



**REPUBLIC OF KENYA**

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**HYDROLOGISTS REGISTRATION BOARD**

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**STRATEGIC PLAN**

**2023-2027**

***MOTTO: ENHANCING PROFESSIONALISM IN HYDROLOGY***

**FINAL DRAFT**

**DECEMBER, 2023**



## **VISION**

A quality and robust hydrological practice and management.

## **MISSION**

To promote good governance in regulation, oversight and coordination of the practice of Hydrology.

## **OUR CORE VALUES**

The Hydrologists Registration Board will be guided by the National Values as espoused by the Constitution of Kenya, 2010. These are:

- a. Sustainable Development.
- b. Honesty and Integrity.
- c. Human Dignity.
- d. Transparency and Accountability.
- e. Teamwork and Focus on Results.
- f. Innovation.
- g. Participatory Approach.
- h. Equity.

## **FOREWORD**

The Hydrologists Registration Board is a Regulatory State Corporation formed under the Hydrologists Act No 19 of 2017. The Board was established via Kenya Gazette Notice No. 6466-8 in Vol. CXXI No. 90 of 19<sup>th</sup> July, 2019 and was formally inaugurated on 5<sup>th</sup> December, 2019. The institution falls under the Ministry of Water, Sanitation and Irrigation.

The mandate of the Board according to the Hydrologists Act, 2017 is to regulate, coordinate and oversee the practice of hydrology; to promote standards of professional competence and practice amongst hydrologists; to coordinate research, investigations and surveys in the hydrological field; to recognize institutions that furnish a sufficient guarantee of academic knowledge of practical experience in hydrology; to demand and certify hydrological studies and reports necessary for the design of hydraulic structures; to collaborate with other bodies or organisations in development of programs and facilities for the advancement of hydrology and well-being of hydrologists; and to perform any other function that is incidental or consequential to its functions under this Act any other written law.

The Board is committed to ensuring the right to water as stipulated in Article 43(1) (d) and Article 69 (1) of the Constitution of Kenya as well as promoting access to adequate and sustainable water resources to all. This will be attained by ensuring professional hydrological services are available for the development of hydrological reports, undertaking of hydrological investigations and studies, design of hydraulic structures, and the implementation of water, road and related projects and programs.

The process of developing this Strategic Plan has involved key stakeholders. A Technical Working Group was constituted to review the Strategic Plan, from the 2022-2026 Strategic plan to 2023-2027 to align it to MTP IV and BETA. This Strategic Plan has been prepared through a consultative process that involved a wide range of stakeholders from within and outside of the Water Sector, whose critical reviews have as much as possible been incorporated. Engagement with stakeholders will be strengthened in future through policy, strategy and institutional development, sustainable financing models, adequate planning, monitoring and review as well as capacity development.

This Strategic Plan will provide policy direction for the Board for the next five (5) years.

**CHAIRPERSON  
HYDROLOGISTS REGISTRATION BOARD**

## PREFACE AND ACKNOWLEDGEMENT.



According to the Constitution of Kenya 2010, Articles 43(d) and 43(b) it is the right of all citizens to have access to clean water, in adequate quantities and right to reasonable standards of sanitation. In light of this, it is imperative that all stakeholders involved in the planning, development and conservation of water resources work jointly and individually towards the achievement of universal access to water and sanitation by the year 2030.

This Strategic Plan sets out the policies, programs and activities that the Hydrologists Registration Board will be implementing and undertaking during the period 2023-2027 to support the progressive realisation of the right to adequate and sustainable water resources for all Kenyans, and the attainment of the Sustainable Development Goal (SDG) No. 6 and the National Development Goals. This will be done through the registration and licensing of hydrologists to provide professional services in hydrological research, analysis, surveys and investigations.

The Board will in the next five (5) years place great emphasis on the full operationalization of the Hydrologists Act, 2017 and finalisation of draft Hydrologists Regulations, 2023; the development of policies, standards and procedure manuals; enhancing professional competence amongst hydrologists, and in promoting research in hydrological services. The Board will further ensure the certification of hydrological studies necessary for the design of hydraulic structures and will actively seek collaborations and partnerships in human capacity development and in resource mobilisation. Over and above these objectives, the Board will develop an inventory of hydrology professionals in the country and will aim at licensing at least one thousand (1000) of them. It shall also remain an objective of the Board to provide necessary support to the Executive Board, Board Committees, Registrar/CEO's office, and to facilitate liaison with academic and technical institutions, professional and regulatory bodies and all other key stakeholders among other objectives.

It is my great pleasure to acknowledge the invaluable contribution from our stakeholders. First and foremost, I wish to thank the leadership and the staff of the Ministry of Water, Sanitation and Irrigation, led by the Principal Secretary, State Department for Water and Sanitation, and to the Planning Department led by the Director - Planning, who played a key role in providing guidance and direction in the development of the Plan. My sincere gratitude goes also to other Government Ministries, Departments and Agencies and Water Sector Institutions and all other stakeholders for their input. Special thanks to the Technical Working Group that assisted in preparation of this strategic plan.

