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Regional meeting of the
Megacities Alliance for Water and Climate (MAWAC)
(Lagos State, Nigeria)

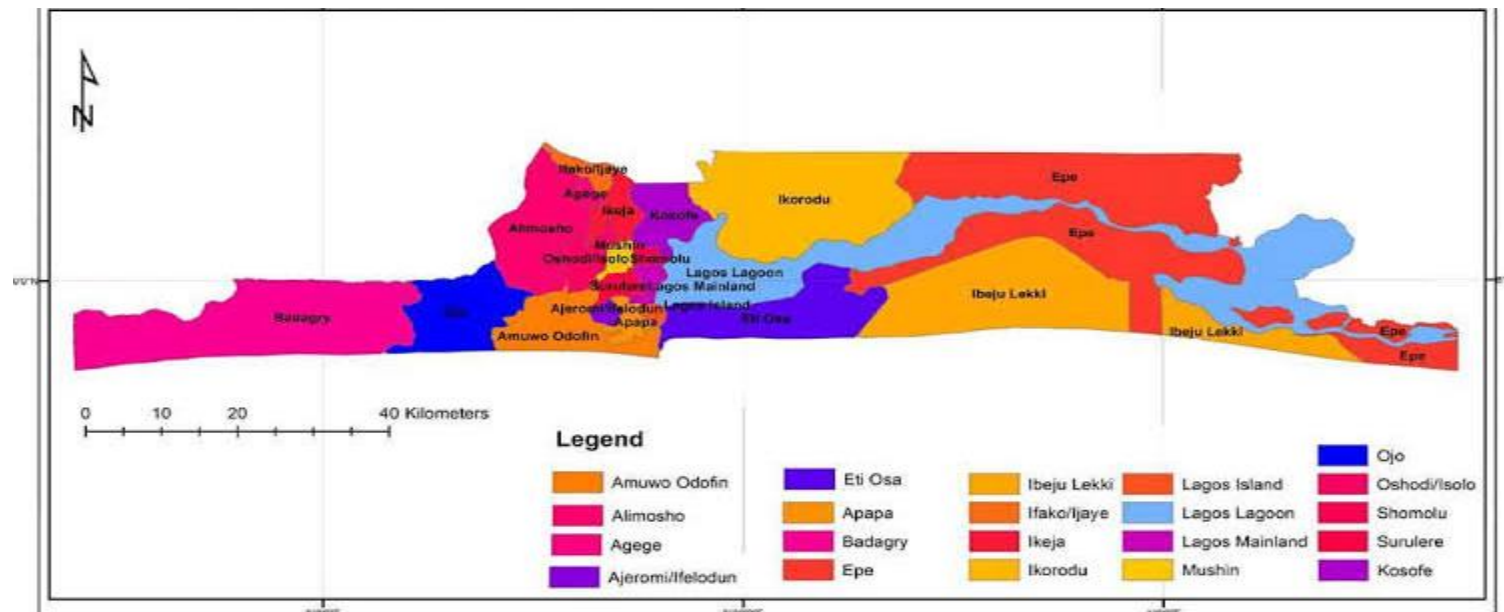
Presenter: **Funke Adepaju (Mrs.)**, Executive Secretary, Lagos State Water Regulatory Commission (LASWARCO)



DEMOGRAPHY OF LAGOS STATE

- Lagos State is located in the southwestern part of Nigeria around the coastal flood plain of the Bight of Benin.
- It lies approximately between longitude 2°42'E and 3°22'E and between latitude 6°22'N and 6°42' N.
- It is bounded in the North and East by Ogun State of Nigeria, in the West by the Republic of Benin, and in the South by the Atlantic Ocean.
- It comprised five administrative divisions of Ikeja, Badagry, Ikorodu, Lagos Island, and Epe, subdivided into 20 Local Government Areas (LGAs) and 37 Local Council Development Areas (LCDA).
- The state covers an area of 3,577 sq. km, representing about 0.4 per cent of the total land area of Nigeria.
- Due to the coastal nature of the state, it is characterized by flat terrain, with an average elevation of less than 15m above sea level.
- Going by the population growth rate of 3.44%, the estimated projected population for the State as at 2015 is 24.6 million (UN-Habitat and International Development Agency).

