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THE NATIONAL ASSEMBLY



ELEVENTH PARLIAMENT – FIFTH SESSION- 2017


DEPARTMENTAL COMMITTEE ON ENVIRONMENT AND NATURAL
RESOURCES

REPORT ON THE CONSIDERATION OF THE HYDROLOGISTS BILL, 2016

CLERK'S CHAMBERS
PARLIAMENT BUILDINGS,
NAIROBI

JANUARY, 2017

*Paper laid by the
Chairperson of the
Environment and Natural
Resources on 02/02/2017*



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CHAIR'S FOREWORD

On behalf of the Departmental Committee on Environment and Natural Resources and pursuant to provisions of Standing Order 199 (6), it is my pleasant privilege and honor to present to this House the Report of the Committee on its consideration of the Hydrologists Bill, 2016.

The Bill was read a first time in the House on 27th April, 2016 and subsequently committed to the departmental Committee on Environment and Natural Resources. The Committee's report has been prepared following meetings with various stakeholders including the Ministry of Water and Irrigation and the Hydrologists Society of Kenya.

The Bill seeks to regulate the profession of Hydrologists who play a critical role in solving water related problems in society: problems of quantity, quality and availability. The Bill provides for the establishment of the Hydrologists Registration Board and its functions which include regulating the standards of performance of hydrologists. The Bill also sets out the definition of hydrological science and the qualifications needed for a person to practice as a hydrologist.

The Committee wishes to register its appreciation to the Offices of the Speaker and the Clerk of the National Assembly for the support accorded to the Committee and the staff, in the execution of its mandate. Let me take this opportunity to thank all Members for their patience, endurance and dedication to committee business, despite their other commitments and tight schedules, especially during this election year, which enabled the Committee to complete this Report.

Hon. Amina Abdalla, CBS, M.P

COMMITTEE MANDATE

The Departmental Committee on Environment and Natural Resources is established under the National Assembly Standing Orders No. 216 (1). The functions and mandate of the Committee are also contained under the National Assembly Standing Orders, No. 216(5) as:-

- a) Investigate, inquire into, and report on all matters relating to the mandate, management, activities, administration, operations and estimates of the assigned Ministries and departments;
- b) Study the program and policy objectives of the Ministries and departments and the effectiveness of the implementation;
- c) Study and review all legislation referred to it;
- d) Study, access and analyze the relative success of the Ministries and Departments as measured by the results obtained as compared with its stated objectives;
- e) Investigate and inquire into all matters relating to the assigned Ministries and departments as they may deem necessary, and as may be referred to them by the House;
- f) Vet and report on all appointments where the constitution or any law requires the National Assembly to approve, except those under Standing Order 204; and
- g) Make reports and recommendations to the House as often as possible, including recommendation of proposed legislation.

The subject matter of the Departmental Committee on Environment and Natural Resources are stated in the Second Schedule of the National Assembly Standing Orders No. 216 (f) as follows: climate change, environment management and conservation, forestry, water resource management, wildlife, mining and natural resources, pollution and waste management.

OVERSIGHT

In executing its mandate, the Committee oversees the following Government Departments namely:-

- i. The State department for Water Services;
- ii. The State Department of Environment;
- iii. The State Department for Natural Resources; and
- iv. The Ministry of Mining

MEMBERS OF THE COMMITTEE

The Committee comprises the following Members:

Chairperson	Hon. Amina Abdalla, M.P, CBS	-
Vice Chairperson	Hon. Alexander. K. Kosgey, M.P.	-
	Hon. Alice Ng'ang'a, M.P.	
	Hon. Samuel Ndiritu, M.P.	
	Hon. Opiyo Wandayi, M.P.	
	Hon. (Dr.) Ejidius Njogu Barua, M.P.	
	Hon. Jude Njomo, M.P.	
	Hon. Moitalel Ole Kenta, M.P.	
	Hon. Kathuri Murungi, M.P.	
	Hon. Sunjeev Birdi, M.P.	
	Hon. Jackson K. Rop, M.P.	
	Hon. Abdi Noor Ali, M.P.	
	Hon. Joyce Emanikor, M.P.	
	Hon. Abdulaziz Farah, M.P.	
	Hon. Ronald Tonui, M.P.	
	Hon. (Dr.) Reginalda Wanyonyi, M.P.	
	Hon. Gideon Mwiti, M.P.	
	Hon. Hassan Dukicha, M.P.	
	Hon. Chachu Ganya, M.P.	
	Hon. Richard Makenga, M.P	
	Hon. Charles Geni. Mongare, M.P.	
	Hon. (Dr.) Wilber K. Ottichilo, M.P.	
	Hon. George Ogalo, M.P.	
	Hon. (Major) Muluvi Mutua, M.P.	
	Hon. Mohamed, Diriye M.P.	
	Hon. Peter Kinyua, MP.	
	Hon. Shukran Hussein Gure, M.P	
	Hon. Joyce Lay, M.P	

SECRETARIAT

The Committee is serviced by the following Members of Staff:

Ms. Tracy Chebet Koskei	- Clerk Assistant II
Mr. Hassan Arale	- Clerk Assistant III
Mr. Ronald Walala	- Legal Counsel II

SITTINGS

The Committee held three sittings to consider the Hydrologists Bill, 2016. One of the sittings included a meeting with the Cabinet Secretary for Ministry of Water & Irrigation and the Secretariat to the Hydrologists Society of Kenya. The Committee's decisions to accept and or reject the amendments were based on the Constitutional requirements and borrowed best practices in other jurisdictions with similar experiences.

INTRODUCTION

On 27th April, 2016, the Hydrologists Bill, 2016 was read a first time in the House by the Leader of the Majority. According to the United States Geological Survey, Hydrology is the science that encompasses the occurrence, distribution, movement and properties of the waters of the earth and their relationship within each phase of the hydrological cycle. Hydrologists therefore play a critical role of applying the scientific knowledge and mathematical principles to solve water related problems in society: problems of quantity, quality and availability.