I appreciate greatly the role played by the Board's Strategy and Technical Committee who provided great insight and guidance in ensuring that this Strategic Plan has conformed to the Ministry of Planning guidelines on preparation of Strategic Plans. Last but not least, I wish to direct my heartfelt gratitude to the Board of Directors for offering strategic direction during the preparation of this Strategic Plan.

I wish to reiterate my commitment to implement the planned activities and meet the annual targets, through the Board's Annual Performance Contracts and Work Plans. It is my hope that all key stakeholders will partner with the Board to implement planned activities, projects and programs so as to improve service delivery to the Citizens of the Republic of Kenya.

**ANTONY MWENJE**  
**REGISTRAR/CHIEF EXECUTIVE OFFICER**

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## ABBREVIATIONS AND ACRONYMS

BETA	Bottom-Up Economic Transformation Agenda
BPR	Business Process Re-engineering
CEO	Chief Executive Officer
CIDU	County Irrigation Development Units
CPD	Continuous Profession Development
EAC	East African Community
ERS	Economic Recovery Strategy
GEC	Global Economic Crisis
GHG	Greenhouse Gas
GHRIS	Government Human Resource Information System
HR	Human Resources
HRB	Hydrologists Registration Board
HSK	Hydrological Society of Kenya
ICT	Information Communication Technology
IPPD	Integrated Personnel Payroll Database
KEWI	Kenya Water Institute
KRA	Key Result Area
MDG	Millennium Development Goals
M&E	Monitoring and Evaluation
Mn	Million
MoUs	Memorandum of Understanding
MTEF	Medium-Term Expenditure Framework
MTP IV	Fourth Medium Term Plan
MWSI	Ministry of Water, Sanitation and Irrigation
NWMP	National Water Master Plan
NWRS	National Water Resources Strategy
PESTEL	Political, Economic, Socio-cultural, Technological, Environmental and Legal Analysis

RCGW	Regional Centre on Ground Water Resources Education Training and Research
SDGs	Sustainable Development Goals
SOPs	Standard Operations
SRC	Salary Renumeration Commission
SWOT	Strengths, Weaknesses, Opportunities and Threats
TWG	Technical Working Group
WASREB	Water Services Regulatory Board

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## KEY CONCEPTS AND TERMINOLOGIES

**Key Activities:** Actions taken or work performed, through which inputs are mobilised to produce outputs.

**Baseline:** A description of the initial state of an indicator before the start of a project/programme, against which progress can be assessed or comparisons made.

**Indicator:** A means for measuring progress/change that results from an intervention. It measures a change in a situation or condition and confirms progress towards achievement of a specific result. It is used to measure a project impact, outcomes, outputs and inputs that are monitored during project implementation to assess progress.

**Key Results Areas:** They are the broad areas in which you are expected to deliver results.

**Outcome:** The intermediate results generated relative to the objective of the intervention. It describes the actual change in conditions/situation as a result of an intervention output(s) such as changed practices as a result of a programme or project.

**Output:** Products, services, or immediate results, tangible or intangible resulting directly from the implementation of activities or applying inputs.

**Strategies:** Broad abstractions which are descriptive of the means for achieving the strategic objectives.

**Strategic Issues:** These are problems or opportunities emanating from situational analysis that an organisation has to manage in order to be able to fulfil its mandate and mission.

**Strategic Goal:** General qualitative statements on what an organisation is hoping to achieve in the long term. Each strategic goal is linked to a strategic issue. Goals are the foundations of your plan and need to be set at the start of the planning process.

**Strategic Objectives:** These are what the organisation commits itself to accomplish in order to achieve strategic goals. Strategic objectives should be SMART; they establish performance levels to be achieved on priority issues and measures of success in fulfilling critical mission statement elements.

**Target:** A result to be achieved within a given time frame.

**Top Leadership:** Individuals or groups of people who carry the Vision of an organisation and are responsible for achieving its mandate. For Ministries top leadership includes Cabinet Secretary and Principal Secretary, Board of Directors for State Corporations and Chairpersons or Heads of Commissions and Independent Offices, and respective CEOs.

**Value Chain:** A description of the production-to-market linkages, generating value to the customer through efficient processes and procedures. Value chains are about understanding how creation of value is distributed along the chain.

## EXECUTIVE SUMMARY

The Hydrologists Registration Board is a Regulatory State Corporation formed under the Hydrologists Act No 19 of 2017. The Board was established vide Kenya Gazette Notice No. 6466 - 6468 in Vol. CXXI No. 90 dated 19<sup>th</sup> July, 2019. The Board, which falls under the Ministry of Water, Sanitation and Irrigation (MWSI), was formally inaugurated (operationalized) on 5<sup>th</sup> December, 2019.

The Board developed the first Strategic Plan 2022-2026 in the Financial Year 2022/23 and is reviewing the Strategic Plan to 2023-2027 to align it with Fourth Medium-Term Plan (MTP IV) 2023-2027 and Bottom-Up Economic Transformation Agenda (BETA). The Strategic Plan charts the Board's future by presenting the key milestones that the Board intends to achieve in the next five years and the strategies that it intends to employ in doing so. Preparation of the Strategic Plan has been guided by the Constitution of Kenya 2010, Water Act 2016, Hydrologists Act, 2017, Kenya Vision 2030, Fourth Medium-Term Plan (MTP IV) 2023-2027, Bottom-Up Economic Transformation Agenda (BETA), Sustainable Development Goals (SDGs), East African Community Vision 2050 and Africa Union's Agenda 2063.

