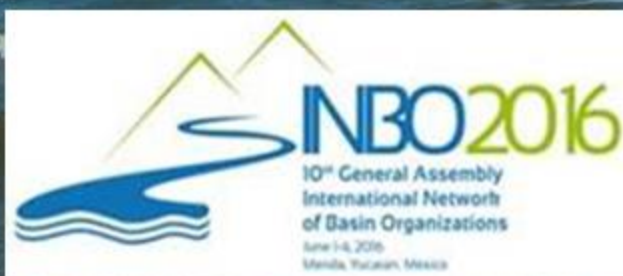


The value of Lake Cocibolca (Nicaragua)



**Prof. Salvador
Montenegro Guillén**



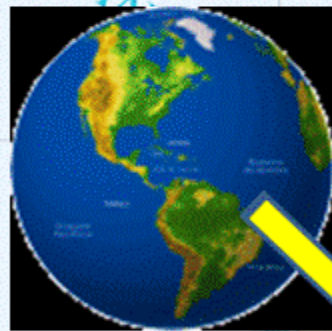
Mérida, Yucatán Junio 1-4 MMXVI

Nicaraguan Great Lakes watershed spans 42 000 km², (70% in Nicaragua, 30% in Costa Rica), it contains Lake Cocibolca or Nicaragua (~8 250 km²), which at surface mean level of 31.32 masl, discharges through Río San Juan approx 250 m³s.

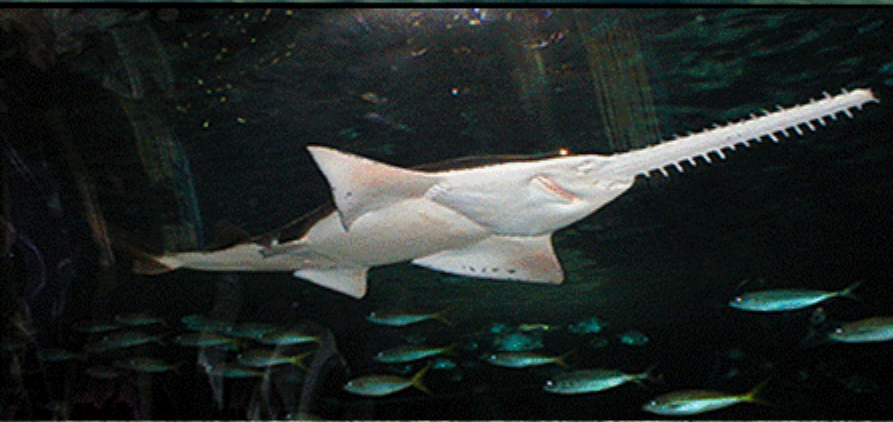
Lake Cocibolca is shallow, windy, with great potential as drinking supply and irrigation due to its good water quality, both for Nicaragua's population of 6 million, and neighboring countries. Its biological diversity is unique and very fragile.

CUENCA No. 69
RÍO SAN JUAN DE
28,995.54 km²

CUENCA No. 69
RÍO SAN JUAN
(Área de Drenaje en Costa Rica)
13,040.04 km²



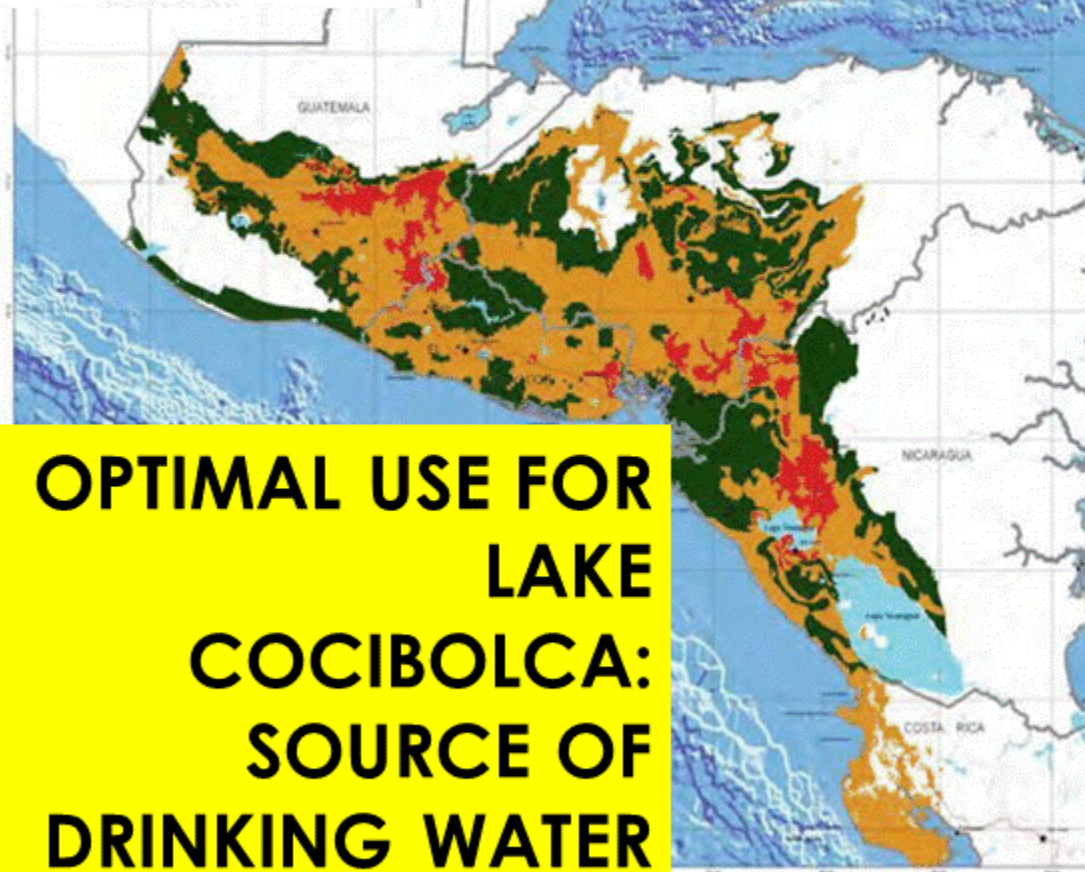
OPTIMAL USE FOR LAKE COCIBOLCA: SITE OF HIGH BIOLOGICAL DIVERSITY



Ecological basis for sport fishing and tourism. In neighboring Costa Rica, this activity brings more than US\$600 million a year

**CORREDOR SECO
CENTROAMERICA**

CORREDOR SECO



**OPTIMAL USE FOR
LAKE
COCIBOLCA:
SOURCE OF
DRINKING WATER
DOMESTIC AND
REGIONAL**

At 31.32 masl, Lake Cocibolca discharges 250 000 liters every second, or $250 \text{ m}^3\text{s}$. In a day that is $21.6 \text{ Mm}^3\text{d}$.

- Should every nicaraguan (6 million people) be supplied with one barrel per day (200 liters), we would use $240 \text{ 000 m}^3\text{d}$.
- If we could export $20 \text{ m}^3\text{s}$ (10 to El Salvador and 10 to Costa Rica) : = $1 \text{ 728 000 m}^3\text{d}$. If priced at one dolar for every m^3s = $\text{US\$ } 631 \text{ Millions /year}$

Domestic and exported drinking water would account for 10% of lake's outflow.

The study "Una Estrategia de Riego de las Planicies del Pacífico de Nicaragua", considers that only the Great Lake of Nicaragua is capable of supplying the water for irrigation of 625,000 hectares of best soils in Nicaragua located between sea level and 100 masl.

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