1.1 Consideration of the Bill

The principal object of the Bill is to provide for the registration of persons to practise as hydrologists, assistant hydrologists and consulting hydrologists. **Clause 21(1)** of the Bill outlines the practice of hydrology as—

“offering to perform or performing services involving—

- (a) the verification of hydrological data, studies, and design or hydrometric installations; or
- (b) hydrological studies, design and investigations and assessment of water resources potential,”

Part I of the Bill deals with preliminary provisions. It provides for the long title of the Bill and the definition of terms as used in the Bill.

Part II of the Bill deals with the establishment and functions of the Hydrologists Registration Board. It provides for the composition of a nine-member Board, the conduct of business and affairs of the Board, the employment of staff and the protection from personal liability of the Board members.

Part III of the Bill deals with the Registrar and the registers to be maintained under the Bill and the qualifications for registration. Once appointed, the Registrar is to keep and publish registers of the various categories of hydrologists. Under **Clause 18** of the Bill, to be registered as a hydrologist, a person must be a member of the Hydrological Society of Kenya (“Society”) and the holder of a degree or postgraduate degree in any two disciplines among hydrology, hydraulics or fluid dynamics, and computational or applied mathematics. To be registered as an assistant hydrologist, one must be a member of the Society and hold a diploma or equivalent qualification in hydrology from a polytechnic or recognized college and must have practical experience of not less than three (3) years of a nature that satisfies the Board.

Part IV of the Bill deals with financial provisions. The funds of the Board include such monies as may be appropriated by Parliament for the implementation of the Bill and the affairs of the Board. The Part also provides for the financial year and requirement for the preparation of the annual estimates of the Board. The Board is to keep proper books of account and submit the books for audit on an annual basis as per the provisions of the Public Audit Act, 2015.

Part V of the Bill deals with general provisions. These include restrictions on the use of the titles “hydrologist”, “assistant hydrologist” and “consulting hydrologist” by a non-registered person as well as dishonest practices related to the practice of hydrology. The Part gives the Cabinet Secretary the power to make regulations under the Bill and to exempt certain persons from having to comply with the provisions of the Bill. **Clause 37** of the Bill allows persons practising as hydrologists a transitional period of six months or such longer period as the Cabinet Secretary may prescribe to take out licences with the Board.

The Schedule to the Bill deals with the provisions as to the conduct of business and affairs of the Board.

SUBMISSIONS FROM VARIOUS STAKEHOLDERS ON THE HYDROLOGISTS BILL, 2016

2.1 Comments from the Ministry of Water and Irrigation and the Hydrologists Society of Kenya

The Cabinet Secretary for the Ministry of Water and Irrigation, Hon. Eugene Wamalwa, EGH and the Secretary for the Hydrologists Society of Kenya, Mr. Samuel Mureithi Kioni appeared before the Committee on 21st June, 2016 to present their submission. Both the Ministry and the Hydrologists Society of Kenya presented the same views on the Bill.

The Cabinet Secretary informed the Committee that hydrologists play a critical role in the society; it is the professional duty of Hydrologists to determine stream flow estimates for the sizing of flood control and storage structures such as dams, reservoirs, dam spillways, dam tunnels, urban storm water channels etc. If Civil Engineers design these structures poorly as a result of poor hydrological input, this would pose grave danger to downstream inhabitants and property. Similarly, over-sizing of such structures as a result of poor hydrological input would result in projects that become white elephants.

It is also the core business of hydrologists to map out flood zone areas especially in the river's riparian zones. If engineers do not incorporate hydrologists' findings on flooding, the results are catastrophic such as collapse of buildings and flooding. Hydrologists also play a critical role in the determination of river flows during drought conditions. Sustaining equity in water allocations under these circumstances is vital in meeting the needs of all water users, especially downstream communities who are often pastoralists with no other source of water for their livestock.

Hon. Wamalwa further stated that arbitration of disputes on water resources issues taken to the environment court will require evidence. Registered hydrologists who are experts in the field can be relied upon to provide courts with the necessary professional guidance to enable the courts make well informed judgements.

This Bill provides for the establishment of the Hydrologists Registration Board which exercise professional regulation and oversight over hydrologists who provide expertise in surface water resource assessment, exploration and monitoring. Regulation through such a Board will minimise disasters that lead to loss of property and human lives even collapse of buildings that is related to poor drainage due to lack of consideration of hydrological input.

The Board once established will be in a position to enforce expected performance by those who are registered with it, this will ensure high professional standards are upheld.

The Board will also lead to better assessment of our share of international water resources and make Kenya be in a better position to negotiate on water matters at regional and International forums.

Proposed Amendments

The Ministry of Water and Irrigation and the Hydrologists Society of Kenya presented a joint submission on the following amendments to the Bill:

PART I - PRELIMINARY

Delete the phrase “assistant hydrologist” and substitute with the phrase “hydrological assistant” under articles and sub-articles: 2, 13 (1) (b), 18 (2) (b), 24 (3), 33 (1) (b), 33 (2) (a), 33 (2) (b); under section on Memorandum of objects and reasons- paragraph 1, clause 33.

Delete the phrase “consulting hydrologist” with the phrase “consultant hydrologist” under articles and sub-articles: 2, 13 (1) (c), 18 (3), 18 (3) (b), 24 (2), 33 (1) (a), 33 (2) (b); under section on Memorandum of objects and reasons – paragraph 1, clause 33.

PART II – ESTABLISHMENT AND FUNCTIONS OF THE BOARD

6 (1) (e) Delete the phrase “the principal secretary for the time being responsible for matters relating to roads construction” and substitute with the phrase “Two members to be appointed by the Hydrological society of Kenya by virtue of their experience in hydrology”

6 (1) (f) delete this sub-clause

PART III- THE REGISTRAR AND THE REGISTER

Delete sub-clauses 18 (1) and (2) and substitute with the following words:

18(1) (a) is a holder of a degree or a post graduate diploma in hydrological sciences; and
18) (c) has had not less than two years’ practical experience in the hydrological field.