The water sector in Kenya faces significant challenges, which include: limited water resources, climate change, catchment degradation, rapid population growth and poverty, competition for available water resources, water pollution, poorly designed water infrastructure, unsustainable water projects, management of transboundary waters, and inadequate data for use in planning and decision-making. Hydrologists are, owing to the nature of their profession and training, well-placed to provide solutions and advice towards the handling of these challenges. This Strategic Plan 2023-2027 intends to provide solutions to some of these challenges.

Kenya's per capita fresh water potential is estimated to be approximately 527m<sup>3</sup> (NWMP, 2030), which is way below the United Nations standard of above 1000m<sup>3</sup> for countries not considered to be under water stress. Kenya is therefore considered as a water-scarce country, with the situation being exacerbated during low-rainfall and drought periods when high water demand against low water availability creates tension, competition and conflicts. As the Ministry and the general populace addresses this challenge through construction of water diversion, storage and supply infrastructure, this Plan will ensure that design of such infrastructure is done by well- trained, certified and licensed hydrologists.

It is expected that the major limiting factors to the implementation of this Strategic Plan will be related to inadequate funds, lack of awareness, resistance to change, lack of capacity amongst hydrologists, slow pace of enforcement of regulations, impacts of increased pressure on available water resources, climate change and reducing and unreliable rainfall, and unethical practices in the development of water infrastructure.

However, the Board intends to learn from any challenges encountered and will use this

experience in developing sustainable solutions. This Strategic Plan will provide for sound strategies for forging cooperation, partnerships and collaborations among stakeholders, and for resource mobilisation.

Stakeholder participation is a key component of any planning process. The Board has taken cognizance of this fact by ensuring that there was adequate stakeholder participation in the preparation of the Strategic Plan. The stakeholders involved in the planning and implementation of this Plan have been identified as being the general public, MWSI officials, Board management staff, research and academic institutions, other government Ministries, Departments and Agencies, County governments, professional and regulatory bodies, the Judiciary, the National Assembly and the Senate, the media and the Board's contractors and suppliers.

In the implementation of this Strategic Plan, the Board will be guided by the principles of integrated resource management, integrated planning, respect for human rights, equity, inclusion, professionalism, efficiency, collaboration, public participation and consumer protection. In preparation of the Strategic Plan, the Board will be following four vital steps; initiation, development, validation, finalisation and dissemination.

The Strategic Plan will be structured along eight chapters; chapter one will address the context for Strategic Plan, chapter two will be discussing the mandate, vision, mission, strategic goals, core values and quality policy statement. The third chapter will present the situational and stakeholder analyses while chapter four will address strategic issues, goals and key result areas (KRAs). Chapter five will be addressing strategic objectives and strategies; chapter six will discuss implementation and coordination framework and chapter seven will discuss resource requirement and mobilisation strategies. Monitoring, evaluation and reporting framework will be discussed in the eighth chapter of the Strategic Plan.

The overall goal of the implementation of this Strategic Plan will be by injecting professionalism in the investigation, survey, analysis of water resources and catchments, and in the design of hydraulic infrastructure so as to increase sustainability of water resources, programs and projects and accelerate access to water availability. In so doing, the Plan will have five (5 no.) key result areas namely: Regulation, Coordination and Overseeing the Practice of Hydrology; Research in Hydrological Services; Certification of Hydrological Studies for Design of Hydrological Structures; Partnership and Resource Mobilization; and Institutional Development and Capacity Building.

The Board recognizes that for this Strategic Plan to be implemented successfully, there must be adequate human, technical and financial resources. The Board currently has five (5 no.) permanent staff member and ten (10 no.) other staff who are deployed temporarily from the Ministry, against an authorised establishment of seventy-eight (78 no.) officers who are required for this Strategic Plan to be fully implemented. Unless addressed immediately, this deficit is likely to pose a major challenge in the implementation of the Plan.

In terms of funding, the Board will require Kshs. 1.352 billion for implementing this Strategic Plan out of this, Kshs. 890 million is projected as the allocation by the Government of Kenya (GoK) and Kshs. 462 million is expected to be raised from A-in-A and from development partners.

To maximise on the utilisation of the available resources, the Board will enhance transparency and accountability in regulation of the hydrology profession, in undertaking hydrological designs, analysis, studies, investigations and assessments; and in planning, implementation, monitoring and evaluation of projects and programs as well as adopting preventive maintenance and use of technology.

The Board will seek to mitigate risks in the implementation of this Strategic Plan by establishing a Risk Monitoring System consisting of a Risk Management Policy, a Risk Management Committee and Risk Management Coordinators. This Risk Monitoring System will be developed so as to assist in identifying risks, as well as determining and implementing risk management measures.