MAP OF LAGOS STATE



WATER SITUATION OF LAGOS STATE – A PRESENTATION FOR MAWAC

1.0: Introduction (Water Resources & Supply in the State)

- **Lagos Water Corporation (LWC)** – State Owned Municipal Water.
- **Infrastructures** – (i) **4 Major Waterworks** with total installed capacity of the of **119MGD (450.42 m³/d)**.
(ii) **48 Mini/Micro Waterworks**
(iii) Combined installed capacity of **91MGD (344.44 m³/d)**.
- Total Installed Capacity - **210MGD (794.85 m³/d)**.
- Total Demand - **840MGD (3179.4 m³/d)**.
- Transmission Mains - **180Km**.
- Distribution Main - **2215Km**.
- Demand/Supply Deficit - **630MGD (2384.55 m³/d)**.

BRACKISH WATER SOURCES (surface areas)

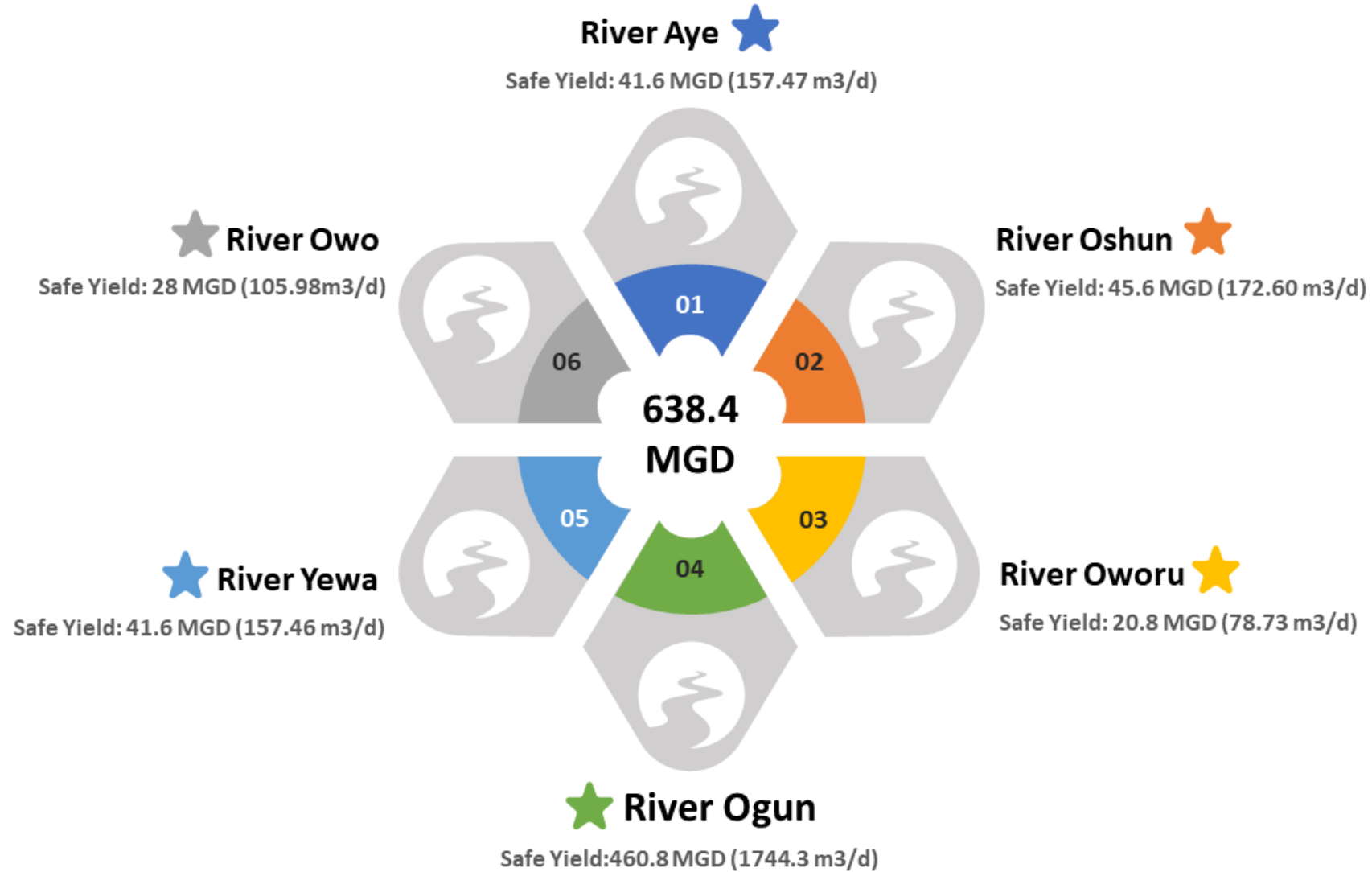
- **Lagos Lagoon** – 500 sqkm
- **Lekki Lagoon** – 300 sqkm
- **Badagry Creek** – 200 sqkm
- **Ologe Lagos** – 64 sqkm

GROUNDWATER: an estimated yield of **2.0 billion m³/d** in the State.



