



WATER RESOURCES AUTHORITY

EXPLANATORY MEMORANDUM

(pursuant to Section 5A of the Statutory Instruments Act, No. 23 of 2013)


to

**DECLARATION OF BASIN AREAS
Legal Notice No. 235 of 2021**



PART I

Name of the Statutory Instrument: Declaration of Basin Areas
Name of the Parent Act: Water Act No. 43 of 2016
Enacted Pursuant to: Section 24 of the Water Act No. 43 of 2016
Name of Agency: Water Resources Authority
Gazetted on: 3rd December, 2021
Tabled on: [insert after Gazettement within 7 days]

 THE NATIONAL ASSEMBLY PAPERS LAID		
DATE: 21 DEC 2021 <table border="1" style="display: inline-table;"><tr><td style="text-align: center;">DAY.</td></tr></table>		DAY.
DAY.		
TABLED BY:		
CLERK-AT THE TABLE:		

PART 2

1. The purpose of Declaration of Basin Areas

- 1.1. Integrated Water Resource Management considers the environmental, social and economic aspects of a river basin, and ensures that these aspects are integrated into an overall management strategy. It aims to achieve a sustainable balance between the utilisation, development and protection of water resources.
- 1.2. Section 24 of the Water Act, 2016 requires the Authority, following consultations with the Cabinet Secretary, to designate a defined area from which rain water flows into a watercourse to be a basin area for purposes of the Act. In this regard, the Authority has proposed to designate the **6 Basin Areas** of Kenya as follows:

1.2.1. Lake Victoria North Basin Area

The Lake Victoria North Basin has an area of 18,374 km² and is located at the western part of the country, with Mt Elgon to the north, Uganda bordering to the west and Lake Victoria to the south-west.

The topography of the Lake Victoria North Basin varies from 4,320 masl at Mt Elgon to 1,130 masl at Lake Victoria. The Nzoia River is the largest river in the Basin and drains 70% of the catchment, followed by the Yala River which drains 18% of the catchment. Both rivers drain into Lake Victoria. The Sio River flows across the Ugandan border before draining into Lake Victoria. The Nzoia River is a permanent river with seasonal variability and high flows during the two rainy seasons, which frequently cause the river to burst its banks and cause flooding of the lower plains. Surface water quality is degraded due to effluent discharges from major towns and urban areas, factories in Eldoret as well as due to irrigation return flows in some areas.

The Lake Victoria North Basin is divided into 40 sub-basins.

1.2.2. Lake Victoria South Basin Area

The Lake Victoria South Basin has a catchment area of 26 906 km² and is in the western part of the country. It borders Tanzania to the South and Lake Victoria to the East. The Basin receives the second highest rainfall in the country, after the Lake Victoria North Basin.

The basin is characterised by the Nandi escarpment north-east of Kisumu and the Mau Forest Complex along its north-eastern border with the Rift Valley Basin from where its major rivers originate, including the Nyando, Sondu, Mara and Gucha rivers. The Mara River crosses the border into Tanzania in the Masai Mara National Reserve. Collectively, these 4 rivers drain almost 80% of the Lake Victoria South Basin.

The remainder of the basin is drained by smaller catchments discharging into the Winum Gulf of Lake Victoria. The Lake Victoria South Basin faces the north-eastern side of Lake Victoria, which is the largest freshwater lake in Africa. The Lake is a shared water

resource between Kenya, Tanzania and Uganda. The main wetlands in the Basin are associated with the Migori, Nyando and Sondu Miriu Rivers originating in the Mau Forest Complex. The Nyando (Kusa) Swamp, located at the mouth of the Nyando River, is covered with dense papyrus beds and is home to many rare bird species.

The Lake Victoria North Basin is divided into 29 sub-basins.

1.2.3. Rift Valley Basin Area

The Rift Valley Basin has an area of 131 423 km². It has a long, narrow shape bordering South Sudan and Ethiopia in the north and Tanzania in the south. The bottom half of the basin is bordered by the Lake Victoria North and South basins to the west, and the Athi and Tana basins to the east. The central and northern part of the basin is bordered by Uganda to the west and the Ewaso Ng'iro North Basin to the east.

Lake Turkana is located in the northern Rift Valley Basin and is the largest lake in Kenya. The northern part of the basin is classified as arid land and is one of the driest parts of the country. The central part of the basin is surrounded by the water towers of Cherangani Hills, Mau Forest and the Aberdare Range, forming the so-called 'Rift Valley' from which the basin derives its name.

