



Directorate of Water Resources Management

Review of Sector Performance Report 2017/18

By
Director, WRM

Date: 18th –September–2018



Priority interventions for the DWRM FY 2017/18

- ❑ Development of a quality control system for data management, Prepared road map for establishment of a modelling unit and Completed the flood management Action Plan Nyamwamba
- ❑ Coordinating and active participation of Uganda in transboundary water resources management programmes under the NBI, LVEMP, (EAC)/Lake Victoria Basin Commission, AMCOW and IGAD
- ❑ Implementation of the National Water Quality Management Strategy

Priority interventions for the DWRM FY 2017/18



- ❑ Continue to improve water resources regulatory framework and Implementation of the strategy for compliance and enforcement of water laws and water permit conditions
- ❑ Implementation of catchment based water resources management through the 4 WMZs
- ❑ Establishment of Water Resources Institute
- ❑ Provide support to the Water Policy Committee

Physical Performance FY 2017/18



- ❑ **Water Policies and laws:** The revised Water Policy and amendments to the Water Act were submitted to Cabinet for approval
- ❑ The first ever Water and Environment Week was held in March 2018; attended by over 400 participants
- ❑ **Non-Tax Revenue of 608.1m** was collected FY 2017/18 from sales of data, information and specialised services inclusive of water use fees compared to **528.83m** in FY 2016/17

Operationalization of the Water Resources Institute



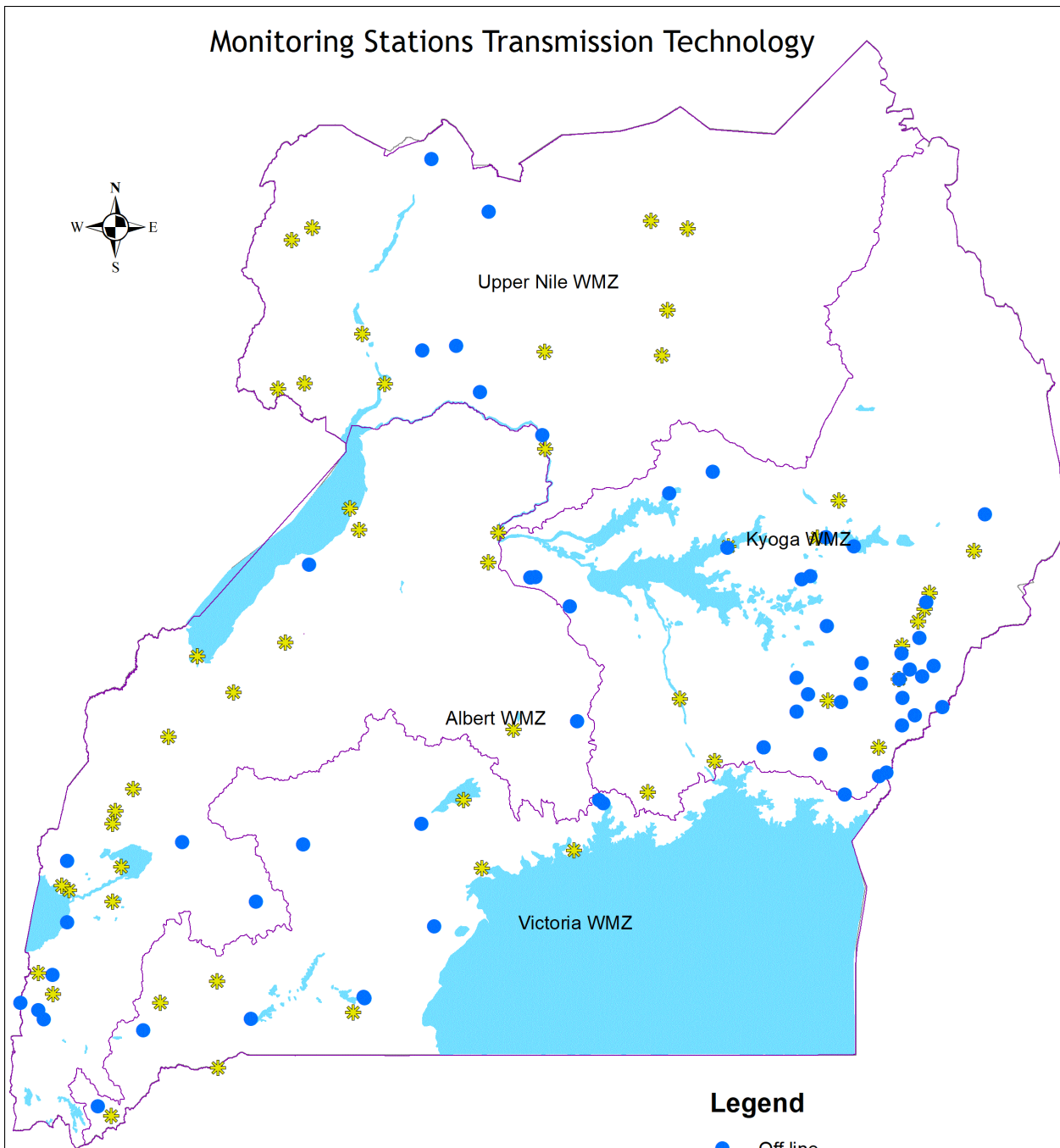
- ❑ Launched on 21 March 2018 by the Prime Minister of the Republic of Uganda.
- ❑ Four training courses have since been conducted in different areas:
 - ❑ Pumping test targeting drillers,
 - ❑ Monitoring and Evaluation for MWE staff,
 - ❑ Catchment management approach and procedures for WMZ staff,
 - ❑ Water governance and international water law for participants from a number of African countries
- ❑ Some Support for the Institute, amounting to USD0.6Mil, has been received from World Bank through the Korea Trust Fund for 2 years

