

UGANDA'S LEGAL FRAMEWORK FOR WATER SERVICE PROVISION

The key legal instruments governing water service provision in Uganda are:

1. The Ugandan Constitution (1995)

- Defines clean and safe water as a fundamental right for all Ugandans.
- Compels the government to take all practical measures to promote good water management at all levels of action.
- Defines the principle of decentralization as the system for local governance in Uganda (Art. 176). (Government of Uganda, 1995a)

2. The National Environment Act (1995)

- Provides the legal framework for the sustainable management of environmental resources, including water.
- Establishes the National Environment Management Authority as the coordinating, monitoring, and supervisory body for that purpose. (Government of Uganda, 1995b)

3. The National Water and Sewerage Corporation Act (1995)

- Establishes the National Water and Sewerage Corporation (NWSC) as a corporation that shall operate and provide water and sewerage services in specific entrusted areas. The act assigns NWSC to:
 - Manage water resources in the most beneficial way for the people of Uganda.
 - Provide water supply services for domestic, stock, horticultural, industrial, commercial, recreational, and environmental uses.
 - Provide sewerage systems in the areas appointed under the Water Act of 1995.
 - Develop water and sewerage systems in urban centres (15,000 inhabitants) and large national institutions (hospitals, etc.) throughout the country. (NWSC, 1995)

4. The Water Act (1997), Cap 152 & Land Act (1998), Cap 227

- All water rights are vested in the Government. No water can be obstructed, dammed, diverted, polluted, or interfered with without a permit.
- Defines the powers and functions of water authorities as the responsible entities for provision of water supply services and gives the Minister of Water and Environment the authority to demarcate water supply areas and appoint water authorities to provide water supply services in these areas through a notice in the Gazette.

- Gives general rights to the occupiers of that land to use water that naturally existing water sources for domestic use. However, the occupier must receive approval from Ministry of Water and Environment to abstract water on his/her premises (Art. 7). (Government of Uganda, 1997c; Government of Uganda, 1998)

5. The Local Government Act (1997) & Public Health Act (2000)

- In districts and urban centres outside the National Water and Sewerage Corporation's jurisdiction, water service provision and maintenance of facilities is the responsibility of local councils under the guidance and support of the central government.
- Local councils must take lawful and necessary measures to prevent the pollution of any water supply, which the public has the right to use for drinking or domestic purposes. Districts are the legal owners of water infrastructure (Government of Uganda, 1997c; Government of Uganda, 1997a) and must purify any water supply used for drinking or domestic purposes that is known to be polluted (Public Health Act, Cap 281, 2000, Art. 103).
- The District Water Offices (DWO) are responsible for planning, implementing and monitoring all water and sanitation activities in the district. The DWOs apply for District Water Supply and Sanitation Conditional Grants (DWSCG) and receive support from the national government to plan and implement water provision and public sanitation. DWO responsibilities include:
 - Developing a district wide water and sanitation plan
 - Managing contracts with Private Operators
 - Managing funds for the provision of water services
 - Reporting to the District Council and Ministry of Finance and Ministry of Water and Environment
- Though guided by the Ministry of Water and Environment, the Ministry of Finance dictates the allocation formulas which outline how DWSCG can be spent and disburses funds to District Local Governments. The District Council approves District Water Office's work plans and budgets for water service provision. The Ministry of Local Government (MoLG) is responsible for providing administrative support, technical advice, guidance and mentoring required to effectively execute local government district plan processes. (Government of Uganda, 1997b; Government of Uganda, 2000)

TABLE 1: Uganda Drinking Water Standards– primary parameters for routine water quality monitoring

Parameter	Max in Treated Potable Water – Piped water	Max in Natural Potable Water – Non-piped supplies
Fluoride	1.5 mg/L	1.5 mg/L
Arsenic	0.01 mg/L	0.01 mg/L
<i>E. coli</i>	Absent	Absent
Total coliforms	3 coliform organisms in any one sample	10 coliform organisms in any one sample

Source: (UNBS, 2014)

TABLE 2: Minimum frequency of sampling of water for surveillance in Uganda

Population served	Minimum frequency of sampling – should be more frequent during the rainy season
< 2,500	1 sample every month
2,500 to 10,000	2 samples every month
10,000 to 25,000	3 samples every month
25,000 to 100,000	10 samples every month
>100,000	10 samples every month per 100,000 of population served

