation of agricultural supplies and movement of goods. This is a reflection of the National Government of Colombia's plan to promote agro-industry in the Llanos region of the Orinoco, which makes up most of the Meta River Basin. It is important to consider the environmental implications of these projects in order to avoid negatively altering the natural hydrology and linked ecological processes that are critical to this important river. Advocating and implementing environmentally sustainable practices is needed in order to maintain the agricultural livelihoods dominant in this region.

Grasslands are important for livestock grazing in the Meta.

Music keeps the **Llanos culture alive**

"Llanero" is the name for people that currently inhabit the Llanos. For the llaneros, their culture and traditions are very important and music is integral to their way of life. The music from the llanos is so popular that every year the city of Villavicencio becomes the headquarters for the International Joropo Tournament - the most important regional Llanos folk festival for both Colombia and Venezuela. Thousands of people arrive to participate in the Joropo dance, celebrate, share songs about the river, and enjoy the picturesque Orinoco sunrises, and their working lands.

Dancing and music are vital cultural activities in the Meta.

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 the state of river-related cultural values, agricultural and livestock certifications, ecotourism, and navigation and transport —which currently has erratic and outdated data— in order to include related indicators in subsequent report cards.

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