Monitoring, evaluation and reporting of the implementation are key components of this Strategic Plan. The Board will adopt an innovative monitoring, evaluation and reporting framework, based on a common framework of indicators and methodologies. A monitoring and evaluation team will be formed which will receive and analyse progress reports from each directorate and department.

## **Chapter One : INTRODUCTION**

### **1. Overview**

This Chapter focuses on background information of the Hydrologists Registration Board and highlights its mandate according to the Hydrologists Act No.19 of 2017. It focuses on the role the Board plays in the National Development Agenda including Kenya's Vision 2030, Bottom-Up Economic Transformation Agenda, the Fourth Medium Term Plan (2023-2027), The East African Community Vision 2050, the African Union Agenda 2063, and United Nations 2030 Agenda on Sustainable Development.

#### **1.1. Strategy as an imperative for Organizational Success**

This Strategic Plan 2023-2027 is the first reviewed version by the Board. The Plan charts the Board's future by presenting the key milestones that the Board intends to achieve in the next five years and the strategies that it intends to employ in doing so. Preparation of the Strategic Plan has been guided by the Constitution of Kenya 2010, Water Act 2016, Hydrologists Act, 2017, Kenya's Vision 2030, MTP IV (2023-2027), Bottom-Up Economic Transformation Agenda, Sustainable Development Goals, and Africa Union's Agenda 2063.

#### **1.2. The Context of Strategic Planning**

Strategic planning is a dynamic and essential process that enables organisations to navigate the ever-changing business environment. The context of strategic planning requires consideration for the changes that occur in the market situation to optimise the development of the organisation. It also requires consideration for the characteristics of the internal environment of the organisation, as well as consideration for the characteristics of the external organisational environment to optimise the effectiveness and potential for success in the implementation of the resulting strategic plan. In today's rapidly changing world, strategic planning serves as a compass, guiding an organisation towards its desired future state by setting clear vision, mission, objectives, defining strategies, and aligning resources to achieve long-term success. The process includes establishing the sequence in which those goals should be realised so that the organisation can reach its stated vision. This context of strategic planning underscores its critical role in helping organisations adapt, innovate, and remain competitive in an increasingly complex and interconnected global environment.

These multifaceted issues require comprehensive strategies and concerted efforts to ensure sustainable development and prosperity. The development of this strategic plan has taken into consideration international, regional and national government development priorities frameworks



### **1.2.1. United Nations 2030 Agenda for Sustainable Development**

The SDGs 2030 Agenda finds Kenya at a vantage point as it builds on the lessons learnt and foundations laid by the former Millennium Development Goals (MDGs). The Board through its mandate will promote the achievement of SDGs, specifically those touching on hydrology (SDG 2, 6, 13 and 15). The Board will take on the task of certifying hydrological reports to ensure sound hydrology expertise to guide implementation of hydraulic infrastructures and in turn assist in the development of safe, resilient, sustainable projects.

### **1.2.2. African Union Agenda 2063**

Africa Agenda 2063 version is “integrated, prosperous and peaceful Africa, driven by its own citizens and representing a dynamic force in the International arena”. The Implementation of Agenda 2063 calls for collective responsibility at continental, regional, national, county and institutional levels of governance. In particular, Aspiration 1(18) calls for Africa to have equitable and sustainable use and management of water resources for socio-economic development, regional cooperation and the environment.

The Board will put in place mechanisms to mainstream aspirations on inclusive growth and sustainable development in environmentally sustainable and climate resilient economies and communities, by ensuring access to basic necessities of life such as water and sanitation. This will be done by aligning and incorporating the aspirations of 1(18) into the Board’s work plans. A framework for collaboration with other countries in Africa on water research, training and education will also be established.

### **1.2.3. East Africa Community Vision 2050**

The EAC Vision 2050 lays out a broad perspective in which the region optimises the utilisation of its resources to accelerate productivity and the social well-being of its people. A key ambition of the EAC Vision 2050 is achieving water security despite there being competing demands for basic water supply and sanitation, food security, economic development and a sustainable environment. The Board through its mandate is set to address the issue of quality and sustainability of water resources as set out in the EAC Vision 2050. The Vision advocates for sustainable management of water resources and access to safe water and sanitation thus unlocking economic growth and productivity.

### **1.2.4. Constitution of Kenya, 2010**

Articles 42 and Article 43 (b) and (d) of the Constitution of Kenya, 2010 provides that every citizen has a right to a clean and healthy environment and right to accessible and adequate housing, and reasonable standards of sanitation, clean and safe water in adequate quantities

respectively. The Board has aligned its mandate to these articles by ensuring that the capacity of hydrologists to attain certain standards of professionalism in reporting and designing of the hydraulic structures are met. Water storage infrastructure and other related water projects are required to be designed to such standards that will ensure safe and clean water supply to all sectors of the economy.

The Board also shall facilitate the achievement of Article 69 (I) on conservation of the environment and will also facilitate the attainment of ecologically sustainable development and use of natural resources by setting standards and certifying hydrological reports that adhere to the agreed regulations on environmental and ecological structures.