Source: (UNBS, 2014)

UGANDA'S WATER AND ENVIRONMENTAL POLICIES

The key Ugandan water provision policies framing the national water sector are:

1. The National Water Policy (1999) promotes an integrated approach to manage the water resources in ways that are sustainable and most beneficial to the people of Uganda. The approach is based on the government's recognition that water is a social and economic good. The policy is divided into water resources management and the development of water uses. Water resources management covers the allocation and protection of water resources. Water development and uses covers domestic water supply, water for agriculture, and other water uses (i.e., industry, hydropower, and recreation). (MWLE, 1999)

2. The Pro-Poor Strategy for the Water and Sanitation Sector (2006), aims to improve the effectiveness of WASH pro-poor services. The strategy establishes the need for operational water quality monitoring and appoints service providers to ensure that low-income households are consuming safe water. (MWLE, 2006)

3. The Water and Sanitation Sub-Sector Gender Strategy (2018) acknowledges that water and sanitation policies affect men and women differently and aims at developing a gender perspective in the sector. Specifically, the strategy provides guidelines to operationalize gender sensitive program planning, implementation, monitoring and evaluation. Additionally, it aims to increase the number of women in leadership position among WASH committees. (MWE, 2010)

4. The National Environment Management Policy (2014)

seeks to address environmental issues in a holistic and integrated manner. It specifically stands for:

- Prioritizing watershed management to control, conserve and regulate the water balance in the catchment regions.
- Empowering lower levels of governance to systematically respond to local water challenges.
- Ensuring that water resources contribute to socio-economic development (Government of Uganda, 2014).

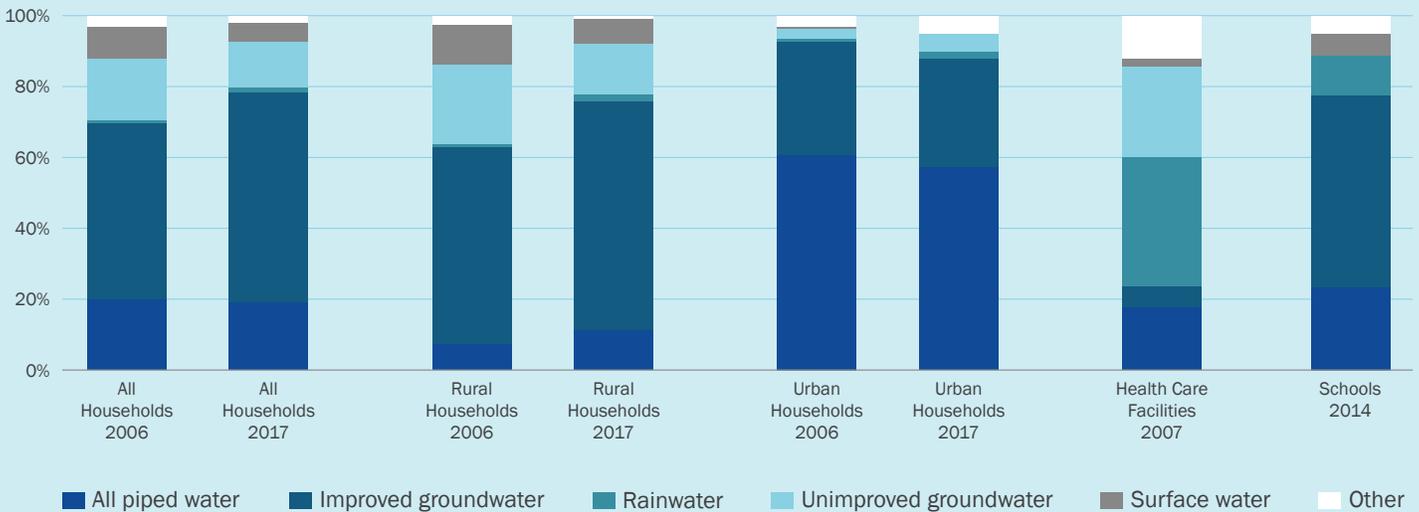
5. The National Water Quality Management Strategy (2006)

aims to safeguard the quality of the country's water resources. This strategy highlights the importance of water quality management and frames approach for achieving water quality standards. In particular, it establishes the National Water Quality Laboratory at Entebbe as the national reference laboratory for water analysis. Additionally, it created four Water Management Zones to support stakeholders to monitor water quality at the catchment level. Water quality standards are set up by the Ugandan National Bureau of Standards (UNBS). (MWE, 2006)