COMMITTEE OBSERVATIONS / CONCERNS

The Committee was concerned over the need for a Hydrologists Registration Board given the high number of boards in the country. The Committee felt that creation of a new board will put a strain on the ex-chequer. However, the Ministry of Water and Irrigation justified the need for the Board stating that the Board will register and exercise oversight

over all duly qualified hydrologists. Further, as a professional Board, it will be responsible for enforcing expected performance by those who are registered with it.

The Ministry submitted that the Board would be anchored in the Ministry of Water and Irrigation. Since hydrology is a young profession which is not currently well established to be able to support itself, funding for the Board's activities needs to initially come from the exchequer. This is in order since activities of the Board will enhance government functions and assist the country in achieving the aspirations of vision 2030 with regard to water resources. However, as the profession grows, it will ultimately become self-sustaining.

4.0 COMMITTEE RECOMMENDATIONS

PROPOSED AMENDMENTS

Having considered the views of the stakeholders; the Ministry of Water and Irrigation; and the Hydrologists Society of Kenya, the Committee is proposing the following amendments for possible introduction at the Committee Stage of the Bill-

CLAUSE 2

THAT, clause 2 be amended by –

- (a) deleting the words “assistant hydrologist” appearing in and substituting therefor the words “ hydrological assistant”;
- (b) deleting the words “consulting hydrologist” and substituting therefor the words “consultant hydrologist”; and
- (c) inserting the following new definition
“hydrological sciences” includes hydrology, hydraulics or fluid dynamics or computational or applied mathematics.

CLAUSE 6

THAT, the Bill be amended in clause 6 (1) by –

- (a) inserting the following new paragraph immediately after paragraph (h)-
“(ha) a representative of the National Environment Management Authority;
- (b) inserting the words “,who shall be an ex officio member of the Board” immediately after the word “ Registrar” in paragraph (i).

CLAUSE 13

THAT, the Bill be amended in clause 13 (1) by-

- (a) deleting the phrase “ assistant hydrologist” appearing in paragraph (b) and substituting therefor the phrase “hydrological assistant”;
- (b) deleting the phrase “ consulting hydrologist” and substituting therefor the phrase “ consultant hydrologist”

CLAUSE 18

THAT, the Bill be amended in clause 18 —

- (a) in sub-clause (1) by
 - (i) deleting paragraph (a) and substituting therefor the following new paragraph —
“(a) is a holder of a degree or a post graduate diploma in hydrological sciences:”
 - (ii) inserting the following new paragraph immediately after paragraph (b)-
(c) has had not less than two years practical experience in the hydrological field.
- (b) in sub clause (2) by deleting the words “assistant hydrologist” wherever it appears and substituting therefor the words “ hydrological assistant”;
- (c) in sub clause (3) by deleting the words “consulting hydrologist” wherever it appears and substituting therefor the words “consultant hydrologist”.

CLAUSE 24

THAT, the Bill be amended in clause 24—

- (a) by deleting the words “consulting hydrologist” appearing in sub clause (2) and substituting therefor the words “consultant hydrologist”;
- (b) by deleting the words “assistant hydrologist” appearing in sub clause (3) and substituting therefor the words “hydrological assistant”;

CLAUSE 33

THAT, the Bill be amended in clause 33 by deleting the words “assistant hydrologist” and “consulting hydrologist” wherever they appear and substituting therefor the words “ hydrological assistant” and “consultant hydrologist” respectively.

- (a) inserting the word “made under this Act” immediately after the word “regulations” appearing in paragraph “(c)”; and
- (b) deleting the word “for issuance by basin water resources committees” appearing in paragraph (f).

Signed..........Date.....26/01/2017.....

Hon. Amina Abdalla, MP, CBS
Chairperson, Departmental Committee on Environment and Natural Resources

ANNEXTURE 1-MINUTES OF THE COMMITTEE

MINUTES OF THE 2ND SITTING OF THE DEPARTMENTAL COMMITTEE ON ENVIRONMENT AND NATURAL RESOURCES, HELD ON THURSDAY 26TH JANUARY, 2017 AT 10.00 AM IN CPA ROOM, PARLIAMENT BUILDINGS

PRESENT

1. Hon. Abdalla Amina, M.P. – **Chairperson**
2. Hon. Alexander Kosgey, M.P. – **Vice Chairperson**
3. Hon. Geni Charles Mong'are, M.P.
4. Hon. Ole Kenta Richard Moitalel, M.P.
5. Hon. Kathuri Murungi, M.P.
6. Hon. Ogalo George Oner, M.P.
7. Hon. Sunjeev Kaur Birdi, M.P.
8. Hon. Tonui Ronald Kiprotich, M.P.
9. Hon. Farah, Abdulaziz Ali, M.P.
10. Hon. Dr. Barua Ejidius Njogu, M.P.
11. Hon. Muluvi Marcus Mutua, M.P.
12. Hon. Dr. Ottichillo K. Wilber, M.P.
13. Hon. Abdinoor Mohammed Ali, M.P.
14. Hon. Wandayi James Opiyo, M.P.
15. Hon. Richard Makenga, M.P.
16. Hon. Jude Njomo, M.P.
17. Hon. Ng'ang'a Alice Wambui, M.P.

APOLOGIES

1. Hon. Ganya Francis Chachu, M.P.
2. Hon. Ndiritu Samuel Mathenge, M.P.
3. Hon. Dukicha Hassan Abdi, M.P.
4. Hon. Dr. Wanyonyi Reginalda N. M.P.
5. Hon. Irea Gideon Mwiti, M.P.
6. Hon. Joyce Lay, M.P.
7. Hon. Gure Shukran Hussein, M.P.
8. Hon. Mohamed Diriye Abdullahi, M.P.
9. Hon. Emanikor Joyce, M.P.
10. Hon. Rop Jackson Kipkorir, M.P.
11. Hon. Peter Kinyua, M.P.
12. Hon. Zulekha Hassan, M.P.

IN-ATTENDANCE - SECRETARIAT

1. Ms. Tracy Chebet Koskei – Clerk Assistant II
2. Mr. Hassan A. Arale – Clerk Assistant III
3. Ms. Amran Mursal – Fiscal Analyst
4. Mr. Mohamed Said Mohamed – Serjeant -at-Arms

MIN.NO. DC/ENR/005/2017:

PRELIMINARIES

The meeting was called to order at 10.30 am after which prayers were said. The Chair then welcomed the members to the meeting.

