



12th World General Assembly of INBO

Transformation of basin governance in light of climate challenges in Cuba.

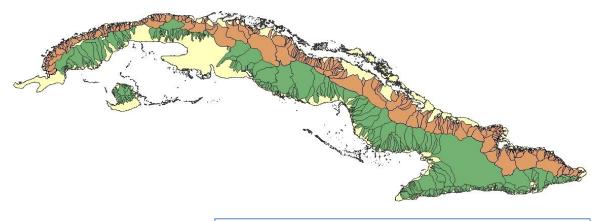
October 9, 2024



Characteristics for safe water supply

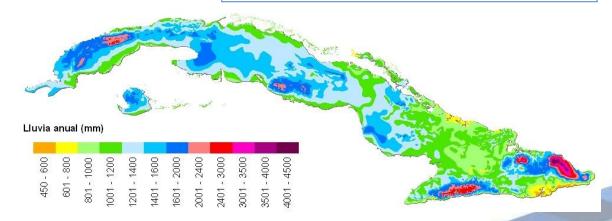
- → Small Island Developing State (SIDS)
- → Vulnerability inherent to our archipelago status.
- → Dependence on rainfall behavior.
- → Climate variability.
- → Impacts of extreme hydrometeorological events.

652 river basins, 85 % area smaller than 200 km² 100 aquifers dominated by karst



Average annual rainfall: 1335 mm

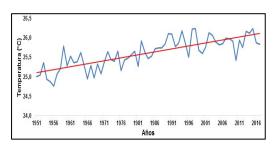
Wet season: 70 %



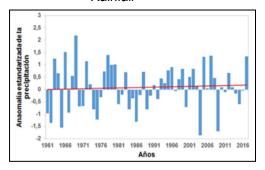




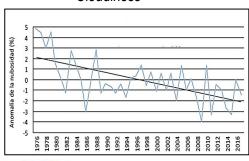
Temperature



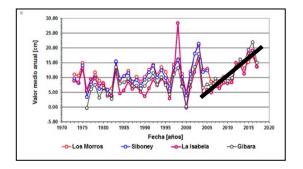
Rainfall

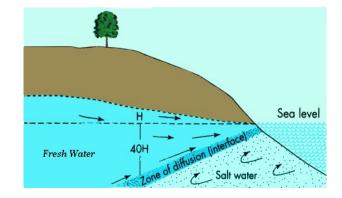


Cloudiness



Sea level





. Decrease in water potential



By 2030 there should be an approximate 10% reduction. Could be less, due to the impact of marine intrusion resulting from the increase in average sea level, which has been estimated for the year 2050 at 29,3 cm.

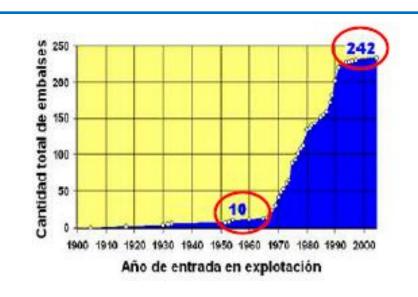
2. Increased rainfall flooding in urban and rural areas.

Records of high rainfall values in a short period of time and the inability of existing drainage systems to evacuate or the non-existence of such systems.





Transformation of water infrastructure and hydrological monitoring networks



Dams: 242

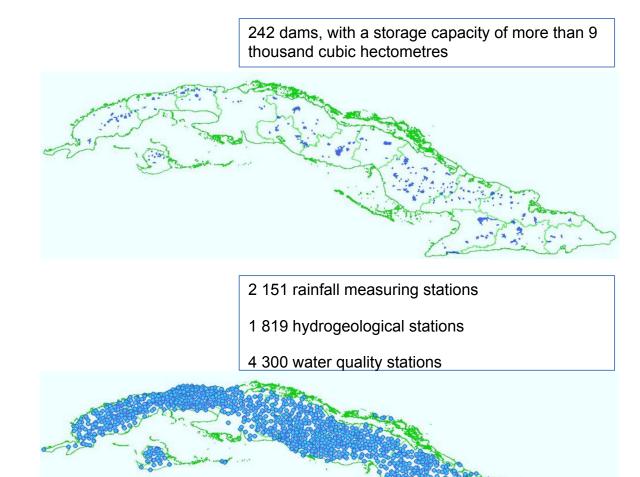
Small dams: 794

Aqueduct pumping stations: 2 767 Transfer pumping stations: 20 Drinking water treatment plants: 73