6. The Water and Environment Sector Development Plan (2015-2020)

outlines the specific objectives for the water sector as part of the national development strategy aiming to "attain the lower middle-income status by 2020 with an annual per capita income of USD 1,033" which is articulated in the Uganda Vision 2040. This document reinforces the government's commitment to achieve the Sustainable Development Goal for Water (SDG 6) by increasing access to piped water and toilet facilities, as well as developing water treatment systems. (MWE, 2015)

FIGURE 2:
Evolution in drinking water sources in Uganda 2006 – 2017 period



Source: UNICEF/WHO Joint Monitoring Program Uganda databases (UNICEF and WHO, 2019).

UGANDA'S WATER ACCESS AND INFRASTRUCTURE MANAGEMENT

WATER ACCESS

Between 2006 and 2017, household access to water supplies has improved. Surface water use decreased in rural areas and almost disappeared in cities. Piped water infrastructure serves 20% of the national population and access has increased in rural areas. It is however noteworthy that piped water coverage in urban areas has slightly decreased in the past decade, indicating that infrastructure has not kept up with the rapid urbanization. Nationally, the majority of the population relies on improved groundwater point sources such as boreholes (31%), protected dug wells (16%) and protected springs (15%). Since 2009, there has been a 60% increase in the usage of deep boreholes which were used by 12,333,000 users in 2019 (UNICEF and WHO, 2019).

While the majority of households (79%) have access to improved water sources, the UNICEF and WHO Joint Monitoring Program estimates that 58% use unsafe sources that are not free of faecal contamination. School water supplies are comparable to households', except that schools rely more heavily on rainwater (10%). Health care facilities, however, substantially rely on unimproved sources (38%) (UNICEF and WHO, 2019).

WATER INFRASTRUCTURE, MANAGEMENT AND TARIFFS

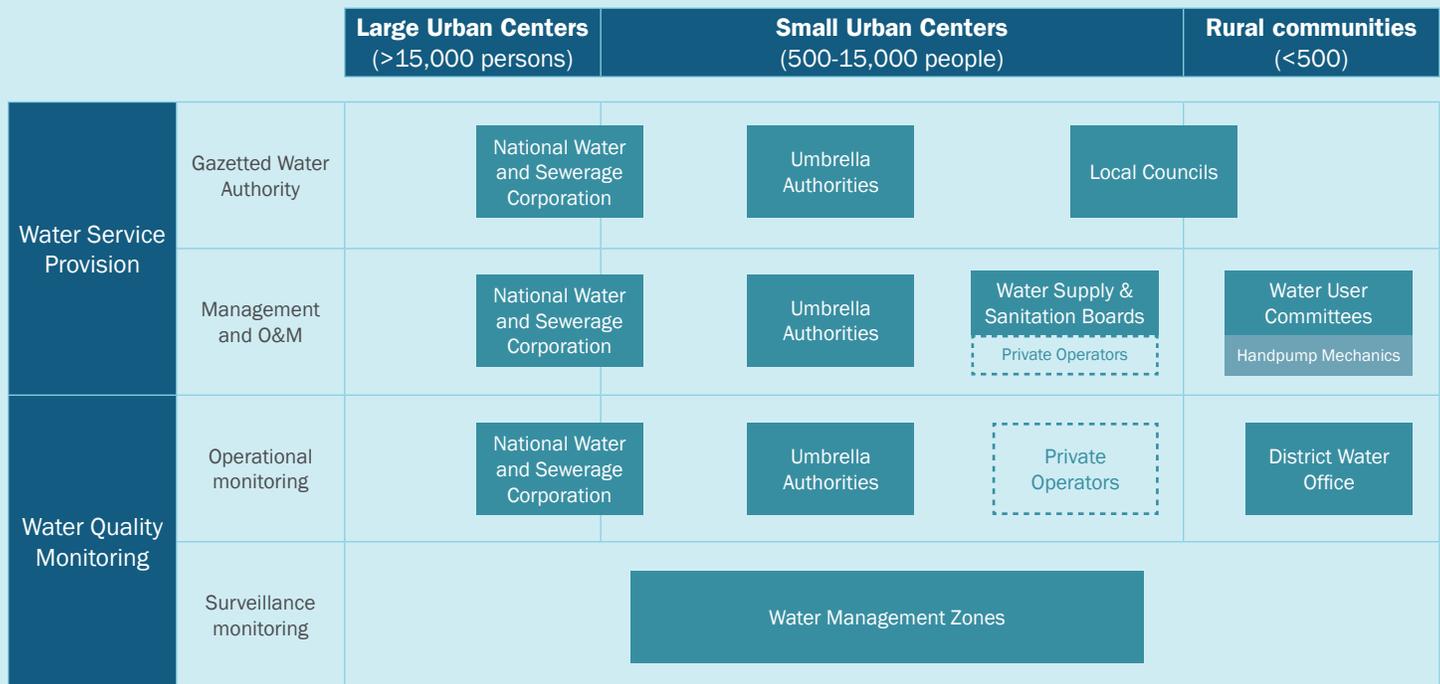
Uganda has approximately 1,000 piped systems, the majority serving less than 10,000 people (MWE, 2018). In 2018, The National Water and Sewage Company (NWSC) operated