MIN.NO. DC/ENR/006/2017: BRIEF BY THE PARLIAMENTARY BUDGET OFFICE:

The Fiscal Analyst submitted that,

The overall budget adjustments

- 1) The 2016/17 supplementary budget proposes to reduce the total gross ministerial expenditure by **Kshs. 181.15 billion** (10.8% of the printed estimates). The gross ministerial recurrent expenditure has been revised upwards by **Kshs 32.44 Billion** comprising of an increase of **Kshs 10.7 billion** in the net recurrent estimates and an increase of **Kshs 21.67 billion** in AIA.
- 2) The gross development expenditure has reduced by **Kshs 213.59 billion** with a decrease in the AIA by **Kshs 194.03 billion** while the net development estimates has reduced by **Kshs 19.5 billion**. The reduction in the development expenditure is majorly attributed to under performance of A-I-A especially from external development partners.

A. The budget adjustments in the Environment, Water and Natural Resources Sector

a) State Department for Environment

- 3) The gross printed estimate for the State Department for environment in 2016/17 financial was **Kshs. 7.23 billion**. This comprised of **Kshs 2.98 billion** for recurrent expenditure and **Kshs 4.25 billion** for development expenditure. The 2016/17 supplementary budget has adjusted the gross allocation to **Kshs 4.80 billion** which represents an overall decrease of **Kshs 2.43 billion** representing 34% decrease.
- 4) The gross recurrent expenditure was increased to **Kshs. 3.06 billion** from the printed estimates of **Kshs. 2.98 billion** resulting in an increase of **Kshs 78.26 million** which is on the net recurrent expenditure representing an increase of 2.6 per cent.
- 5) This is attributed to an increase in use of goods and services which increased by **Kshs. 79.55 million** while other recurrent reduced by **Kshs. 1.29 million**. The components under use of goods and services are under Headquarters financial management and procurement services which increased domestic travel and subsistence, and other

- transportation costs from **Kshs. 2.65 million** to **Kshs. 51.86 million** (increase of **Kshs. 49.21 million**), foreign travel and subsistence and other transportation costs increased from zero allocation to **Kshs. 30 million** in the supplementary. Hospitality supplies and services also increased from **Kshs. 0.99 million** to **Kshs. 30.70 million**
- 6) The gross development expenditure was reduced to **Kshs. 1.74 billion** from the printed estimates of **Kshs. 4.25 billion** resulting in a decrease of **Kshs 2.50 billion** which is on the net development expenditure which has been reduced from **Kshs. 3.90 billion** to **Kshs. 1.66 billion** representing a decrease of 58 per cent. The A-I-A has reduced from **Kshs. 346.08 million** to **Kshs. 86.67 million** representing a decrease of 75 percent.
 - 7) The major reduction in development is as a result of reduced allocation in the net estimates by **Kshs. 2.24 billion**. The projects whose allocations have decreased by more than a hundred million are; the Adaptation fund (NEMA) which had a net decrease of **Kshs. 356.11 million**, urban rivers rehabilitation project by **Kshs. 144 million**, RANET- Kenya Community Radio (Phase III) by **Kshs. 117 million**, purchase of digital instrument by **Kshs. 106 million** and Acquisition of CAT 3 Airport Weather Observing System by **Kshs. 100 million**.
 - 8) According to the Programme Based Budget, the overall decrease of **Kshs. 2.42 billion** is on account of austerity measures on capital expenditures. The programmes affected by the adjustments in expenditures include Meteorological services; Environment Management and Protection; and General Administration, Planning and Support Services.
 - 9) The National Environment Management sub-Programme had the highest reduction in allocation. **State Department for Natural Resources**
 - 10) The state department for Natural Resources had a gross printed estimate of **Kshs. 14.91 billion** in the FY 2016/2017 printed estimates. The supplementary estimate has reduced this allocation to **Kshs. 13.82 billion** representing a decrease of **Kshs. 1.09 billion**.
 - 11) Recurrent allocation has increased from **Kshs. 11.32 billion** to **Kshs. 11.86 billion** representing a total increase of **Kshs. 540.03 million**. Compensation to employees increased by **Kshs. 60 million** (**Kshs. 25.77 million** increase in the natural resource HQs, new allocation of **Kshs. 17.51 million** for wildlife conservation HQs, **Kshs. 3.19 million** new allocation to planning and project monitoring while the financial

management services had a new allocation of **Kshs. 13.52 million**). Current transfers to Govt agencies increased by **Kshs. 500 million** which was as a result of an increase in allocation to KWS from the approved **Kshs. 3.92 billion** to **Kshs. 4.41 billion** while other recurrent increased by **Kshs. 80 million** (purchase of h/hold, office, general equipment and specialized plant and machinery for the HQs). However there is a decrease of **Kshs. 100 million** in the use of goods and services component.

- 12) Development expenditure has decreased from the allocated/approved estimate of **Kshs. 3.59 billion** to **Kshs. 1.96 billion** representing a decrease of 45 percent. This was mainly as a result of A-I-A decreasing from **Kshs. 1.45 billion** to **Kshs. 411.50 million (Kshs. 1.03 billion)** and the net estimates reducing from **Kshs. 2.15 billion** to **Kshs. 1.55 billion (Kshs.600 million)**.
- 13) The decrease in A-I-A is mainly in the conservation of biodiversity in Northern Kenya-France Project which decreased by **Kshs. 618.5 million** and the capacity development project for sustainable forest management which decreased by **Kshs. 206 million**.
- 14) According to the Programme Based Budget, the overall decrease of **Kshs. 1.09 billion** is on account of the decrease on capital expenditures; however the recurrent expenditure has been adjusted upwards by **Kshs. 500 million** on account of additional funding for salary shortfall.

b) State Department for Water Services

- 15) The Gross printed estimates for the state department for water services in the FY 2016/2017 amount to **Kshs. 43.23 billion**. This comprised of **Kshs. 39.61 billion** for development and **Kshs. 3.62 billion** for recurrent expenditure.
- 16) In the supplementary estimates, recurrent estimate was revised upwards to **Kshs. 4.02 billion** resulting to an increase of **Kshs. 398.95 million**.
- 17) Water resources management authority has an increased allocation of **Kshs. 300 million**, coastal water services board with **Kshs. 184.45 million**, and **Kshs. 16.4 million** new allocation to the regional centre on groundwater resource education training & research. Compensation to employees however was reduced by **Kshs. 73.78 million** while use of goods was reduced by **Kshs. 27.45 million**.
- 18) Development expenditure was revised downwards to **Kshs. 21.61 billion** resulting to a decrease of **Kshs. 18 billion**.