#### **1.2.5. Kenya Vision 2030, Bottom-Up Economic Transformation Agenda (BETA) and Fourth Medium Term Plan**

Following the successful implementation of the Economic Recovery Strategy (ERS) of 2003 by the Government of Kenya, a long-term blueprint was developed: The Kenya Vision 2030. The Vision is motivated by a collective aspiration for a better society by the year 2030, in order to create a global competitive and prosperous citizenry. The aim of Vision 2030 is to transform Kenya into a newly-industrialised, middle-income country providing a high quality of life to all its citizens in a clean and secure environment. Kenya Vision 2030 is being implemented through a series of five-year Medium – Term Plans (MTPs). Currently, MTP IV covers the period 2023-2027.

The MTP IV seeks to undertake various projects that touch on agriculture, irrigation, roads, environment and water resources management and development including rehabilitation of urban rivers, waste management, pollution control and water infrastructure. All these projects require in-depth hydrological reporting to inform on how best to design and implement them.

The Bottom-up Economic Transformation Agenda (BETA) linked to Kenya Vision 2030 is anchored on five key pillars; Agricultural Transformation and inclusive growth; transformation of Micro, Small and Medium Enterprises; Affordable Housing and Settlement; Universal Healthcare and Digital and Creative Economy

To achieve these developments, the Board aims at ensuring that hydraulic structures are designed to the required hydrological standards by registered and licensed hydrologists. This will enhance the sustainability of water projects and increase water availability.

This Strategic Plan will address MTP IV through hydrological analysis, surveys, investigations and research to be carried out prior to implementation of the programs and projects including Irrigation and Drainage Infrastructure Programme, Rural Water Supply Programme, Urban Sewerage and Sanitation Programme, Water Harvesting and Storage Programme, and the Water Resources Management Programme.

### **1.2.6. Sector Policies and Laws**

#### **The Water Act 2016.**

The Water Act 2016 provides for the regulation, management and development of water resources, water and sanitation services and for other connected purposes. It came into force in April 2017 when the Cabinet Secretary published notices in the Kenya Gazette, announcing the commencement of its implementation. The Act recognizes that water-related functions are a shared responsibility between the National Government and the County Governments. It also gives priority to the use of abstracted water for domestic purposes, irrigation use and management of the use of international waters and water resources.

The Act establishes the Water Resources Authority, the National Water Harvesting and Storage Authority, the Water Services Regulatory Board (WASREB), the Water Sector Trust Fund, Water Tribunal and the nine water works development agencies (WWDA)

#### **Hydrologists Act, 2017.**

The hydrologists Act, No. 19 Of 2017 establishes the Hydrologists Registration Board is a corporate body and is a part of the institutions that fall under the Ministry of Water, Sanitation and Irrigation.

The Board has an overall mandate of regulating, coordinating and overseeing the practice of hydrology in Kenya. Other functions as spelt out in the Act include promoting standards of professional competence and practice amongst hydrology professionals; certifying hydrological studies and reports necessary for the design of hydraulic structures; and coordinating research, investigations and survey in the hydrological field.

#### **National Irrigation Act, 2019.**

The National Irrigation Act provides for the development, management and regulation of irrigation to support sustainable food security and socio-economic development in Kenya. The Act establishes the National Irrigation Authority responsible for implementation of national and public irrigation schemes, strategic irrigation schemes, and trans-boundary and trans-county schemes. At the County level exists County Irrigation Development Units (CIDU) tasked with irrigation development.

These functions relate to the Hydrologist Registration Board's strategic goal related to enhancing compliance to standards in hydrological practice by licensed hydrology professionals who are engaged in undertaking the design of the infrastructure mentioned above.

#### **Kenya Water Institute Act, 2001 (KEWI).**

This Act provides for the establishment of Kenya Water Institute as a body corporate, defines the object of the institute and provides with respect to its administration. Kenya Water Institute is responsible for providing Human Resources Development, Applied Water Research, Outreach and Consultancy services for the water sector.

This function relates to the Hydrologist Registration Board's mandate of promoting standards of professional competence and practice among hydrologists.

### **Legal Notice No.252 of 2015.**

Regional Centre on Ground Water Resources Education Training and Research (RCGW) is a state corporation established under the State Corporation Act vide Legal Notice 252 of 18th December 2015 and with abroad mandate of initiating and conducting research in mapping and assessment of aquifer system and management.

The aim of this centre is to; undertake groundwater research, to increase knowledge and understanding of aquifer characteristics for sustainable development and management of groundwater. Another aim is to train and create public awareness on groundwater knowledge and build capacities to deliver basic activities in the context of a changing climate and recurring drought and floods which is crucial.

Coordinating research, investigations and surveys in the hydrological field is a key mandate of the Board and is in line with the functions of the Regional Centre for Groundwater Services.

### **The National Water Policy, 2021.**

The overall goal of this policy is to guide in the achievement of sustainable management, development and use of water resources in the country. The objective of the policy is to provide a framework that is dynamic, innovative and effective for re-engineering the water sector.

