

# SYNTHESIS OF POLICY INTERVENTIONS RESPONDING TO COMMON INTEGRATED WATER RESOURCES MANAGEMENT CHALLENGES IN THE CARIBBEAN SIDS

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# OBJECTIVE

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Policy recommendations aimed at supporting sustainable water resources management through an integrated water resources management (IWRM) approach in the Caribbean SIDS

Based on an assessment of the approaches and the challenges affecting IWRM implementation in the seven Caribbean SIDS

Countries: The Bahamas, Barbados, Belize, Guyana, Jamaica, Suriname & Trinidad and Tobago.

## **POLICY RECOMMENDATIONS FOR AN ENABLING ENVIRONMENT**

Mainstream and align IWRM into national economic, social, and environmentally sustainable development policies, strategies, plans and measures - as such, building resilience in groundwater and surface water resources management and in particular to climate variabilities, climate change impacts and disaster management,

Establish legislation, regulations, and institutional arrangements to provide for an effective IWRM system and reduce the high level of disaggregated structures and institutions and overlapping responsibilities of organizations and sectors having IWRM functions including regularisation of unlicensed abstraction.

Review, assess and implement Water Abstraction Charges or Volume-Based Fees (VBF) for both surface water and groundwater sources based on the abstraction volumes and apply for all users, public and private. These water abstraction charges also serve as an important IWRM financial instrument and can encourage more efficient water use. These water abstraction charges should also be applied to the potable service provider (Utility service provider).

## **POLICY RECOMMENDATIONS FOR AN ENABLING ENVIRONMENT CONTINUED**

Assess and implement water resources demand management. The allocation of available water to different users or types of use should be based on an assessment and implementation of water demand management. To facilitate optimization of water use, incentives (and sanctions, where appropriate) for conservation, management of infrastructure, pollution control, water recovery, water recycling and water reuse should be considered for implementation.

Strengthen bilateral and multilateral plans for improved water management of Caribbean SIDS with Transboundary Water Agreements. These plans should also include agreed procedures for the management of the impacts of climate change and climate variabilities.

# POLICY RECOMMENDATIONS FOR IWRM INSTITUTIONAL FRAMEWORK

Establish an IWRM institutional framework and organizational structure that are legally defined, adequately financed, and appropriately resourced. The functions of which can include water resources assessment, regulation and allocation of the water resources for its uses, conservation, development and maintenance of a national water resources data and information database/system, development and implementation of water resources master plans and policy coordination across all sectors.

Engage, in organizations, the appropriate human resources capacities and capabilities in order to enhance or transform the implementation of IWRM. Core competencies to effectively provide for IWRM include water resources assessment, hydrological engineering, hydrogeology, water resources management, watershed management, environmental management, economics, natural resources, participatory stakeholder management and communication. These core areas are specialized and require that skills are current to meeting new and emerging water resources management techniques and technologies.

Establish an effective Public Education and Awareness Programme and a communication mechanism to address dissemination of water sector data and information to the public.

Establish/ Strengthen a National Stakeholder Coordination Mechanism and organizational structures including IWRM in transboundary water management and water transfer arrangements as in the cases of Belize, Guyana, and Suriname.

# POLICY RECOMMENDATIONS FOR IWRM MANAGEMENT INSTRUMENTS

Establish an institutionalized monitoring and accountability system for IWRM. This system should include having updated data on the status of water sources, abstractable volumes of ground and surface freshwater resources and sectoral demands and uses. This will support data review and updating of national plans on a scheduled basis. Use of water resources data in decision making will also result in more effective decision making, planning and savings in investment costs.

Ensure national laboratories for water quality analysis are properly resourced and equipped and there is effective data reporting. The operations of these water laboratories must be certified through recognized certification bodies.

Ensure that each country has a national IWRM Database and Information System with real time access to all stakeholders, particularly practitioners in disaster planning and management. This will require investments in geospatial technologies, citizen science participation and open data portal access. It is recommended that a shared data platform on IWRM resources be developed. This data platform can give controlled access to key stakeholders as well as to provide via read-only access to other stakeholders. This data management and reporting system will also serve towards meeting the reporting requirements of SDG 6 targets and indicators, and other regional and international multilateral agreements.

Explore Rainwater Harvesting for non-potable uses with the aim of reducing dependency on produced potable water. For communities that are not served from a central water supply grid or are underserved, training, capacity building and infrastructure services can be further developed for the collection, storage, and treatment of harvested waters to be used as potable water quality. Disaster risk management planning and policies should also include rainwater harvesting.

# IWRM AND THE COVID-19 PANDEMIC MANAGEMENT

With respect to the demands due to the COVID-19 pandemic control measures and impacts to IWRM operations, the following were identified:

- Greater accessibility to WASH services for all citizens. Particular attention has to be provided for WASH services to women, girls, youth and persons with disabilities.
- Potential decrease of revenue through water tariffs from the commercial sectors. Closure of the services sectors including restaurants, hotel, tourism, and cruise vessels decreased the potable water and wastewater demand services.
- The covid-19 pandemic lock-down measures delayed progress in water infrastructure development and maintenance.
- Increase in domestic water demands due to work and school from home covid-19 control measures.
- The loss of jobs and income impacted many including women, girls, youth, and other vulnerable communities. These consumers will require financial support and other incentives to meet their water charges.