- 19) Out of the **Kshs. 39.61 billion** allocated for development **Kshs. 28.47 billion** (72%) was to be financed through A-I-A while **Kshs. 11.14 billion** was to be financed through the exchequer. This shows that the state department relies heavily on external sources of financing.
- 20) Under the supplementary estimates A-I-A for development expenditure has reduced by **Kshs. 16.82 billion** reducing A-I-A allocation from **Kshs. 28.47 billion** to **Kshs. 11.65 billion** while the net estimates reduced by **Kshs. 1.18 billion**.
- 21) As shown in table 1, there are projects which have been introduced under the supplementary budget for the state department for Water Services. These projects are totaling to **Kshs.1.57 billion** of which **Kshs. 100 million** is through A-I-A while **Kshs. 1.47 billion** is to be financed through the exchequer.

Project	Gross	A-I-A	NET
Siyoyi-Muruny Water Project	417.71	-	417.71
Drought Mitigation	221.17		221.17
Ithanga Water Supply	100.00	100.00	-
Kenya Pooled Water Fund	250.00	-	250.00
Public Participation Water Supply Projects	539.80		539.80
Kaptagat Sitoton Water Supply	35.00		35.00
Lokoitany Water Project	10.00		10.00
TOTAL	1,573.69	100.00	1,473.69

Source: Supplementary Estimate Programme Based Budget FY 2016/2017, National Treasury

c) Ministry of Mining

- 22) The gross printed estimate for the Ministry of Mining in 2016/17 financial was **Kshs. 4.59 billion**. This comprised of **Kshs 697.36 million** for recurrent expenditure and **Kshs 3.89 billion** for development expenditure. The 2016/17 supplementary budget has adjusted the gross allocation to **Kshs 2.10 billion** which represents an overall

decrease of **Kshs 2.49 billion** representing 54% decrease. The supplementary allocation has increased the recurrent expenditure by **Kshs. 70.99 million** while the development expenditure has decreased by **Kshs. 2.56 billion**

23) Rehabilitation of Madini House and HQS have been allocated **Kshs. 50 million** and **Kshs. 35.16 million** under the supplementary. These projects were not allocated any funds during the start of the FY.

B. Salient issues

A review of the supplementary estimates reveals the following key issues which the Committee may wish to note:

- i. There is no details on whether the additional funds sought for in the supplementary budget is for expenditure that is either yet to be incurred or has been incurred within the last two months.
- ii. A number of programmes in the State Department for Environment, State Department for Natural Resources, State Department for Water Services, and the Ministry of Mining have been amended by more than ten percent of their approved estimates for 2016/17. This is inconsistent with the provisions of the PFM Act 2012 Section 43(2)(c)
- iii. It is also noted that the total development allocation for the State Department of Water Services has been reduced due to the reduction in donor funding. Unless the government increases the allocation through exchequer, the issue of pending bills is highly likely to escalate.

COMMITTEE FINAL OBSERVATIONS:

The Committee observed that:-

1. The net development expenditure was reduced from kshs. 3.90 billion to kshs. 1.66 billion Representing a decrease of 58% and A.I.A has reduced from kshs. 346.08 million to kshs. 86.67 million Representing a decrease of 75% according to the public finance management act, 2012 which states any reduction or increment should not be more than 10% of the allocated amount in printed estimates.
2. The major reduction in development as a result of reduced allocation in the net estimates by **Kshs. 2.24 billion**. The projects whose allocations have decreased by more than a hundred million are; the Adaptation fund (NEMA) which had a net

decrease of **Kshs. 356.11 million**, urban rivers rehabilitation project by **Kshs. 144 million**, RANET- Kenya Community Radio (Phase III) by **Kshs. 117 million**, purchase of digital instrument by **Kshs. 106 million** and Acquisition of CAT 3 Airport Weather Observing System by **Kshs. 100 million**. So therefore the Committee was concerned what is the basis of reducing? What will be affected? What are the necessary contingency measures put in place? and which airports are these?

3. Whether Umaa dam, Badasa Dam, Thiba Dam in Muranga and Garissa sewerage Company is funded through equalization fund since it is not listed.
4. Why remove funds from granite assessment in Vihiga and add it to geological data bank project?
5. Let the Ministry complete the ongoing projects before starting new projects.
6. There is no intra communication between the Executive hence the administrative hiccups in using funds.

MIN.NO.DC/ENR/007/2017: ADOPTION OF THE REPORT ON THE HYDROLOGIST BILL.2016;

The Members having considered the report on the Hydrologist Bill, 2016 adopted it as the true reflection of the committee's deliberation after it was proposed and seconded by Hon. Sunjeev Kaur Birdi, M.P and Hon. Marcus Mutua Muluvi, M.P respectively.

MIN.NO.DC/ENR/008/2017: ANY OTHER BUSINESS

The following were discussed;

1. Hon. Wilber Ottichilo was tasked to convene a sub-committee meeting to analyze the Environmental Impact Assessment study report submitted by the Ministry of Water and Irrigation on the Northern Water Collector project and thereafter report to the Committee to plan a second visit.
2. The Committee was informed of the blockage of the sewerage system in Lunga Lunga by the tannery industries and therefore the need to visit the area and assess the damage. The Committee agreed there is need for formal petition to the committee for the committee to undertake the field visit.

MIN.NO.DC/ENR/009/2017:

ADJOURNMENT

There being no other business the meeting was adjourned at 12.30pm.