Achievements under monitoring and assessment



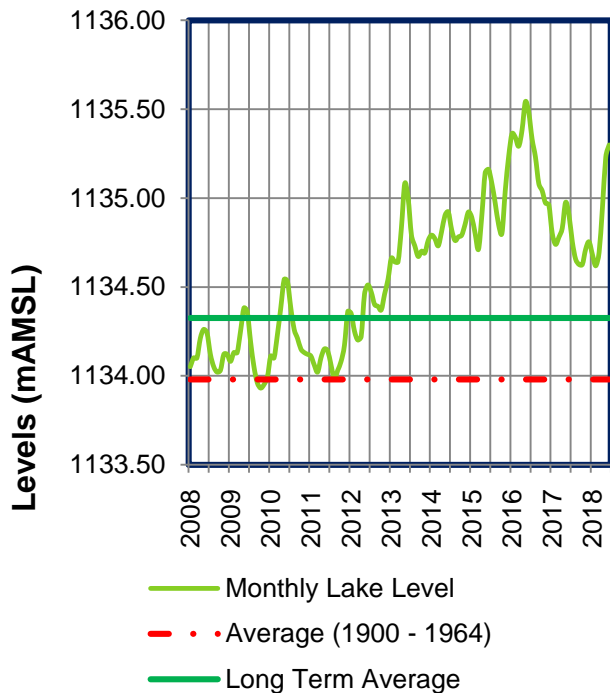
- ❑ Monitoring of surface water (**48 stations**) and groundwater (**30 stations**) resources
- ❑ Upgraded stations to transmit data in real time (telemetry) - 32 surface water & 17 groundwater)
- ❑ Improved access to data for Development projects designs and development;
 - ✓ UNRA - design of ferry routes navigation routes for Kiyindi - Buvuma and Bukungu, Kabermaido in in Lakes Victoria and Kyoga respectively;
 - ✓ MWE/MAAIF - Sipi and Sironko irrigation scheme
 - ✓ Katonga Catchment management plan
 - ✓ MEMD for HPP - River Agago and R. Nyahuka