Among the key objectives of the Policy are the acceleration of water supply services and the development of water harvesting and storage infrastructure, which require suitable hydraulic designs to be undertaken before implementation, and which can best be achieved through enhancement of compliance to standards in hydrological practice. The Policy's objective of strengthening water training and research is also in line with the HRB Strategic Plan's goal aimed at enhancing institutional capacity, professional development and competence.

### **National Water Harvesting and Storage Strategy**

The National Water Harvesting and Storage Authority was established under section 30 of the Water Act 2016. Its main mandate is to undertake the development of National Public Water Works for water resources storage and flood control on behalf of the national government.

Water harvesting refers to all activities to collect, store and conserve available water resources temporarily to ensure availability for use when required. Usage is particularly during periods of drought when no perennial resources are available and for unseen emergency applications.

This therefore includes collection of natural water resources from rain water, fog, runoff water, ground water or even waste water. This will incorporate the continuous implementation of new water harvesting and storage infrastructure, including flood water diversion and waterways projects.

Where such projects are to be implemented, it will be necessary that hydrological reports for the design of the hydraulic infrastructure are undertaken by licensed hydrology professionals.

### **National Water Resources Strategy.**

This National Water Resources Strategy (NWRS) (2021-2025) was developed to ensure that the regulation, management and development of water resources leads to realization of constitutional requirement on the right of access to clean and safe water in adequate quantities as per Article 43 of the Constitution, 2010. The objective of the NWRS is to provide the Government's plans and programs for the protection, conservation, control and management of water resources. The strategy was formulated to redress emerging challenges that relate to water resource conflicts, lack of universal access to safe water, water scarcity, rising water demand, catchment degradation, encroachment of riparian land and wetlands, pollution, uncontrolled and unregulated use of water resources, flooding, management of transboundary resources, limited technical and enforcement capacities, climate variability and climate change.

The Strategy articulates a number of strategic objectives and actions that will be pursued to enhance availability and access to water resources by all. The Strategy has considered that the management of water is multi-sectoral and a shared responsibility of all Kenyans. The Strategy will ensure that the water resources are properly managed for the benefit of all Kenyans.

### **National Water and Sanitation Strategy**

The National Water and Sanitation Strategy is geared towards achieving the aspirations of the National Water Policy which will contribute towards equity in access to water and sanitation services for all persons in the country. This will involve implementation of projects around the entire country with the ultimate target of universal coverage by the year 2030.

Implementation of these projects will call for the preparation of hydrological reports on the design of the hydraulic infrastructure.

### **1.3. History of the Hydrologists Registration Board**

The formation of the Hydrologists Registration Board was initiated by hydrologists in the MWSI and who were members of the Hydrological Society of Kenya (HSK). The latter is the umbrella body of hydrologists in Kenya and was registered in the year 2000. It was established that there was a need to have a framework for regulation and coordination of the hydrological profession and thus HSK championed for creation of a Board backed by an Act of Parliament through the drafting of the Hydrologists Bill in 2009 and later the Hydrologists Act of 2017. This led to the establishment of the Hydrologists Registration Board.

The Hydrologists Registration Board is a body corporate established under the Hydrologist Act No. 19 of 2017. The Board was gazetted on 19<sup>th</sup> July, 2019 and officially inaugurated on 5<sup>th</sup> December, 2019 with the overall mandate of developing, regulating, coordinating and overseeing the practice of Hydrology in Kenya. This is considered as a key component in achieving water and food security under the country's strategic targets as outlined in the

Bottom-Up Economic Transformation Agenda (BETA), Vision 2030, the Forth Medium-Term Plan (2023-2027), and the SDGs.

#### **1.4. Methodology of Developing the Strategic Plan**

Strategic Planning is a process in which an organisation's leaders define their vision for the future and identifies their organisation's strategic issues, goals and objectives. The process includes establishing the sequence in which those goals should be realised so the organisation can reach its stated vision.

The review of the strategic plan is guided by the revised guidelines which outlines the four steps to undertake in the review of the strategic plan. The steps include initiation of the strategic planning process; strategic plan development, validation, finalization and dissemination of the strategic plan. The board management initiated the strategic planning process by determining the rationale and scope of review, developing the terms of reference and forming a technical committee composed of representatives from the departments of the board and other technical officers from the Ministry of water to review the strategic plan. The technical working committee interpreted, reviewed and adopted the Terms of Reference issued by the board. Further the Technical working group developed the roadmap and strategic framework to guide the review. The draft strategic plan was developed by the TWG for Sharing to both internal and external stakeholders to review and validate. The Validated strategic plan is required to be submitted to the state department for planning for review and feedback after which it is finalized and publicized ready for implementation.

## **Chapter Two : STRATEGIC DIRECTION**

### **2. Overview**

This Chapter details the Board's Mandate, Vision, Mission, Strategic goals, Core values as well as The Quality Policy Statement.

#### **2.1. Mandate**

The Hydrologists Registration Board under Section 19 of the Hydrologists Act, 2017 is mandated with the following functions:

- a) To regulate, coordinate and oversee the practice of hydrology;
- b) To promote standards of professional competence and practice amongst hydrologists;
- c) To coordinate research, investigations and surveys in the hydrological field;
- d) To recognize institutions that furnish a sufficient guarantee of academic knowledge of practical experience in hydrology;
- e) To demand and certify hydrological studies and reports necessary for design of hydraulic structures;
- f) To collaborate with other bodies or organisations in development of programs and facilities for advancement of hydrology and well-being of hydrologists;
- g) To perform any other function that is incidental or consequential to its functions under this Act any other written law.