236 piped water schemes in towns and large population centres while the six Umbrella Authorities (UA) operated 259 schemes (MWE, 2018). All the other piped systems are managed by private operators and communities (MWE, 2017a). Since 2017, these figures have been rapidly evolving as the government has promoted UAs to take over privately operated small piped water systems and NWSC has launched an initiative to accelerate water service coverage in line with national development priorities.

For piped schemes managed by NWSC, tariffs are designed to cover the full costs of operation and maintenance, together with depreciation of technical installations. Cross subsidization is promoted through step-wise water tariffs and pricing is determined at the national level.

Twenty percent of Ugandan point water sources (protected springs, boreholes and shallow wells) are non-functional, primarily because of technical breakdowns (40% of cases), absence of yield (i.e., dry) (15% of cases), and water quality not meeting drinking water standards (10% of cases) (MWE, 2017a). Eighty-two percent of point sources rely on community-based management while 8% are managed by institutions and 7% by private operators. In rural areas, maintenance is often poor because of limited financial resources, which questions the strength of the enabling environment for sustaining operational water services. In particular, water users are expected to pay their respective Water User Committee, but actual payments are rare due to low enforcement, poor management structures and lack of incentives (Lockwood et al., 2018).

FIGURE 3:
Overview of water provision dynamics in Uganda



For piped water, National Water and Sewerage Corporation and the Umbrella Authorities are expanding coverage, reducing the space for Private Operators and effectively phasing them out.

UGANDA'S EVOLVING FRAMEWORK FOR WATER SERVICE PROVISION AND MONITORING

In large urban centres, the National Water and Sewerage Corporation (NWSC) is responsible for piped water provision. Increasingly, NWSC is also extending piped water service in small urban centres. In addition to operating and managing infrastructure, the NWSC is in charge of operational monitoring to ensure that the water distributed meets national drinking water standards.

In small urban centres, historically, local councils would appoint Water Supply and Sanitation Boards (WSSBs) who would then contract Private Operators to operate and maintain small piped systems and, in theory, monitor water quality. In recent years, the mandate of the Ministry of Water and Environment's (MWE) Umbrella Authorities (UAs) has changed. The UAs previously played a back-up support role, providing technical assistance with operation and maintenance and water quality monitoring to WSSBs, but now they directly manage and operate piped systems. The role of the UAs was changed through a process of gazetting

where by the Minister of Water and Environment, through the power and function outlined in the Water Act (1997), designated water supply areas and appointed the UAs as the water authorities in these areas.

In rural areas, water infrastructure (primarily hand pumps) operation and management typically relies on community-based systems. In theory, sub-county councils appoint a Water Supply and Sanitation Board (WSSB) to support Water User Committees in managing individual water points, but this is rarely the case in practice.