Monitoring Stations Transmission Technology



Lake Victoria Water Levels

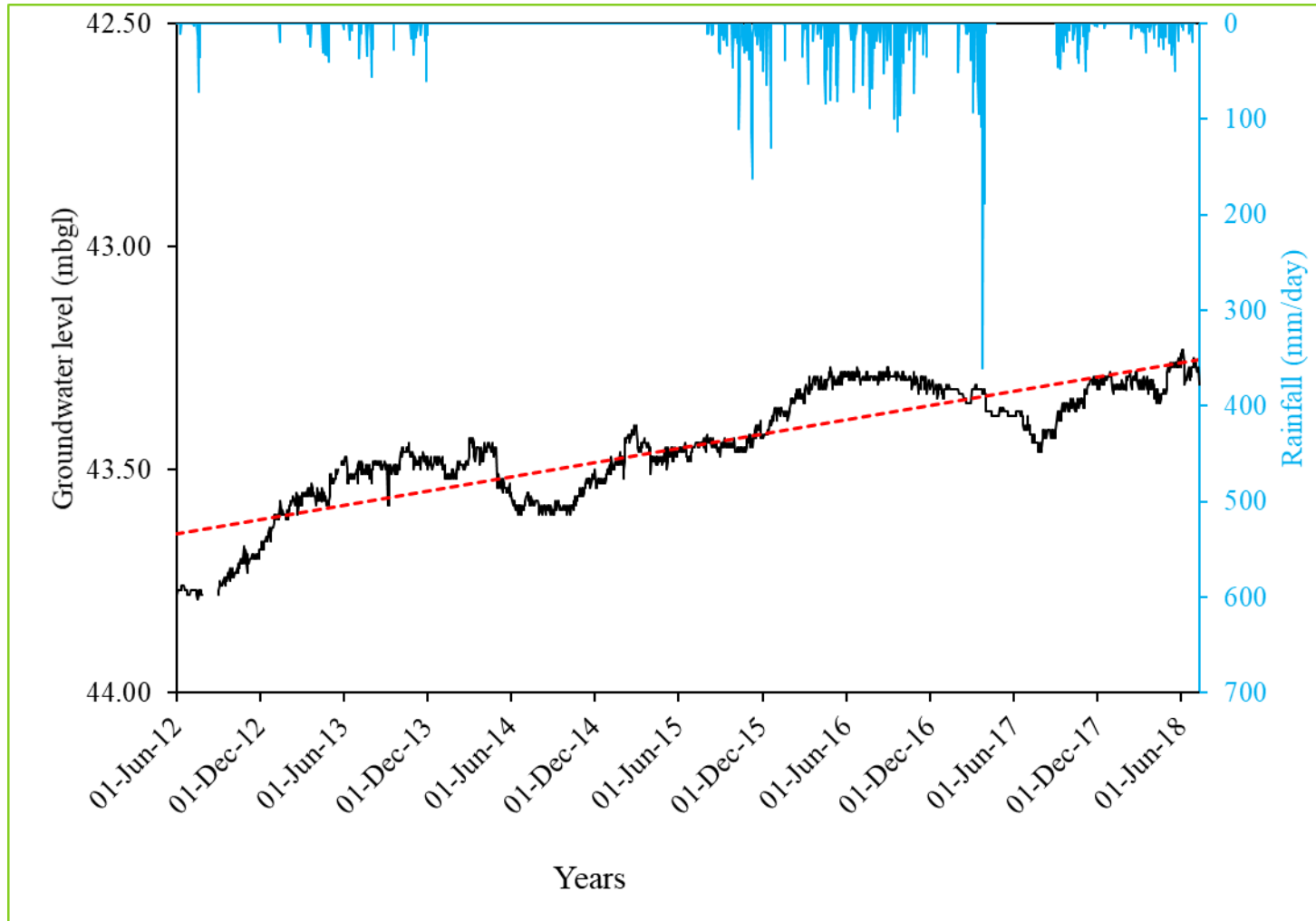
Trend in Lake Victoria Monthly Levels from 2008 - June 2018