Drainage in the Rift Valley Basin is characterized by seven major lakes with their respective drainage basins: Lake Turkana, including the Omo River catchment in Ethiopia. The Kerio and Turkwel rivers are the major Kenyan rivers which drain to Lake Turkana from the south-west. The second largest drainage basin (8 350 km²) is Lake Magadi in the south of the Rift Valley Basin, which is mainly fed by underground rivers. The major rivers which feed Lake Baringo include the Perkerra River and the Molo River and the Mukutan River. Lake Naivasha has a drainage area of 3 130 km²; the perennial Malewa and Gilgil rivers account for nearly 90% of the lake's inflow. In the central part of the basin, is Lake Bogoria. The Wasages River (or Sandai River) is a river that rises on the slopes of the Nyandarua Plateau below the Aberdare Range, discharging into Lake Bogoria. Lakes Nakuru and Elementaita have much smaller drainage areas and are located close to Nakuru Town.

In addition to the above lakes and their respective drainage areas, the Rift Valley Basin has three more river basins: the Tarash River which feeds the Lotikipi Swamp; the Suguta River; and the perennial Ewaso Ng'iro South River which originates on the Mau Escarpment. It flows southwards and crosses the border into Tanzania, where it empties into Lake Natron.

The main wetlands in the Rift Valley Basin surround the seven major lake regions and support a variety of fauna. Only Lakes Baringo and Naivasha have fresh water, while the other lakes have saline water. Lake Turkana is the world's largest permanent desert lake and the world's largest alkaline lake. Turkana Lake is designated as a UNESCO

World Heritage Site, while Lakes Baringo, Bogoria, Elmenteita, Naivasha and Nakuru are designated as Ramsar sites.

The rainfall seasonality in the Rift Valley Basin is complex, with ground altitude playing an important contributing factor. The northern part of the Basin is classified as arid land, the central part as humid and the southern part as semi-arid.

The Rift Valley Basin is divided into 33 sub-basins.

1.2.4. Athi Basin Area

The Athi Basin has an area of 66 435 km² and borders Tanzania to the south, the Indian Ocean coastline to the east, the Tana Basin to the north and the Rift Valley Basin to the west. The Athi River is the main river in the Athi Basin, draining about 57% (38 170 km²) of the basin. It is the second longest river in Kenya (after the Tana River) and has a total length of 390 km. The Lumi River originates in the Athi Basin in Kenya along the eastern slopes of Kilimanjaro, and flows across the border into Tanzania, while the Uмба River flows from Tanzania into the Athi Basin south of Mombasa. Various smaller rivers drain the eastern coastal parts of the basin and discharge into the Indian Ocean. The Athi Basin includes major wetland systems including Olingarua swamp, Ol Keju Ado, Ndumato, Mamanga Esokota, Jipe, Mangeri Swamp and the mangrove swamps along the coast.

The Athi basin also includes inland freshwater lakes such as Jipe, Chala and Amboseli. These systems are being threatened by overexploitation of surface and groundwater resources, catchment degradation which result in increased sediment loads, land use changes, encroachment and pollution.

The Athi Basin is divided into 32 sub-basins.

1.2.5. Tana Basin Area

The Tana Basin has a catchment area of 126,208 km². The catchment borders Somalia and the Indian Ocean coastline in the east, the Athi Basin to the south, the Ewaso Ng'iro North Basin to the north, and the Rift Valley Basin to the west.

The upper parts of the catchment receive high rainfall and include some of the most productive agricultural lands in the country. The Tana River is the main river in the basin and drains approximately 76% of the Tana Basin. It originates on the slopes of Mt Kenya and flows eastward until it reaches Garissa town, after which it flows southwards and pours into the Indian Ocean at the Tana Delta. Upstream tributaries include the Chania, Thiba, Maragua and Thika rivers. Eastwards-draining, seasonal tributaries join the main stem of the Tana River downstream of Garissa and include Nihunguthu, Maua, Komoli, Galole and Kokani rivers. Smaller rivers in the north-eastern part of the basin drain to Somalia and the Indian Ocean. The Tana River discharges into the Indian Ocean at the Tana Delta.

The Tana River hosts Kenya's largest and richest wetlands. As the River enters the Indian Ocean, before the coral reef drop off, the Tana River passes through a large floodplain of wetlands, riverine forests, woodlands, bushlands, fresh and brackish lakes, estuaries, mangroves and grasslands commonly referred to as the Tana Delta. The upper part of the Tana Basin also hosts wetlands along tributaries above the Seven Forks dams. These wetlands are under threat from expansion of agriculture. There are also other estuaries and mangroves associated with the coastal region of Tana Basin.