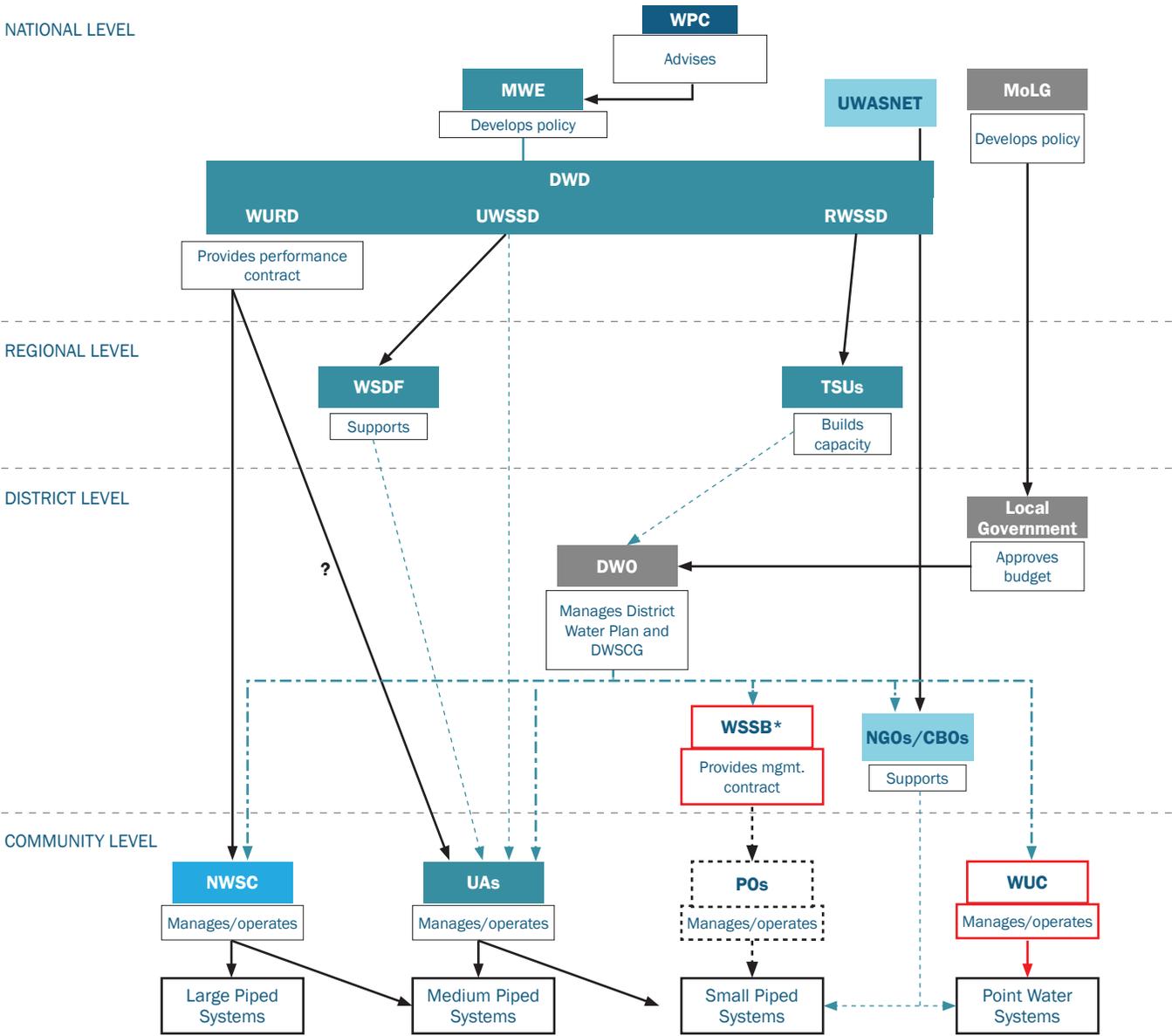
Independent surveillance of water quality is the responsibility of the four Water Management Zones (WMZ). These entities were established in 2006 as deconcentrated structures² of the Ministry for Water and Environment to strengthen catchment-based water management, enforce local government water laws and regulations and carry out monitoring and evaluation activities in their respective areas. WMZ responsibilities include monitoring drinking water systems as well as monitoring natural water resources, but do not include direct water provision.