The graph shows seasonal fluctuations of L. Victoria,

Comparison of Net Basin Supply and L. Victoria Levels from 2008-2017

Ground water level fluctuation at Kimengo in Masindi



Achievements under Water Quality Management

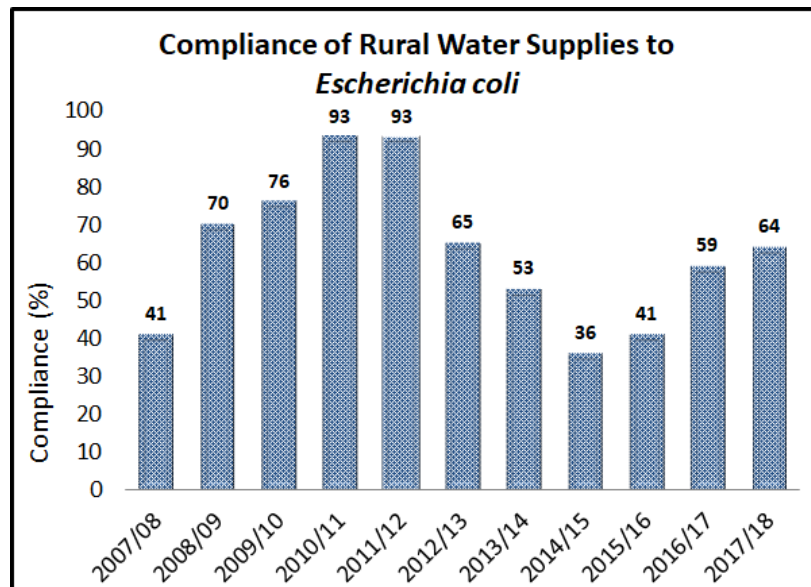


SN	WQMD Activity	Planned	Achieved	Performance (%)
1	Monitoring network	119	82	68
2	Samples from WMZs	1,600	1,910	120
3	Samples from NWQRL	2,400	3,092	129
4	Non Tax Revenue	80 million	135 million	170



Performance Indicator No.5

Rural Water Supply Trends



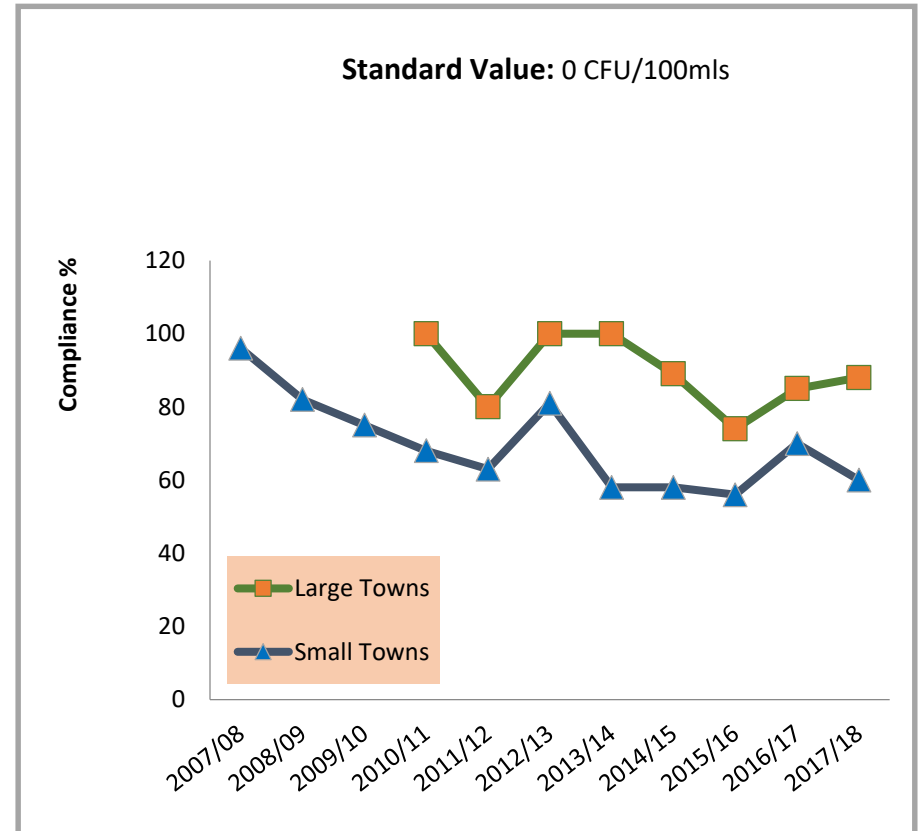
Factors affecting rural water quality

- Technologies that supply consistently poor quality water
- Poor storage methods
- Poor sanitation and Hygiene
- Poor Operation and Maintenance
- Poor Siting
- Poor water quality due to natural factors