The Tana Basin is divided into 39 sub-basins.

1.2.6. Ewaso Ng'iro North Basin Area

The Ewaso Ng'iro North Basin borders Ethiopia in the north, Somalia in the east, Rift Valley Basin in the west and Tana Basin in the south. The Basin covers an area of about 210,000 km², which is approximately 36% of the total area of Kenya. It is the largest of the six river basins in Kenya, but with the least population as it falls mostly within Arid and Semi-Arid Land (ASAL).

The Ewaso Ng'iro River is the largest river of the Basin, with a catchment of 81 750 km² or about 39% of the basin. Its main upstream tributaries include Ewaso Narok, Nanyuki, Isiolo, Osinyai and Milgis rivers. After the confluences of these rivers, the Ewaso Ng'iro North River flows eastwards, becomes significantly drier and discharges into the Lorian Swamp. Large seepage losses occur along the lower parts of the river. Rivers in the northern and central parts of the basin are seasonal rivers. Some originate from Ethiopia and flow into the Ewaso Ng'iro North Basin e.g. the Kore and Bolo rivers in the north-western part of the basin which drain into an endoreic area. Larger rivers in the central part of the basin include the Bogal, Bor and Katulo rivers, which drain in a south-easterly direction across the central and eastern part of the basin towards Somalia. The Dawa River is a perennial river from south-east Ethiopia and forms part of the Kenya Ethiopia border in the north-east between Malka-Mari and Mandera. Lake Ol-bolossat is a high-altitude lake in Nyandarua County, and is the source of the Ewaso Narok River which supplies water to Nyahururu and recharges the Ol-bolossat aquifer. Other wetlands in the catchment include Ewaso-Narok and Suguta Marmar swamps. The Lorian Swamp is a large wetland that is home to many large mammals and other wildlife. This wetland area is an important source for groundwater recharge of the Merti aquifer.

These systems are being threatened by catchment degradation which result in increased sediment loads, land use changes, encroachment and pollution.

The Ewaso Ng'iro North Basin is divided into 26 sub-basins.

2. The Legislative Context

- 2.1. The Water Act was enacted in 2016, and came into force on 21st April 2017. This law gave effect to various provisions of the Constitution of Kenya including protecting the

right to a clean and healthy environment, sustainable management of water resources and soil and water conservation.

- 2.2. The Water Resources Authority (in consultation with the Cabinet Secretary in charge of water) is required, under Section 24 of the Water Act, 2016 to designate Basin Areas, through publication in the *Gazette*.
- 2.3. The Authority intends to declare the following six (6) areas as Basin Areas for purposes of compliance with the Water Act, 2016
 - a. Athi River Basin Area
 - b. Tana Basin Area
 - c. Rift Valley Basin Area
 - d. Lake Victoria North Basin Area
 - e. Lake Victoria South Basin Area
 - f. Ewaso Ng'iro North Basin Area
- 2.4. The Sub-Basins within each of the Basin Areas are also contained in the Declaration.

3. Policy Background:

- 3.1. The Water Act, 2002 (now repealed) made provision for designation of Catchment Areas. The Authority has in the past managed water resources through Catchment based approach.
- 3.2. The promulgation of the Constitution of Kenya 2010 marked the beginning of the policy review for the water sector. This was intended to fully align the policy and legal priorities of the water sector, in terms of the mandates of the national government, and the 47 county governments as stipulated in the Constitution.
- 3.3. In terms of policy, the water sector is divided into three main sub-sectors: water resources management; water harvesting and storage and water services. There are also various enabling sub-sectors whose importance cuts across, including water financing; climate change; gender equity; roles of youth and children; interests and needs of persons with disabilities.
- 3.4. The current water policy is the National Water Policy, Sessional Paper No. 1 of 2021. The Sessional paper was been laid on the table of the National Assembly on 8th June 2021.

4. Consultation Outcome

- 4.1. Public consultations were held following an invitation for comments and input; the advertisement was carried in the *Standard Newspaper* of 8th September 2021. No objections were received and applicable comments have been incorporated into the document.