²Deconcentrated structures of government are a means of administrative decentralization in which certain functions are shifted to different levels of the central government (e.g., regional offices). Deconcentrated structures are given authority over specific responsibilities which are vested in the central government, but have been redistributed to lower-level units.

1.DETAILED UGANDAN WATER SERVICE PROVISION FRAMEWORK

Institutions	Roles and Responsibilities in Water Service Provision
Water Policy Committee (WPC)	The Water Policy Committee (WPC) advises the Ministry of Water and Environment to develop integrated sustainable water management policies. WPC is comprised of representatives from several ministries, National Water and Sewerage Corporation (NWSC) and National Environmental Management Authority (NEMA).
Ministry of Water and Environment (MWE)	The Ministry of Water and Environment (MWE) has the overall responsibility for setting national policies, standards, and priorities for the development of water provision services.
Directorate of Water Development (DWD)	The Directorate of Water Development (DWD) is responsible for: <ul style="list-style-type: none"> Managing, coordinating and regulating water supplies and sanitation activities (rural and urban areas) Providing support to Local Governments to develop capacity guide the utilization of grants. Constructing and rehabilitating piped water schemes in small towns and rural growth centres
Rural Water Supply and Sanitation Department (RWSSD)	The Rural Water Supply and Sanitation Department (RWSSD) builds programs to develop staff capacity for water provision and monitoring in rural areas. RWSSD collaborates with the Technical Support Units who are operating in the districts.
Urban Water Supply and Sanitation Department (UWSSD)	The Urban Water Supply and Sewerage Department (UWSSD) oversees and supports water supply and sanitation service delivery in areas outside the National Water and Sewerage Corporation's mandate. The Department has two regional deconcentrated units: Umbrella Authorities and Water and Sanitation Development Facilities.
Water and Sanitation Development Facility (WSDF)	The Water and Sanitation Development Facilities (WSDFs) funds new water supply, sanitation schemes and major rehabilitations project in Small Towns and Rural Growth Centres. After completion, WSDF schemes are handed over to NWSC, local authorities or Umbrella Authorities for operation and maintenance.
Water Utility and Regulation Department (WURD)	The Water Utility and Regulation Department (WURD) is responsible for setting, monitoring and enforcing water service standards for the National Water and Sewerage Corporation as well as reviewing private operators' business plans, approving new tariff proposals.
Umbrella Authorities (UA)	Umbrella Authorities (UA) are regional structures of the MWE officially designated (since 2017) as water authorities responsible for the management of piped systems not covered by NWSC. Prior to 2017, these organizations were called Umbrellas of Water and Sanitation and were responsible for O&M backup support. As of 2018, 259 schemes had been gazetted to the UAs for direct management.
Technical Support Units (TSU)	Technical Support Units (TSU) are the links between the MWE and Local Government. They are relatively influential at the district level. They were established under MWE in Uganda's 9 regions to build capacity at the district level following the decentralization of rural water supply and sanitation. They provide capacity building, monitoring and technical back-up support skills to local governments, especially in the utilization of the DWSCG.
National Water and Sewerage Corporation (NWSC)	The National Water and Sewerage Corporation (NWSC) is a parastatal corporation responsible for the delivery of water supply and sewerage services in urban centres. NWSC is gazetted service areas (jurisdiction) which are expanding to small urban centres. From 20 service areas in 2011, NWSC managed 236 areas in 2018.
Private Operator (PO)	Private Operators manage small piped systems under a management contract with the Sub-County. With the designation of the Umbrella Authorities as service providers, POs are being phased out.
Sub-county Water Supply and Sewage Board (SCWSSB)	The Sub-County Water Supply and Sewage Board (SCWSSB) no longer manage (directly, or more commonly, through POs) small piped system but conserve an oversight role. They are seen as an important link between the community and the service provider (the Umbrella or NWSC).
Water User Committees (WUC)	The community, through the Community-Based Management System (CBMS), is entrusted to take care of the management of rural point sources through Water User Committees (WUC) .
Hand Pump Mechanics Association (HPMA)	The Hand Pump Mechanics Association (HPMA) is a district-level actor with members from the sub-counties who provide maintenance services to waters in rural areas. Private hand pump mechanics and scheme attendants also operate independently of the Association..
Uganda Water and Sanitation NGO network (UWASNET)	Non-governmental Organizations (NGOs) and Community-based Organizations (CBOs) support the provision of water and sanitation services (construction of facilities, community mobilization, training of communities and local governments, hygiene promotion), as well as advocacy and lobbying.
Ministry of Local Government (MoLG)	The Ministry of Local Government (MoLG) is responsible for providing administrative support and technical advice to local governments in developing district water plans. The Ministry of Finance dictates the allocation formulas which outline how District Water and Sanitation Conditional Grants can be spent in the district. The District Water Office, with support from Ministry for Water and Environment through the Technical and Support Units, develops work plans and budgets. The District Council can recommend changes to workplans and makes the final approvals.
Local Governments (districts, towns, sub-counties)	The local Governments (districts, towns, sub-counties) are responsible for the provision and management of water and sanitation services in rural and urban areas outside the jurisdiction of NWSC, in liaison with District Water Office and the Umbrella Authorities.
District Water Office (DWO)	The District Water Office (DWO) is the central institution coordinating district water and sanitation services. The DWO elaborates the district water plans through the District Water and Sanitation Conditional Grants. DWO has an oversight and architect role of water management in the district. They do not directly manage specific operations such as maintenance or infrastructure development.