Urban Water Supply

- ❑ A total of 356 samples collected
 - ❑ 158 Large towns with 87% compliance
 - ❑ 198 Small towns with 60% compliance
- ❑ Deterioration in Small town's water supply quality continued



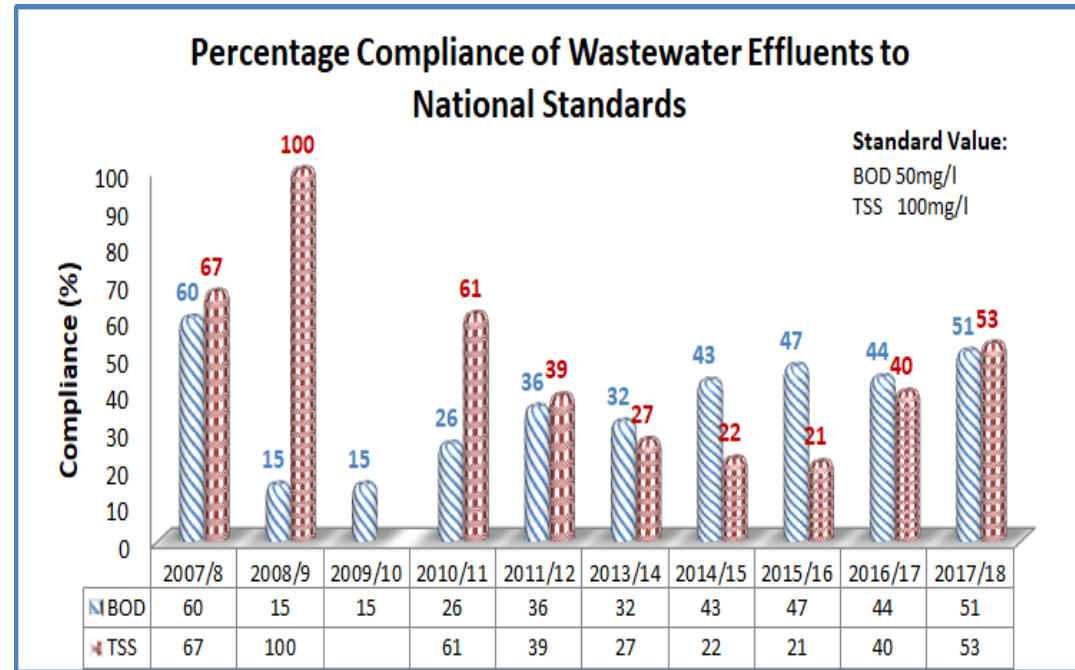
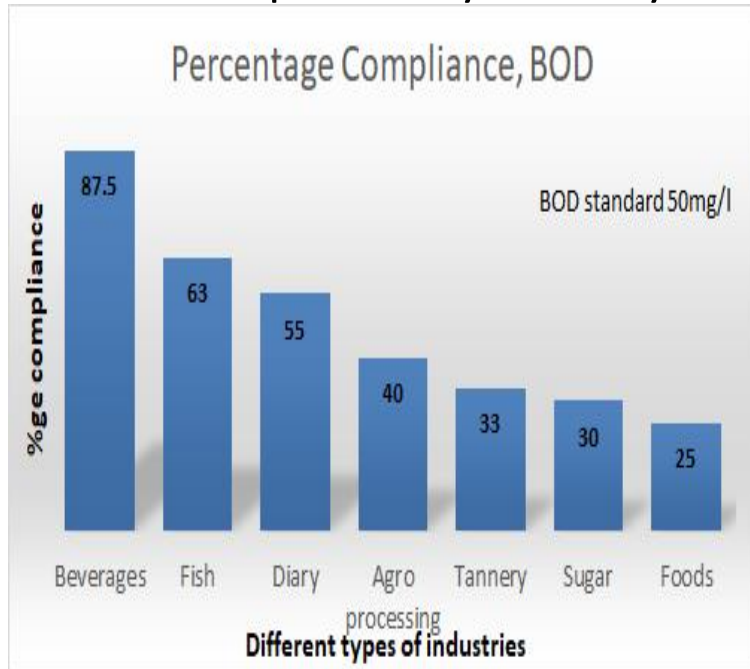
Compliance of Urban Water Supplies to Escherichia coli