#### **2.2. Vision Statement**

A quality and robust hydrological practice and management.

#### **2.3. Mission Statement**

To ensure good governance in regulation, oversight and coordination of the practice of hydrology.

#### **2.4. Strategic Goals**

- a) Enhanced compliance to standards in hydrological practice
- b) Financial sustainability
- c) Enhanced Partnership and Collaboration with stakeholders in Research, Education and Governance
- d) Enhanced institutional capacity, professional development and competence

## 2.5. Core Value

The Board will draw its values from the Constitution of Kenya, 2010, Article 10, which details the national values and principles of governance, which include the following:

- a) **Sustainable Development:** The Board will pursue development in the sector that satisfies the needs of the present generation without compromising the capacity of future generations, guaranteeing balance between economic growth, care for the environment and social well-being.
- b) **Honesty and Integrity:** The Board shall conduct its affairs in serving the public in an honest manner upholding the highest degree of responsiveness to the aspirations of the public it serves.
- c) **Transparency and Accountability:** The Board will be open in the implementation of its programmes and the public will have a right to access to information.
- d) **Human Dignity:** The Board is committed to upholding reasonable standards of living through quality working environment
- e) **Teamwork and focus on results:** The Board will relentlessly pursue timely attainment of targeted results at all levels through high-level coordination, networking and collaboration with all staff, stakeholders and the public.
- f) **Innovation:** The Board is committed to innovativeness, creativeness, and resourcefulness and focused planning and customer-driven service delivery.
- g) **Participatory approach:** The Board is committed to consultations, joint and comprehensive partnership with all its stakeholders in all its undertakings.
- h) **Equity:** The Board will provide all stakeholders with fair and equal opportunities based on their individual needs.

## 2.6. Quality Policy Statement

The Hydrologists Registration Board is committed to developing, regulating, coordinating and overseeing the practice of Hydrology in Kenya. The implementation of Board's mandate is in line with the Government's Policies as enshrined in the Constitution of Kenya, Vision 2030 and the fourth medium-term plan that emphasises the need for efficiency and better management in the utilisation and better management in the utilisation of Water Resources to enable the government achieve its strategic objectives of inclusive growth, productivity and digitalization for efficient service delivery. In this regard the Board will endeavour to conform to the set standards in ensuring efficient and effective service delivery. The Board is therefore committed to consistently meeting its customer's requirements and aim to exceed their expectations by complying with statutory and regulatory requirements relevant to its mandates.



## Chapter Three : SITUATIONAL AND STAKEHOLDER ANALYSES

### 3. Overview

This chapter provides the review of the operating environment within the Hydrologists Registration Board. In order to meet the national goals as envisioned through the SDGs, Vision 2030, Bottom-Up Economic Transformation Agenda, and MTP IV, there is a need to provide sustainable solutions to the country's water challenges. The situational analysis of the Board focuses on achievements, challenges and lessons learnt. An external and internal analysis was undertaken using the Strengths, Weaknesses, Opportunities and Threats (SWOT) and Political, Economic, Socio-cultural, Technological, Environmental and Legal (PESTEL) analysis.

#### 3.1. Situational Analysis

##### 3.1.1. External Environment

This chapter entails the analyses of macro environment, micro environment, industrial, as well as market environment factors. However, industrial, market and micro environments are applicable to commercial state-owned enterprises. The main objective is to analyse a useful technique for understanding the PESTEL and SWOT analysis.

##### 3.1.1.1. Macro-environment

A comprehensive analysis of the external environment demonstrates the implication of opportunities and threats facing the Board. An analysis of the Board's macro and micro environment is provided below.

#### Climate change

Climate change refers to changes in average temperature, precipitation and weather intensity. Human activities increase the generation of Greenhouses Gas (GHG) emissions mainly through the burning of fossil fuels such as coal, oil and gas has led to adverse effects on climate change. Kenya is experiencing the effects of climate change, including rising temperatures, changing rainfall patterns, and increased frequency and intensity of extreme weather events such as droughts, wildfires and floods. The impacts of climate change on freshwater resources, ecosystems and human settlements are already undermining access to clean water, food, shelter and other basic human needs; interfering with livelihoods; and displacing people from their homes.

Climate change often impacts the water resources through increased incidences of drought and more erratic rainfall. The warming has heavily impacted the water cycle, leading to increased spatial-temporal variability in precipitation patterns worldwide. The effect on the water cycle

has implications for increased risk of drought (including dry spells) and increased intensity of extreme precipitation events (including flooding). Climate change has contributed to drying up of rivers, receding / expanding of lake levels, siltation in dams and water pans, disruption of hydraulic structures, sea water intrusion leading to deterioration of water quality, this impact further reduces availability/ access to drinking water & for household purposes, for agriculture, for manufacturing, and for sanitation among others.