## **Policy Recommendations For IWRM And COVID-19 Pandemic Management**

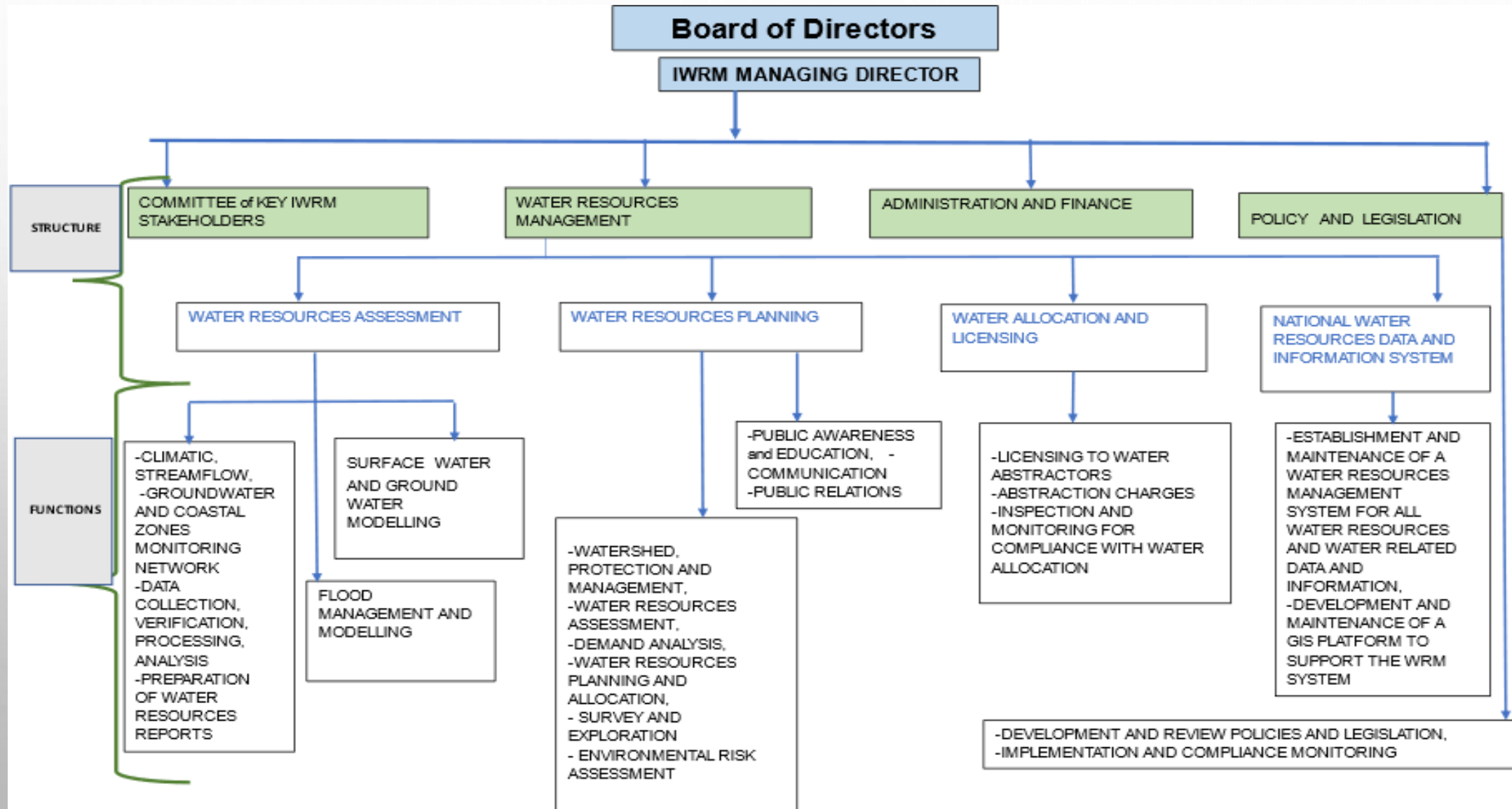
Establish a National COVID-19 Response and Recovery Plan which should include control measures and WRM Plans and ensure WRM Planning includes Operational and Recovery Plans addressing COVID-19 Pandemic.

Establish policies to support ministerial and institutional coordination particularly involving the water-resources, water distribution and health sector agencies to provide for timely and informed decision making.

This coordination arrangement should seek to provide for continuous monitoring, assessment and reporting of national water resources availability in terms of quantity and quality.

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# PROPOSED NATIONAL IWRM ORGANIZATION STRUCTURE





Thank you



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