SIGNED.....
(Chairperson)

DATE.....

MINUTES OF THE 46TH SITTING OF THE DEPARTMENTAL COMMITTEE ON ENVIRONMENT AND NATURAL RESOURCES HELD ON TUESDAY 21ST JUNE, 2016 AT 10.30 CPA ROOM, PARLIAMENT BUILDING.

PRESENT

1. Hon. Abdalla Amina, M.P. – **Chairperson**
2. Hon. Alexander Kosgey, M.P. – **Vice Chairperson**
3. Hon. Ganya Francis Chachu, M.P.
4. Hon. Gure Shukran Hussein, M.P.
5. Hon. Ole Kenta Richard Moitalel, M.P.
6. Hon. Kathuri Murungi, M.P.
7. Hon. Sunjeev Kaur Birdi, M.P.
8. Hon. Tonui Ronald Kiprotich, M.P.
9. Hon. Farah, Abdulaziz Ali, M.P.
10. Hon. Muluvi Marcus Mutua, M.P.
11. Hon. Ottichillo K. Wilber, M.P.
12. Hon. Abdinoor Mohammed Ali, M.P.
13. Hon. Richard Makenga, M.P.
14. Hon. Jude Njomo, M.P.

APOLOGIES

1. Hon. Geni Charles Mong'are, M.P.
2. Hon. Ogalo George Oner, M.P.
3. Hon. Dr. Wanyonyi Reginalda N. M.P.
4. Hon. Irea Gideon Mwiti, M.P.
5. Hon. Rop Jackson Kipkorir, M.P.
6. Hon. Peter Kinyua, M.P.
7. Hon. Ng'ang'a Alice Wambui, M.P.
8. Hon. Joyce Lay, M.P.
9. Hon. Isaac Mwaura, M.P.
10. Hon. Emanikor Joyce, M.P.
11. Hon. Ndiritu Samuel Mathenge, M.P.
12. Hon. Barua Ejidius Njogu, M.P.
13. Hon. Dukicha Hassan Abdi, M.P.
14. Hon. Zuleikha Hassan, M.P.
15. Hon. Mohamed Diriye Abdullahi, M.P.

IN- ATTENDANCE

THE NATIONAL ASSEMBLY

- | | |
|----------------------------|-----------------------|
| 1. Ms. Tracy Chebet Koskei | - Clerk Assistant II |
| 2. Mr. Hassan A. Arale | - Clerk Assistant III |
| 3. Mr. James Muguna | - Researcher |
| 4. Mr. Ronald Walala | - Legal Counsel |
| 5. Mr. Simon Muinde | - Audio Officer |
| 6. Mr. Wilson Angatangoria | - Serjeant-At-Arms |

OFFICIALS OF THE MINISTRY OF WATER AND IRRIGATION:

- | | |
|---------------------------|--|
| 1. Hon. Eugene Wamalwa | -Cabinet Secretary, Ministry of Water and Irrigation |
| 2. Ms. Gladys Wekesa | - Acting Director, Directorate of Water Resources |
| 3. Mr. Bernard M. Karicho | - Hydrologist |
| 4. Mr. Simintei Ole Kooke | - Hydrologist |
| 5. Dr. Samuel M. Kiomi | - CSH |

MIN.NO. DC-ENR/164/2016:

PRELIMINARIES

The meeting was called to order at 10.30 am after which prayers were said. The chair then welcomed the members to the meeting.

MIN. NO. DC-ENR/165/2016: MEETING WITH HON. EUGENE WAMALWA CABINET SECRETARY MINISTRY OF WATER AND IRRIGATION TO GIVE SUBMISSIONS ON HYDROLOGIST BILL 2016;

The cabinet secretary informed the committee that,

The Bill was drafted in 2004 to add value to the water sector and help in the planning, design of water surface data and establish where the water (hydrological assessment) is to drill water for irrigation and domestic use. It will also help in the rehabilitation of hydrological network, food control and equitable distribution of water resources.

After operationalisation of the Act, within the first six month it will be mandatory to have a licence to practice as a hydrologist hence instil discipline and professionalism. The estimated membership is 1000 hydrologist but the hydrological society fraternity in Kenya has no administration since it is not based on statute. Therefore this will recognise the hydrological society of Kenya and the Ministry will not take the role of the society but will bring order and discipline in the practice. With this law, professional negligence will be a punishable offence.

The post of chief hydrologist will be established which is already provided for in the scheme of service in the Public Service Commission. The Chief Hydrologist will be responsible for efficiency, adherence to technical standards and data collection.

After presentation the Cabinet Secretary proposed the following amendments the hydrologist Bill, 2016

Replace the phrase “assistant hydrologist” with “hydrologist assistant”

Under articles and sub- articles: 2, 13(1) (b), 18 (2) (b), 18 (2)(b), 24(3), 33(1)(b), 33(2) (a),33(2(b); under section on memorandum of objects and reasons-paragraph 1,clause 33.

Replace the phase “consulting hydrologist” with “consultant hydrologist”

Under articles and sub- articles: 2, 13 (1) (c), 18(3), 18 (3) (b), 24(2), 33 (1) (a), 33 (2); under section on memorandum of objects and reasons- paragraphs 1, clause33.

PART II- ESTABLISHMENT AND FUNCTIONS OF THE BOARD

6(1) (e) two members to be appointed by the hydrologist society of Kenya by virtue of their experience in hydrology

6(1) (f) Delete this sub-article.

PART III- THE REGISTRAR AND REGISTER

Delete sub-articles 18(1) and (2) and replace with the following words:

18 (1) (a) is a holder of a degree or a post graduate diploma in hydrologist sciences and

18 (1) (c) has had not less than two years’ practical experience in the hydrological field.