5. Guidance

- 5.1. The water resources of Kenya, a water-scarce country, are currently threatened on various fronts. Addressing this, demands capacity for comprehensive water resources management and planning, coupled with extensive investment in climate resilient water infrastructure.
- 5.2. The critical importance of proper water resources planning and management is evident in relation to Kenya's Big Four Agenda: Food security, Manufacturing, Affordable universal health care and Affordable housing.
- 5.3. The Authority has also put in place Basin Plans whose main objectives are to provide a clear pathway for the sustainable utilisation and development of the water resources of the country.

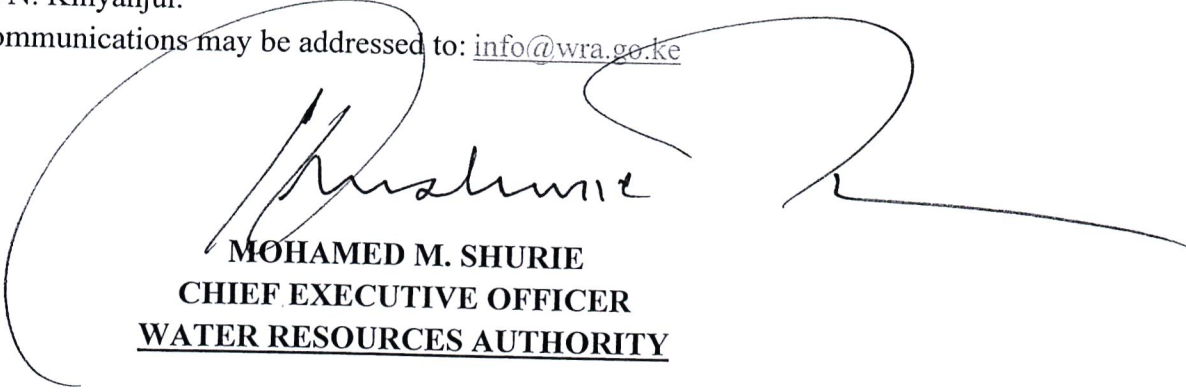
6. Monitoring and Review

- 6.1. The Authority has put in place 5 year Strategic Plan that will ensure equitable allocation of water resources across the country while ensuring sustainable use. Monitoring for the planned activities will also be undertaken through the tools provided for under the Plan.

7. Contact

- 7.1. The Contact person at the Water Resources Authority is the Chief Executive Officer, Mr. Mohamed M. Shurie, or the Manager-Water Resources Assessment & Monitoring, Mr John N. Kinyanjui.

Email communications may be addressed to: info@wra.go.ke



MOHAMED M. SHURIE
CHIEF EXECUTIVE OFFICER
WATER RESOURCES AUTHORITY

Dated this 09 day of December 2021

SPECIAL ISSUE

Kenya Gazette Supplement No. 207

1589

16th November, 2021

(Legislative Supplement No. 93)

LEGAL NOTICE NO. 235

THE WATER ACT, 2016

(No. 43 of 2016)

DESIGNATION OF BASIN AREAS

IN EXERCISE of the powers conferred by section 24 of the Water Act, 2016, the Water Resources Authority in consultation with the Cabinet Secretary designates the following areas to be basin areas for purposes of the Act —


- (a) Lake Victoria North Basin Area;
- (b) Lake Victoria South Basin Area;
- (c) Rift Valley Basin Area;
- (d) Athi River Basin Area;
- (e) Tana Basin Area; and
- (f) Ewaso Ng'iro North Basin Area.

1. Counties

The county governments falling within the designated basin areas are as set out in the First Schedule.

2. Sub-Basins

Pursuant to section 24(2), the Authority designates the basin areas set out in the Second Schedule as sub-basin areas.

 THE NATIONAL ASSEMBLY PAPERS LAID	
DATE: 21 DEC 2021	
DAY: <input type="text"/>	
TABLED BY:	<input type="text"/>
CLERK-AT THE-TABLE:	<input type="text"/>

Y

29048
29950
.go.ke
.go.ke

HE

016
nent
nya.