Waste Water Quality

- ❑ 66 Industrial and 17 municipal effluent samples taken.
- ❑ BOD compliance at 51%
- ❑ TSS compliance at 53%



Compliance by Industry

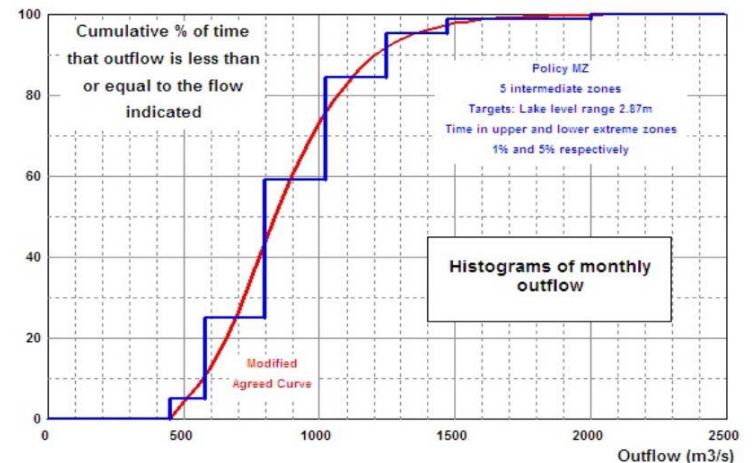
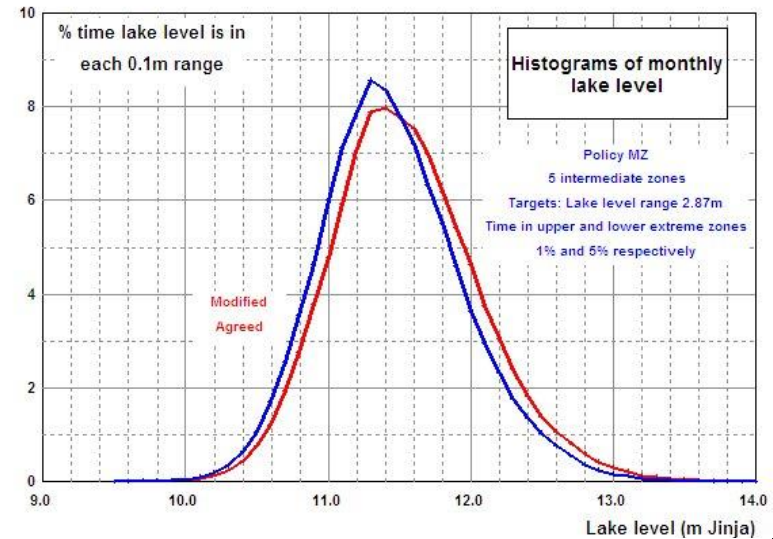


Achievements under International and Transboundary Water Affairs



- Renegotiating the New Water Release and Abstraction policy for Lake Victoria Basin has been reopened

- Agreements & MoU's for use of shared rivers; Kagera, Sio and Malaba



Recommended Policy B

Projects implementation



□LEAF II Project Uganda – DRC

- Policy and Lakes wide plans for co-management of use of Water resources in Lakes Albert and Edward under fisheries under review and development;
- Construction of Albert Regional Water Quality Laboratory & Office Block at 54% ;
- 15 borehole drilled - 6 recommended for motorized pumps and 9 for hand pumps
- Construction of two (2) hydro-meteorological stations (River Waiga and River Nsonge) 30% completed

Lake Victoria Environmental Management Project II –ended 31st December 2017



Achievements

- ❑ Completed procurement of mobile sewerage ponds maintenance equipment for the National Water and Sewage Corporation (NWSC).
- ❑ Constructed 35 Public sanitation facilities at landing sites, schools and markets to benefit 58,900 persons
- ❑ Completed construction of the model waste recycling plant for Kampala Capital City Authority Centre.
- ❑ Constructed additional energy saving stoves in 114 schools with enrolment of 10,500 students
- ❑ Bio fuel saving of 50-60%