COMMITTEE CONCERNS:

- I. The Members sought to know whether there would be overlapping functions the difference between the Board created in the bill and hydrological society of Kenya;
- II. The need to check the functions of WARMA and see if there is linkage with bill so that if it is related there will be no need to make a new board.
- III. One function is not captured that is “develop , update database in a GI system for cross referencing hydrological opportunities”

WAYFORWARD

1. The Cabinet Secretary undertook to provide more information to the Committee especially as regards the justification for creation of a Board, the information would submitted in a week’s time.
2. The Hydrological society of Kenya Secretary General Dr. Simon Kiomi was in agreement with the cabinet secretary and had no different submissions to give and said the society views were incorporated in the bill as indicated by the Cabinet Secretary during drafting.

MIN.NO. DC-ENR/166/2016:

ADJOURNMENT

There being no other business the meeting was adjourned at 12.30pm.

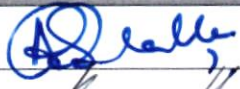
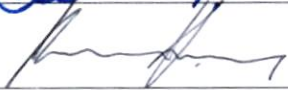
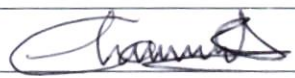

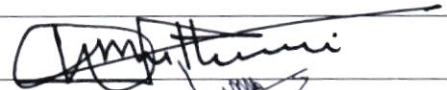

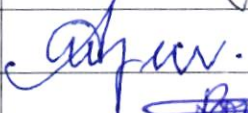
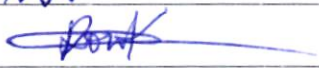
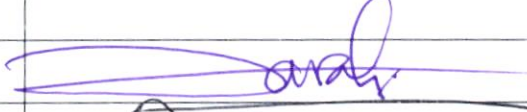

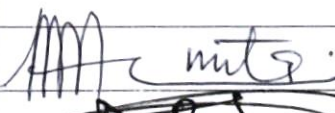


SIGNED.....
(Signature)
(Chairperson)

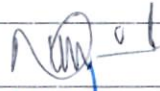

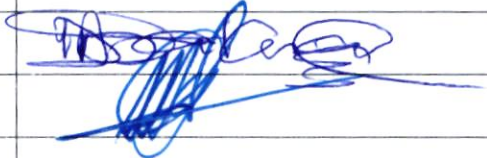
DATE.....
28/6/2016

ANEXTURES 2-ADOPTION LIST

DEPARTMENTAL COMMITTEE ON ENVIRONMENT AND NATURAL RESOURCES NATIONAL ASSEMBLY

ADOPTION LIST OF THE REPORT ON THE HYDROLOGIST BILL, 2016

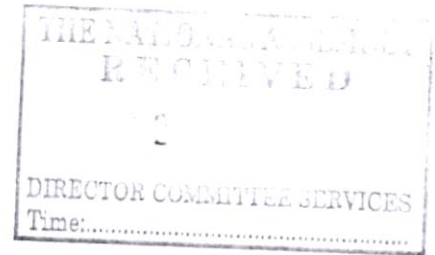
	NAME	SIGNATURE
1	Hon. Abdalla, Amina, MP, CBS-CHAIRPERSON	
2	Hon. Alexander Kosgey, MP Vice Chairperson	
3	Hon. Dukicha, Hassan Abdi, MP	
4	Hon. Emanikor, Joyce Akai, MP	
5	Hon. Ganya, Francis Chachu, MP	
6	Hon. Geni, Charles Mongare, MP	
7	Hon. Gure, Shukra Hussein, MP	
8	Hon. Ole Kenta, Richard Moitalel, MP	
9	Hon. Mohamed, Diriye Abdullahi, MP	
10	Hon. Murungi, Kathuri, MP	
11	Hon. Ogalo, George Oner, MP	
12	Hon. Sunjeev Kour Birdi, MP	
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14	Hon. Dr. Wanyonyi, Reginalda N, MP	
15	Hon. Farah, Abdulaziz Ali, MP	
16	Hon. Dr. Barua, Ejidius Njogu, MP	
17	Hon. Irea, Gideon Mwiti, MP	
18	Hon. Muluvi, Marcus Mutua, MP	
19	Hon. Wandayi James Opiyo, MP	
20	Hon. Ndiritu, Samuel Mathenge, MP	
21	Hon. Ottichilo, Wilber Khasilwa, MP	

22	Hon. Rop, Jackson Kipkorir, MP	
23	Hon. Abdinoor, Mohammed Ali, MP	
24	Hon. Ng'ang'a, Alice Wambui, MP	
25	Hon. Peter Kinyua, MP	
26	Hon. Richard Makenga, MP	
27	Hon. Jude Njomo, MP	
28	Hon. Joyce Lay, M.P	
29.	Hon. Zuleikha Hassan, M.P	

ANNEXTURES 3- SUBMISSION BY HON. EUGENE
WAMALWA CABINET SECRETARY MINISTRY OF WATER
AND IRRIGATION.

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REPUBLIC OF KENYA



MINISTRY OF WATER AND IRRIGATION
OFFICE OF THE PRINCIPAL SECRETARY

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Email: ps@water.go.ke

Ref : MWI/PARAS/10/38 VOL. II(79)

Date: 12th July 2016

Florence Atenyo-Abonyo,
Director, Committee Services,
NATIONAL ASSEMBLY.

**RATIONALE FOR THE PROPOSED HYDROLOGISTS REGISTRATION BOARD
AND JUSTIFICATION FOR RECEIVING EXCHEQUER FUNDING**

Following an invitation by the Departmental Committee on Environment and Natural Resources, the Cabinet Secretary for Water and Irrigation attended on 21st June, 2016 and provided a submission in the form of a statement on the Hydrologists Bill, 2016 to the committee.


The statement was also accompanied by a summary of the emerging issues.

Subsequently, the Committee requested the Ministry of Water and Irrigation to provide a **further statement** on the rationale for the Hydrologists Registration Board and a justification for it's receiving exchequer funding.

The Ministry has now complied and prepared the requested statement.

Forwarded herewith please find a statement in compliance with the request of the Committee for further action.

Yours faithfully,



Hassan Noor Hassan, EBS
For: Principal Secretary,
State Department of National Water Services,
Ministry of Water and Irrigation.

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Nairobi and the flooding of Nakumat Ukay Supermarket in Westlands. In many such situations, the Hydrologist's opinion was either ignored or not sought at all, as such advice or oversight during infrastructural development is not currently a legal requirement.