ving
hich
t. In
nya

3asin

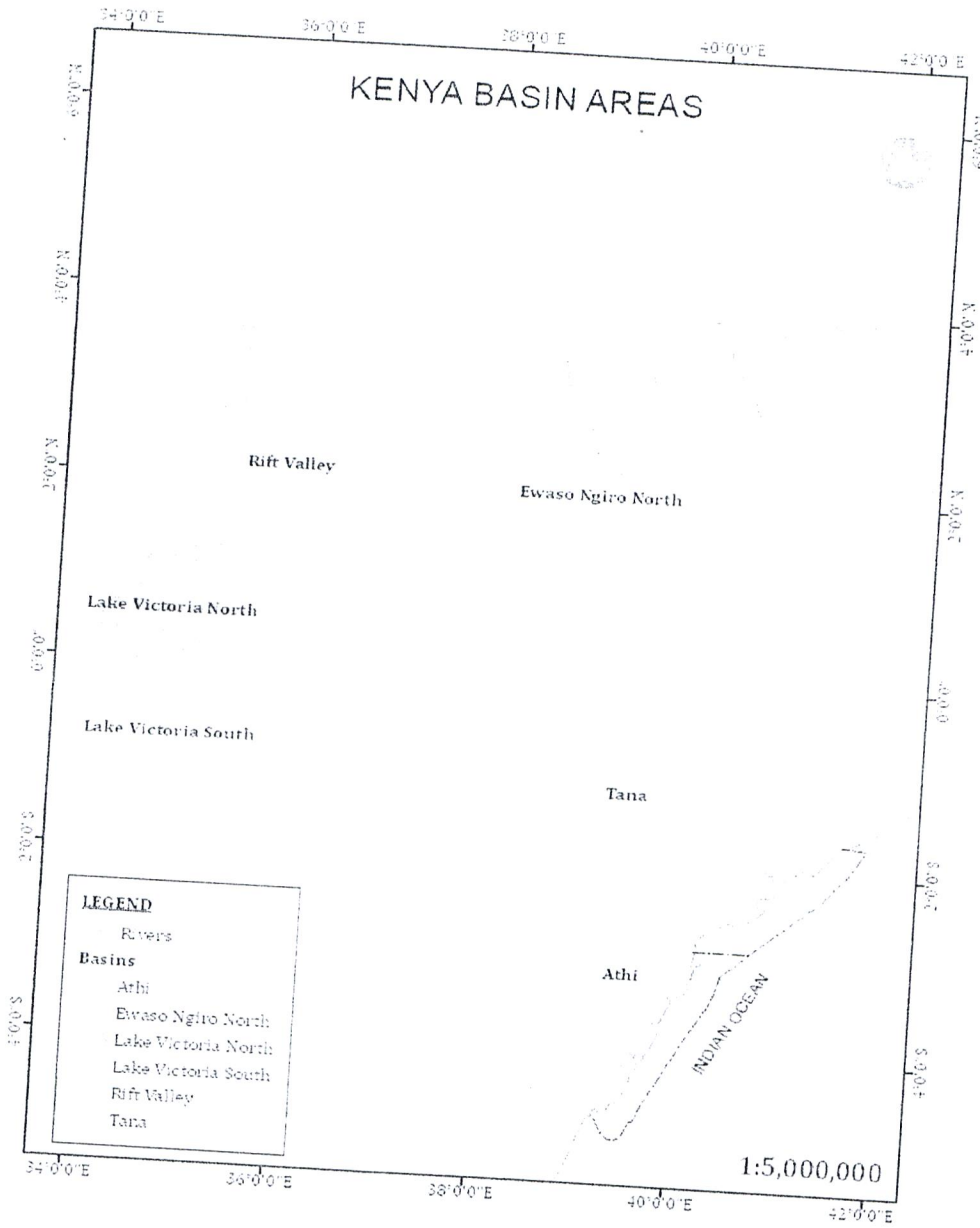
The purpose of this notice is to request you to present the Instrument comprising *Legal Notice 235* before the National Assembly in compliance with Section 11 of the Statutory Instruments Act, 2013.

FIRST SCHEDULE

PART I: COUNTIES WITHIN RESPECTIVE BASIN AREAS

<i>Name of Basin Area</i>	<i>Counties within respective Basin Areas</i>
Athi Basin Area	<ol style="list-style-type: none"> 1. Kiambu 2. Nairobi 3. Kajiado 4. Machakos 5. Makeni 6. Kilifi 7. Taita Taveta 8. Kwale 9. Mombasa
Tana Basin Area Area	<ol style="list-style-type: none"> 1. Kirinyaga 2. Nyeri 3. Embu 4. Muranga 5. Tharaka Nithi 6. Garissa 7. Kitui 8. Tana River 9. Meru 10. Lamu
Rift Valley Basin Area	<ol style="list-style-type: none"> 1. Nakuru 2. Turkana 3. West Pokot 4. Baringo 5. Elgeyo Marakwet 6. Narok, 7. Nyandarua
Lake Victoria North Basin Area	<ol style="list-style-type: none"> 1. Trans Nzoia 2. Kakamega 3. Bungoma 4. Siaya 5. Vihiga 6. Nandi 7. Uasin Gishu 8. Busia
Lake Victoria South Basin Area	<ol style="list-style-type: none"> 1. Kisii 2. Kisumu 3. Kericho 4. Nyamira 5. Migori 6. Homa Bay 7. Bomet
Ewaso Ng'iro North Basin Area	<ol style="list-style-type: none"> 1. Laikipia 2. Samburu 3. Isiolo 4. Mandera 5. Marsabit 6. Wajir