Trans-boundary Projects; Studies/Negotiations to development



- ❑ **Nyimur** Multipurpose Water Resources Management and Development Project Uganda – South Sudan
 - ❑ Feasibility Study, Environmental & Social Impact Assessment, Resettlement Action Plan and detailed designs at 85%;
 - ❑ World Bank through Wfp has expressed interest to finance dev't
- ❑ **Kabuyanda** Multipurpose Water Resources Management and Development Project;
 - ❑ Feasibility Study, Environmental & Social Impact Assessment, Resettlement Action Plan and detailed designs completed;
 - ❑ Wfp taken it up & World Bank has expressed interest to finance dev't
- ❑ **Angolola** Multipurpose Water Resources Management and Development Project Uganda – Kenya
 - ❑ AfDB approval funding for detailed designs, ESIA and RAP studies.

Trans-boundary Projects; Studies/Negotiations to development



Achievements

- **IWRM/Nakivubo Constructed Wetland**
 - KFW approval funding for implementation.

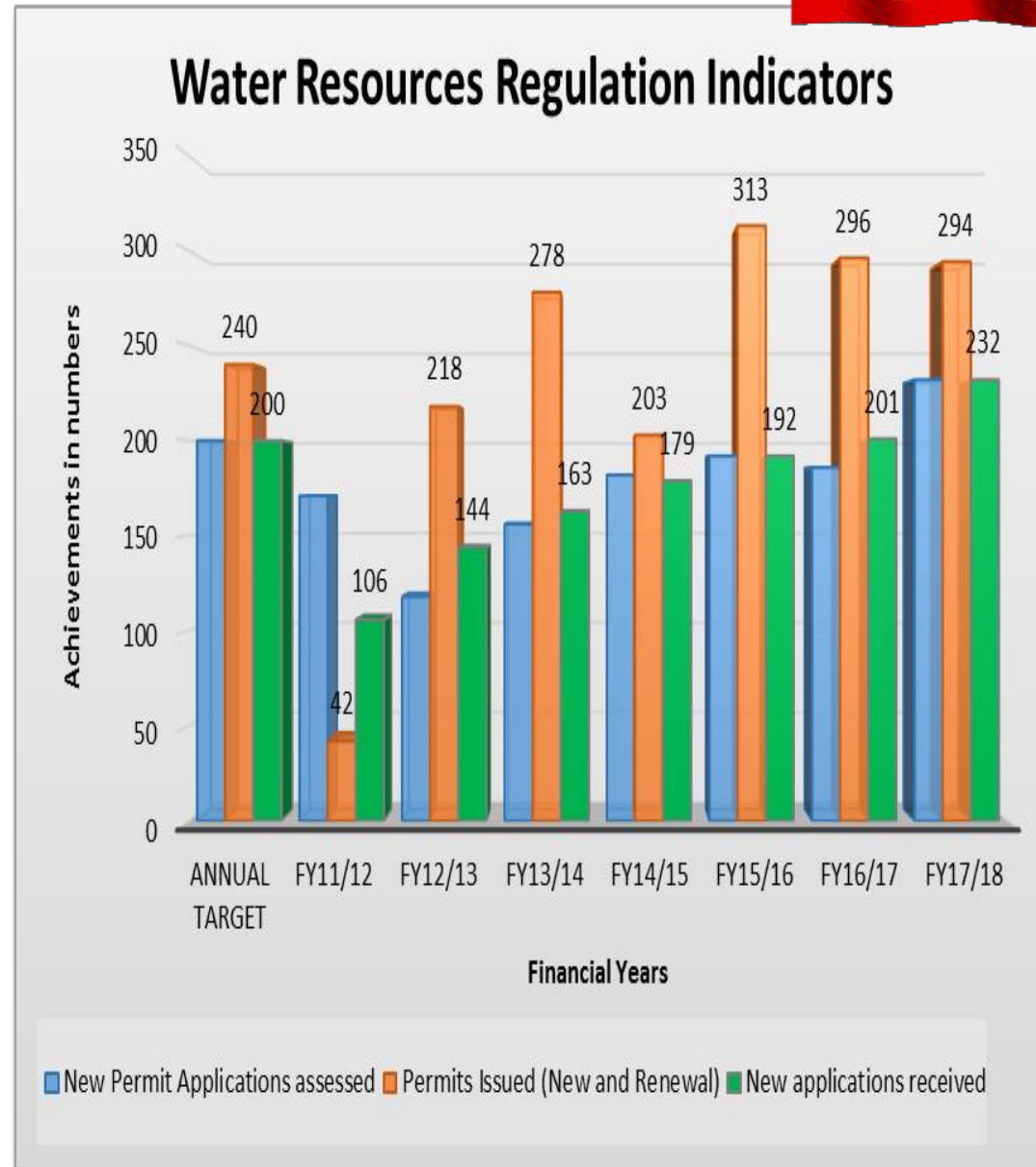
- **Kikagati & Nsongezi HPP on River Kagera**
 - Kikagati development already started; Nsongezi attracted interest by Ug, TZ and Rwanda and now prioritized