NATIONAL LEVEL



LEGEND

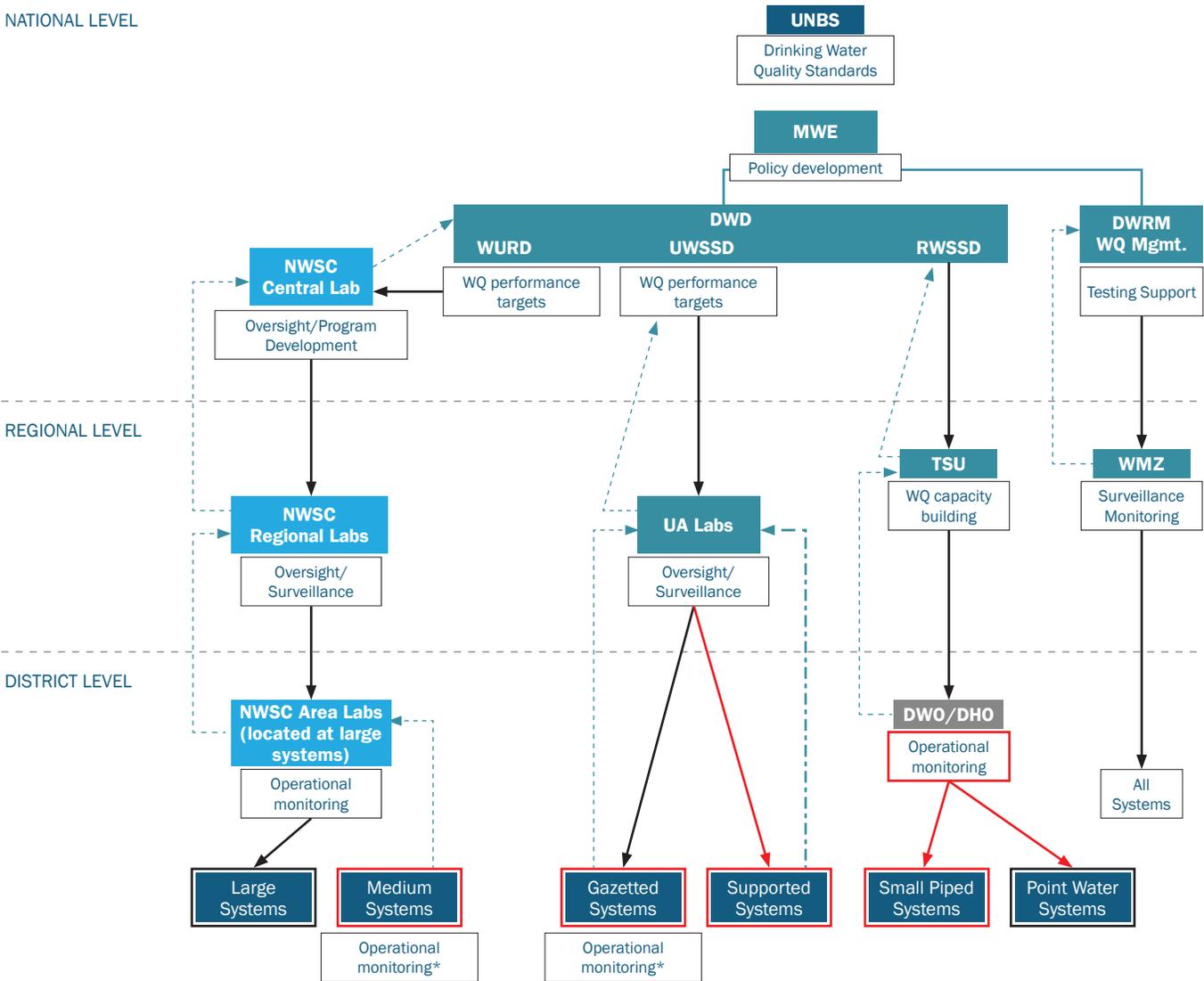
- Ministry of Water and Environment
- National Water and Sewerage Corporation
- Local Government
- Non-governmental
- Oversight
- Coordination
- Interacts/Supports
- Red outlines indicate limited/poor functionality of management entity (e.g., few point sources have active WUCs and WSSBs are not always active)
- Dotted outlines indicate service provider is being phased out