PART II: KENYA BASIN AREAS



Y

29048
29950
.go.ke
i.go.ke

THE

2016
ment
nya.

wing
hich
ct. In
enya

Basin

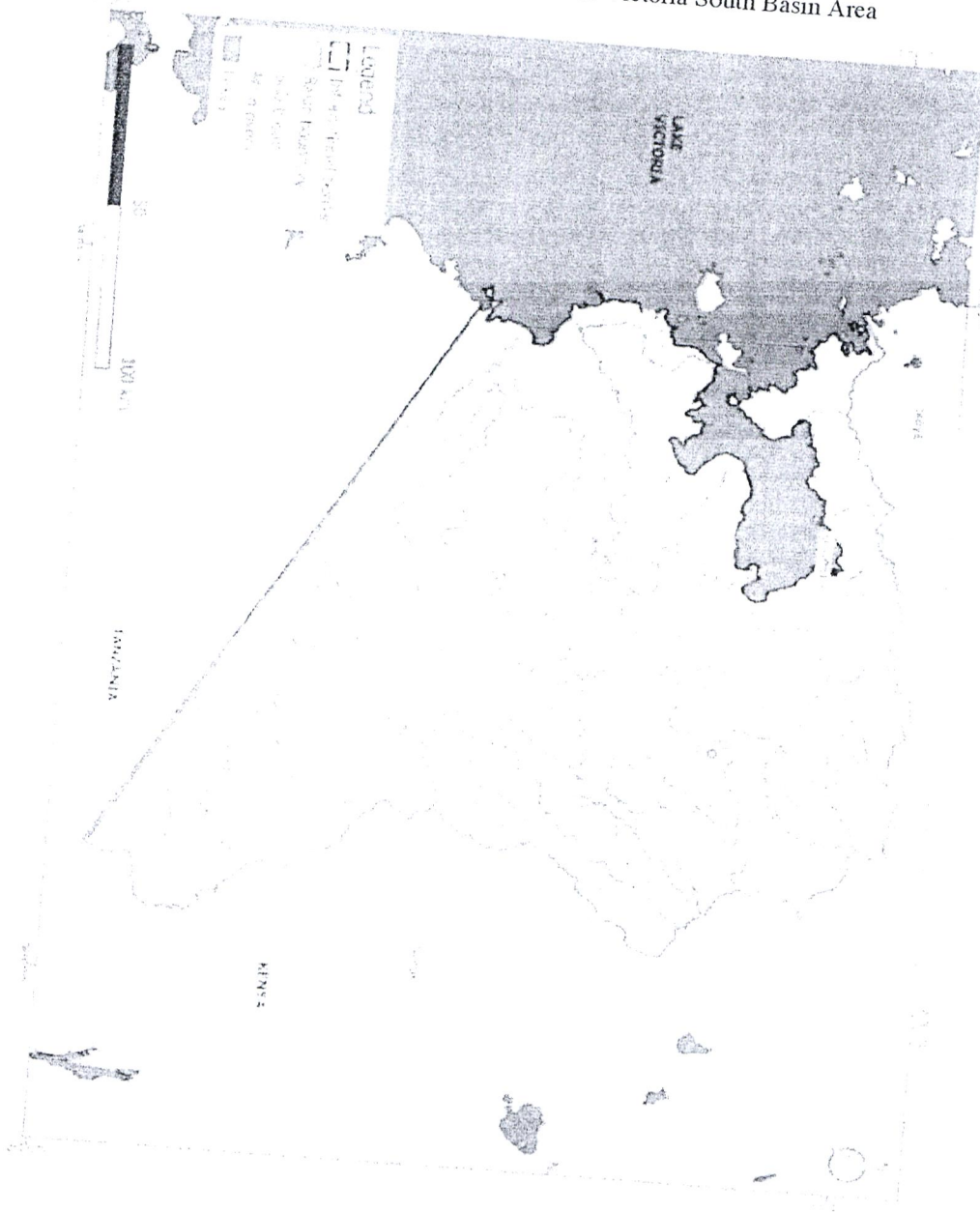
The purpose of this letter is to request your...
Instrument comprising *Legal Notice 235* before the National Assembly in
compliance with Section 11 of the Statutory Instruments Act, 2013.