3. Hydrologists play a critical role in the determination of river flows during drought conditions. Sustaining equity in water allocation under these circumstances is vital in meeting the needs of all water users, especially downstream communities who are often pastoralists with no other source of water for their livestock. Needless to say, downstream-upstream conflicts that arise demand that sound and accurate determinations of water availabilities be carried out in these situations. Kenya therefore needs to establish the Hydrologists Registration Board that will attract, register, license and exercise oversight over hydrologists with the required skills. Conflicts such as experienced in Laikipia, Isiolo and Meru Counties over water sharing among the different water users especially between water supplies, irrigation and livestock, would be minimized if expert registered and duly licensed hydrologists provide the necessary information needed by the water managers.

4. Arbitration of disputes on water resources issues taken to the environment court will require evidence. Registered Hydrologists who are experts in the field can be relied upon to provide the courts the necessary professional guidance to enable the courts make well informed judgements.

5. Need for the Hydrologists Registration Board

Hon. Chair,

In view of the above, it is clear that it is necessary to have a Hydrologists Registration Board that registers and exercises oversight over all duly qualified hydrologists and that also requires accountability from these hydrologists on their professional inputs into the country's development. There is need for regulation to ensure those practicing hydrology take or apportion responsibility in cases of unmet expectations or failures that tarnish the name of the Board as well as that of the profession. Cases of professional negligence or misconduct that bring disrepute or demean the standing of the profession will also need to be addressed, but this is not currently provided for in existing structures of government with respect to



STATEMENT BY HON. EUGENE L. WAMALWA, E.G.H., CABINET
SECRETARY, MINISTRY OF WATER AND IRRIGATION TO THE CHAIR OF
THE DEPARTMENTAL COMMITTEE ON ENVIRONMENT AND NATURAL
RESOURCES ON THE HYDROLOGISTS BILL 2016

RATIONALE FOR THE PROPOSED HYDROLOGISTS REGISTRATION BOARD AND
JUSTIFICATION FOR RECEIVING EXCHEQUER FUNDING

1.1 **Hon. Chair**, let me start by thanking you and your Committee for your continued support to my Ministry and especially in legislation. Hydrologists comprise part of the core professional establishment in the Ministry of Water and Irrigation and nationally play a major role in the water sector.

Hon. Chair, Hydrology is the science of water including its circulation and distribution in space and time in the globe.

Hon. Chair,

1. It is the professional duty of Hydrologists to determine stream flow estimates for the sizing of flood control and storage structures such as dams, reservoirs, dam spillways, dam tunnels, urban storm water channels etc. If civil engineers design these structures poorly as a result of poor hydrological input, this would pose grave danger to downstream inhabitants and property. Similarly, over-sizing of such structures as a result of poor hydrological input would result in projects that become white elephants. Further, most mega-dams belong to public institutions such as KENGEN, Tana and Athi Rivers Development Authority (TARDA), National Water Conservation and Pipeline Corporation, National Irrigation Board and major water service providers like Nairobi City Water and Sewerage Company. These institutions are funded through the exchequer, hence this would amount to wastage of tax payer's money. Even when any such structures are privately owned, it still not acceptable to waste any person's or institution's resources through poor professional practice.

2. It is the core business of hydrologists to map out flood zone areas especially in the rivers' riparian zones. If engineers do not incorporate hydrologist findings on flooding, the results are catastrophic: the collapse of buildings and other structures as recently witnessed in Huruma Estate in



the water sector. This will become a reality with the establishment of the Board.

Professional boards are specific to their professions. A few examples are cited here. The Engineers Registration Board (ERB) regulates engineers who provide expertise in water services infrastructural development. Similarly, the Geologists Registration Board (GRB) exercises professional oversight over geologists who provide expertise in borehole siting, drilling and groundwater management. Similarly, the Hydrologists Registration Board will exercise professional regulation and oversight over hydrologists who provide expertise in surface water resources assessment, exploration and monitoring.

These boards are quite distinct from institutions like Water Resources management Authority (WRMA). In contrast, the Water Resources Management Authority's mandate is to manage the water resources in the country. If the law were to be amended to domicile the hydrologists regulatory function in WRMA, this would be a conflicting mandate as it would require WRMA to oversight the hydrologists who are its employees. Further, none of the existing profession-regulating boards can take up the role of regulating the practice of hydrologists, as the professions they regulate are quite different from hydrology. It would therefore be inappropriate to overload such existing operational boards with regulation of hydrologists.

Once the Board is established, as proposed, it will be in a position to enforce expected performance by those who are registered with it. It will ensure adequate hydrological input in the design of water supply systems, urban storm-water drainage (e.g. Narok, Mukuru kwa Njenga cases), culverts, bridges, to reduce highway flooding. Regulation through such a board will minimise disasters that lead to loss of property and human lives even collapse of buildings that is related to drainage due to lack of consideration of hydrological input. Similarly, floodplain encroachment analysis and zoning and the design of dykes and levees and mapping areas prone to flood or landslides will be enforced through the Board. This will lead to reduction of water related disasters.

Establishment of the board will lead to better assessment of our share of international water resources and make Kenya be in a better position to negotiate on water matters at regional and international forums.



The creation of the Board will encourage its members to venture into the regional countries due to the enhanced professionalism that will result. Also, the accreditation conferred by the Board will enhance the credibility of Kenya' professionals in the regional job market.

The board will play a role in the determination of fees that registered professional Hydrologists and consultancy firms charge for the hydrological services to their clients.

6. Need for exchequer funding of the board

Hon. Chair,

The ministry of Water and Irrigation is the overall custodian of the profession of hydrology. The Board therefore will be anchored in the Ministry. Since hydrology is a young profession which is not currently well established to be able to support itself, funding for the board's activities needs to initially come from the exchequer. This is in order since activities of the board will enhance government functions and assist the country in achieving the aspirations of vision 2030 with regard to water resources. However, as the profession grows, it (board) will ultimately become self-sustaining.

HON. EUGENE WAMALWA, E.G.H.,
CABINET SECRETARY