The Board's role is changing from management to oversight as private operators are phased out.

2. DETAILED UGANDAN WATER MONITORING FRAMEWORK

Institutions	Roles and Responsibilities for Water Quality Monitoring
Uganda National Bureau of Standards (UNBS)	The Uganda National Bureau of Standards (UNBS) sets standards for drinking water quality.
Ministry of Water and Environment (MWE)	The Ministry of Water and Environment (MWE) has the overall responsibility for setting national policies, standards, and priorities for water quality management.
Directorate of Water Resource Management (DWRM)	The Directorate of Water Resources Management (DWRM) is responsible for water resource planning and regulation, water resource monitoring and assessment, and water quality management. The Water Quality Management Department has the mandate for surveillance monitoring of water resources, which is operationalized through Water Management Zones.
Water Management Zones (WMZ)	The Water Management Zones were established in 2006 as deconcentrated structures of the Ministry for Water and Environment. They enforce local government laws and regulations and carry out monitoring and evaluation of Integrated Water Resources Management activities in their respective areas. The Zones are responsible for conducting surveillance of drinking water supplies as well as surface water bodies in four regional catchment basins, covering approximately 40 districts each.
Directorate of Water Development (DWD)	The Directorate of Water Development (DWD) is not directly involved with water quality monitoring, but supports Local Governments through the Technical Support Units and provides water quality performance targets to the Umbrella Authorities.
Technical Support Units (TSU)	The Technical Support Units (TSU) support districts with capacity building to develop water quality testing operations and management systems.
Water Utility and Regulation Department (WURD)	The Water Utility and Regulation Department (WURD) is responsible for setting, monitoring and enforcing water quality targets for the National Water and Sewerage Company and private operators managing piped systems through performance contracts.
Umbrella Authorities (UA)	The Umbrella Authorities (UA) are responsible for operational water quality monitoring in all the systems they operate and must comply with national standards. In addition, UAs are responsible for providing water quality monitoring support to registered systems that they do not operate.
National Water and Sewerage Corporation (NWSC)	The National Water and Sewerage Corporation (NWSC) is responsible for operational water quality monitoring in all of their systems in compliance with national standards. The NWSC has 70 water quality testing labs across Uganda covering wide areas. Areas report to regional centres which report to NWSC central. Most decisions regarding what parameters are tested and with what methods and equipment are controlled from the Centre.
District Water Office (DWO)	The District Water Office are responsible for water quality monitoring of point sources and piped systems not managed by NWSC or the UA. Although the 2006 Water Quality Monitoring Strategy gives the District Water Office and the District Health Office responsibilities to monitor service provision at point sources, this mandate is poorly implemented by stakeholders at district level.

NATIONAL LEVEL



LEGEND

- Ministry of Water and Environment
- National Water and Sewerage Corporation
- Local Government
- Oversight
- Reporting
- Request for support
- Red markings indicate that the monitoring activity is happening on a limited basis or not at all

*Systems with treatment do limited parameters onsite

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