PART II B: DRAINAGE NETWORKS WITHIN BASIN AREAS

The drainage network and sub-basins of the Lake Victoria North Basin Area:



The drainage network and sub-basins of the Lake Victoria South Basin Area



Y

29048
29950
a.go.ke
a.go.ke

THE

2016
ment
Kenya.

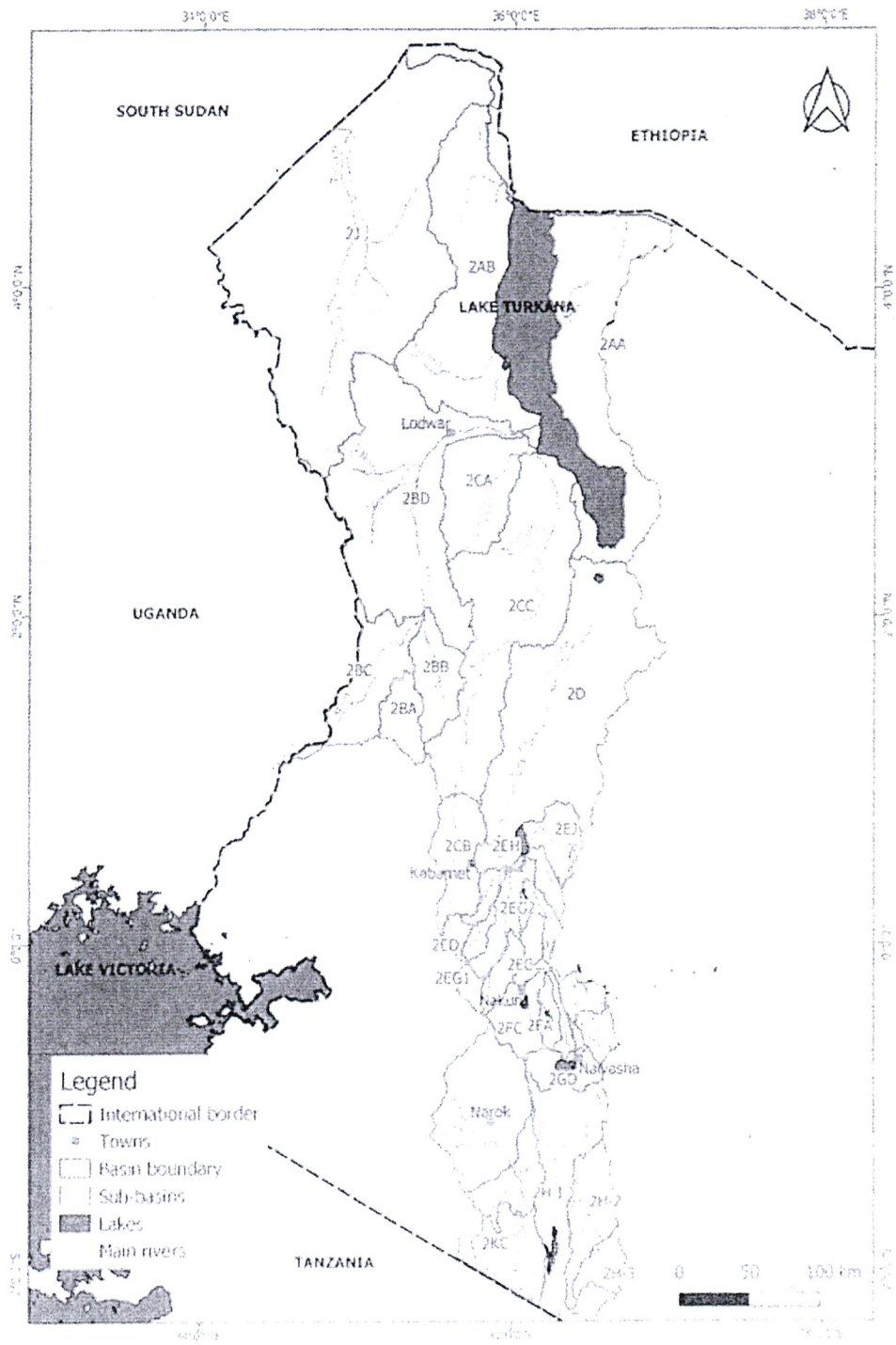
lowing
which
Act. In
Kenya

of Basin

The purpose of this Instrument comprising *Legal Notice 235* before the National Assembly in compliance with Section 11 of the Statutory Instruments Act, 2013.