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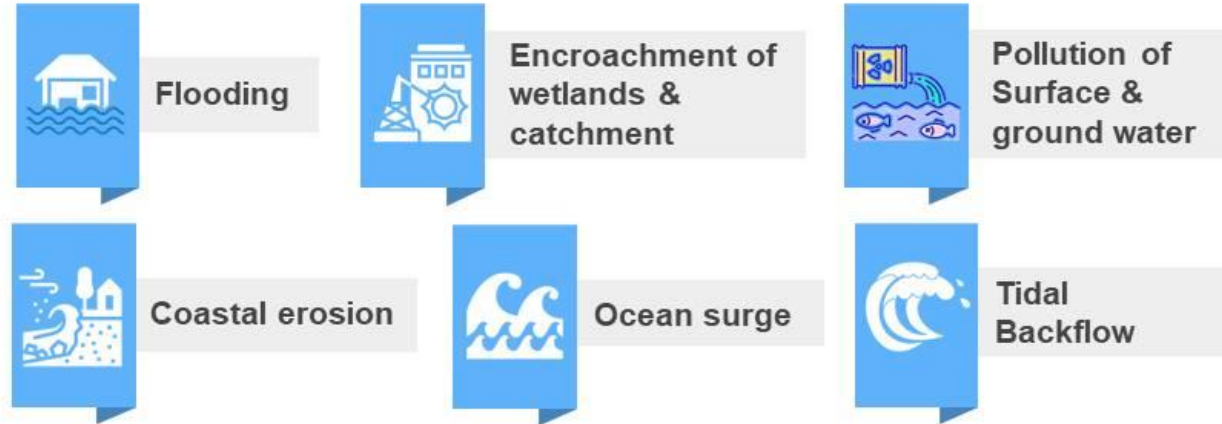
Source of Municipal Water: Surface Water via Safe Yield (638.4 MGD)



LAGOS WATER SITUATION

2.0: Challenges

Some Climatic challenges experienced in the city of Lagos include:



Other challenges experienced include:



3.0 Opportunities

- Legal and Institutional framework are in place to guarantee allowable returns on investment for operators in water and wastewater supply sector;
- Ready population of consumers (market) to be served (Population of 23.6 million with growth rate of 3.2% per annum according to Lagos Bureau of Statistic (LBS));
- Willingness to pay for services (Lagos Master Plan 2012);
- Expansion of water supply and wastewater services to address the identified gaps (Demand/supply gap of 89%) ;
- Public Private Partnership (PPP) financing model of water supply and wastewater service;
- Application of technology to improve access to water supply by converting saline water to freshwater;
- Storm water channels can be used for water transportation;
- Deregulation guarantees investment in midstream and downstream of water supply chain.
- Improved economic activities through ecotourism.



4.0 Solutions

- Conservation of wetlands to prevent flooding, enhance ecosystem, improve water quality, ecotourism;
- Enforcement of regulation along the flood plain;
- Effective implementation of the Lagos State Drainage Master Plan 2015;
- Construction and expansion of water supply and sewerage services;
- Deployment of appropriate technology to improve water production and wastewater treatment;
- Construction and expansion of wastewater services;
- Deployment of appropriate technology to improve wastewater treatment and reuse of treated water and sludge management;
- Use of green energy to power water treatment plants;
- Construction of decentralized wastewater treatment plants;
- Construction of sewer networks to improve sanitation;
- Construction of additional storm water channel to improve storm water management;
- Maintenance of storm water channels to improve flood management;
- Enhance vertical flow of storm water to improve groundwater recharge (Green the city).



LAGOS WATER SITUATION (Contd.)

5.0 Funding

- Research and Development for integrated water resources;
- Expansion of existing and construction of additional water (production) supply and wastewater (treatment and sludge management) infrastructure;
- Construction of additional storm water channel;
- Technology enhanced solution to improve access to water supply and wastewater services
- Bioremediation of polluted surface and groundwater;
- Development of framework for integrated water resource for urban development;
- Mapping of flood plains and areas prone to land subsidence.

6.0 Co-operation

- Co-operation with other megacities with similar challenges and possible solutions;
- Knowledge sharing among relevant agencies;
- Knowledge sharing on climate change adaptation strategies;
- Co-operation for technical support and know-how.

Thank you

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