Flood protection works: 1 401 km Master driving channels: 806 km

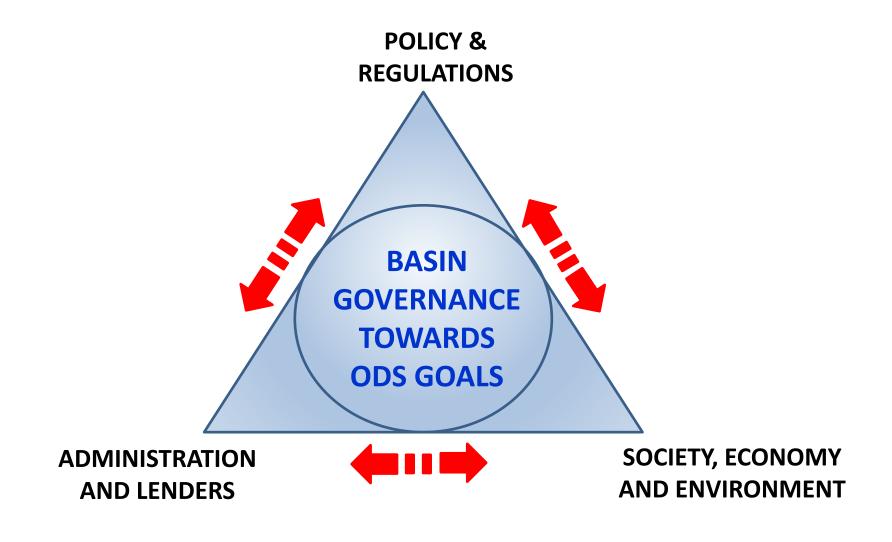
Irrigation canals for agriculture: 22 806 km

Agricultural irrigation pumping stations: 20 000













National regulations for river basin councils

- National Water Policy (2012)
- Law 124 on terrestrial waters and its regulations(2017)
- National Regulation of Basins Councils (2019)

13 Basin council work programs

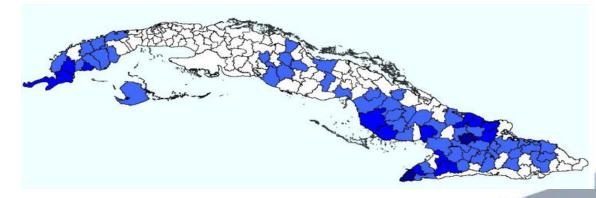
- Elaboration of land use planning schemes by river basins.
- 2. Investment and current expenditures for the protection of natural resources.
- 3. Modernization of hydrological cycle and water quality observation networks in river basins.
- 4. Water balance and annual allocation plan by river basin.
- 5. Integrated management of water quality and pollutant sources.
- Increase in forest area.
- 7. Soil conservation, protection and improvement measures.
- 8. Interdisciplinary, sectoral and community.
- 9. Sustainable management of biological diversity.
- 10. Introduction of science and technological innovation in integrated water management.
- 11. Sustainable use of mineral resources.
- 12. Cooperative surveillance of natural resources.
- 13. Education, awareness-raising, outreach and citizen participation

National Basin Council, led by INRH.

12 Basin-specific councils in basins of national interest.



15 Provincial and 168 municipal Basin Councils Local government-led









Dique Sur Artemisa Mayabeque



Aquifer recharge works in Ciego de Ávila









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