Statutory
Assembly in

The drainage network and sub-basins of the Rift Valley Basin



The drainage network and sub-basins of the Athi River Basin Area:



Y

29048
29950
i.go.ke
i.go.ke

THE

2016
ment
nya.

wing
which
ct. In
enya

Basin

The purpose of this letter is to request your statutory
Instrument comprising *Legal Notice 235* before the National Assembly in
compliance with Section 11 of the Statutory Instruments Act, 2013.

SECOND SCHEDULE
SUB-BASIN AREAS

<i>S/No.</i>	<i>Sub-Basins in Lake Victoria North Basin Area</i>	<i>Sub-Basins in Lake Victoria South Basin Area</i>	<i>Sub- Basins in Rift Valley Basin Area</i>	<i>Sub- Basins in Athi Basin Area</i>	<i>Sub- Basins in Tana Basin Area</i>	<i>Sub- Basins in Ewaso Ng'iro North Basin Area</i>
1.	1AA	1GA	2AA	3AA	4AA	5AA
2.	1AB	1GB	2AB	3AB	4AB	5AB
3.	1AC	1GC	2BA	3AC	4AC	5AC
4.	1AD	1GD	2BB	3BA	4AD	5AD
5.	1AE	1GE	2BC	3BB	4BA	5BA
6.	1AF	1GF	2BD	3BC	4BB	5BB
7.	1AG	1GG	2CA	3BD	4BC	5BC
8.	1AH	1HA	2CB	3CB	4BD	5BD
9.	1BA	1HB	2CC	3DA	4BE	5BE
10.	1BB	1HC	2D	3DB	4BF	5CA
11.	1BC	1HD	2EA	3EA	4BG	5CB
12.	1BD	1HE	2EB	3EB	4CA	5CC
13.	1BE	1HF	2EC	3EC	4CB	5DA
14.	1BF	1HG	2ED	3ED	4CC	5DB
15.	1BG	1JA	2EE	3FA	4DA	5DC
16.	1BH	1JB	2EF	3FB	4DB	5DD
17.	1CA	1JC	2EG1	3G	4DC	5EA
18.	1CB	1JD	2EG2	3HA	4DD	5EB
19.	1CC	1JE	2EH	3HB	4DE	5EC
20.	1CD	1JF	2EJ	3HC	4EA	5ED
21.	1CE	1JG	2EK	3HD1	4EB	5FA
22.	1DA	1KA	2FA	3HD2	4EC	5FB
23.	1DB	1KB	2FB	3J	4ED	5GA
24.	1DC	1KC	2FC	3K	4FA	5GB
25.	1DD	1LA1	2GA	3LA	4FB	5H
26.	1EA	1LA2	2GB	3LB	4GA	5J
27.	1EB	1LA3	2GC	3MA	4GB	
28.	1EC	1LB1	2GD	3MB	4GC	
29.	1ED	1LB2	2H	3MC	4GD	
30.	1EE		2J	3MD1	4GE	
31.	1EF		2KA	3MD2	4GF	
32.	1EG		2KB	3N	4GG	
33.	1FA		2KC		4HA	
34.	1FB				4HB	
35.	1FC				4HC	
36.	1FD				4JA	
37.	1FE				4JB	
38.	1FF				4KA	
39.	1FG				4KB	
40.	1AA					

Notes:

The Sub Basin Code/Identification has the following components:

- First digit represents the Basin i.e. 1 for Lake Victoria (North and South), 2 for Rift Valley, 3 for Athi, 4 for Tana and 5 Ewaso Ngiro North
- The Letters immediately after the digit represent the major sub division of the Basin; and
- The subsequent letter represents the minor sub-division of the Basin (a sub division of the major sub division)

MOHAMED M. SHURIE,
Chief Executive Officer,
Water Resources Authority.



'29048
'29950
a.go.ke
a.go.ke

THE

2016
ment
Kenya.

owing
which
Act. In
Kenya

PRINTED AND PUBLISHED BY THE GOVERNMENT PRINTER, NAIROBI

of Basin

The purpose of this Instrument comprising *Legal Notice 235* before the National Assembly in compliance with Section 11 of the Statutory Instruments Act, 2013.