- **Masaka-Mwanza interconnector at 400kV**
 - NELSAP is mobilising funds to undertake feasibility study for Uganda and TZ and now prioritized

Permits applications and assessment



- **232** New permit applications were received and **201** assessed
- **294** permits (**148** new and **146** renewal) were issued.
- The number of permit issued is almost the same as last years from **296** in FY 2016/17 to **294** in FY 2017/18



Golden Indicator no. 11: Compliance to permit conditions



Type of permit	Permit Condition	Total No. of Permits monitored	No. of permits complying	(%) compliance FY2017/18
Waste water discharge	Effluent discharge	182	115	63
Surface water	Abstracting within permitted amount	249	200	78
Groundwater	Abstracting within permitted amount	730	553	76
Drilling	Quarterly submission of Borehole Completion Reports	55	53	96
Total		1,216	921	78

Compliance to Abstraction Permit conditions: **improved from 73% to 77%** compliance

Compliance to waste water discharge permit conditions: **improved from 59% to 63%**.



Implementation of catchment-based water resources management

CMPs translated into investments

- Multipurpose water supply system - **Upper Sipi Gravity Flow Scheme and Middle Sipi irrigation scheme**

- Lokok and Lokere CMPs - attracted funding from **German Development Cooperation** and the European Union's - **Initiative for Northern Uganda (DINU) for Enhancing Climate Resilience through increased Water for Production Capacities in Karamoja**- on going and

- **EURECCCA Project** to increase the resilience of communities to flood risk and landslides in Awoja, Maziba and Aswa Catchments by promoting catchment based integrated, equitable and sustainable management of water and related resources

WMZ	Catchment	Status of the Plan	Financial Year
Albert	Mpanga	Finalized	2015
	Semliki	Finalized	2016
	Ruhenzamyenda	Finalized	2015
	Albert	Finalized	2017
	Kiiha	Ongoing	
Kyoga	Awoja	Finalized	2013
	Mpologoma	Finalized	2016
	Victoria Nile	Finalized	2016
	Lokere	Finalized	2018
	Lokok	Finalized	2018
Upper Nile	Aswa	Finalized	2016
	Albert Nile	Finalized	2016
Victoria	Rwizi	Finalized	2017
	Maziba	Finalized	2015
	Katonga	Finalized	2018



Emerging Issues and threats on Water Resources

- ❑ Cage fish farming
- ❑ Water weed in the Nile river system
- ❑ Impacts of Oil and Gas (heavy metals in ground water)
- ❑ Lack of a clear framework for ownership, construction, management and operation of transboundary infrastructure projects
- ❑ Influx of refugees in the country putting further stress on Water Resources;
- ❑ Increased/high costs for data transmission



Recommendations

- ❑ Up scaling implementation catchment planning and water source protection guidelines, and operationalizing the 3% contribution for water source protection
- ❑ Satellite transmission, as cheaper alternative be adopted for future stations.
- ❑ Strengthening enforcement of compliance to the laws and regulation
- ❑ Carry out comprehensive assessments of water resources in the oil and gas regions



Thank you