To mitigate climate change and create resilience, development of hydraulic structures is imperative. The Hydrologists Registration Board by regulating the hydrologist through registration and licensing will contribute to well-designed climate proof hydraulic structures in the country by registered and licenced hydrologists. In response to the challenges posed by climate change, the HRB is also advocating for measures, coordinated hydrological research, investigations and studies to inform policy. This initiative aims to mitigate the adverse impacts of climate change and to provide solutions for alleviating Kenya's Water insecurity. Equally, the Board will capacity build the professionals in advance, equipping them in mitigation measures against climate change.

### **Pollution and Degradation of Catchment Areas**

Contamination of water resources lead to reduced water available for use. Cleaning water of low quality requires a high amount of energy, which increases the cost of delivering water to the people and irrigated agriculture. Furthermore, degradation of catchment areas has not only reduced flows and quality of water in the rivers but also increased possibility of conflict between upstream and downstream users.

Pollution as evidenced by presence of waste water, heavy metals and agro-chemicals in rivers and water bodies as well as catchment degradation continue to be major challenges to human health and irrigated crops. In addition, large parcels of land are degraded due to landslides, floods and heavy soil loss and hence reducing their potential for food production. Equally, changes in land use and land cover have led to an increase in water run offs.

Through hydrological research and studies the board will inform policy on status, appropriate management and adaptation strategies towards the protection and conservation of water bodies by providing professional advice, guidance for the appropriate design and protection of water infrastructure and water sources. The Board also actively advocates for and encourages the adoption of water conservation practices as a means to ensure sustainability of water resources. The board is also actively involved in the catchment restoration and conservation through the growing of relevant tree species in the catchment areas.

### **Technology**

Technology continues to play a vital role in the sustainable management and development of water resources, ensuring that this critical source of freshwater remains available for various needs while addressing environmental and sustainability challenges. The rapid technological advancement has led to electronic waste which upon disposal affects the quality of water reservoirs.

The Board is cognizant of emerging technological advancement to incorporate appropriate technologies in the operation of the Board to allow effective research studies, data management and sharing. The Board, through its CPD Policy, will facilitate the acquisition of new and cutting-edge technologies to hydrology professionals to aid in hydrological data collection, analysis, management, storage and sharing.

### **Economic factors**

The Global Economic Crisis (GEC) leads to disruption of the world's financial and economic systems, resulting in a significant downturn in economic activity, financial instability, and adverse impacts on various aspects of the global economy. The consequences of a global economic crisis can be far-reaching, affecting not only financial markets and businesses but also individuals, governments, and social well-being, leading to economic hardship and social and political unrest in many cases. The GEC poses various challenges to the Board, including potential budget cuts, prolonged inflation rates, foreign exchange fluctuations, reduced investments in development projects and initiatives, and limited donor funds towards hydrology governance, management and climate change mitigation, and limited collaborations and partnerships.

### **Political Factors**

Political factors mainly affect the smooth implementation of programmes of an entity. Political factors include taxation, employment laws, and political instability. They can impact a business operation positively or negatively by influencing how agencies operate. Taxation is subject to government regulation. Agencies are liable to various forms of taxation, such as employment taxes paid by employers and employees. Political stability refers to the state of a government being peaceful and steady. Businesses can only thrive in environments that provide political stability. The absence of it through a riot or hostile takeover can disrupt everyday business transactions. Political instability also causes heavy financial losses for businesses. Several aspects of government policy can affect operations at HRB. The Board is expected to adhere to the laws and regulations. The Management should have to find how upcoming legislation can affect activities of HRB.

### **Social Factors**

The society is dynamic and continually changing for example growing popularity of social media. Social networking sites such as Facebook have become very popular among youth. The young consumers of products and services have grown used to mobile phones and computers. The younger generation prefers to use digital technology to shop online while the older people will perhaps stick to their traditional methods. Since the world is a global village, everything happening around us such as social media has an impact on us. This implies that social factors including cultural norms and expectations, health consciousness, population growth rates, age distribution, career attitudes, health, and safety are key in the provision of HRB services.

### 3.1.1.2. Micro-environment

Micro environment encompasses internal factors affecting the implementation of the Board's mandate. The key factors are;

#### a) Labour markets

The HRB staff play a crucial role in the implementation of the strategic plan. Currently, the Board has a low level of staff which leads to workload. The employees are directly linked to the rate of production in the Board. The Board requires additional funds to recruit key staff in various Departments to fill the gaps. Low staffing levels in the Board lead to low levels of output. There is a need for hiring of additional new employees and continuously training the required skills of employees.

#### b) Customer profile

The customers of the Board are the Hydrologists who seek registration and licensing for them to provide hydrological services in the country. The aim of the board is to offer the best quality of service at affordable prices to its consumers. The Board's role is to execute its mandate as well generate income through registering and licensing the hydrologists practitioners. Consequently, paying attention to customers and their feedback is essential.

#### c) Information Communication and Technology capacity

We live in the global world where technology, especially information and communication is changing the manner in which businesses work, how and where we work and how we interact with each other both internally and externally. The Board is way behind in terms of technology due to limited ICT infrastructure. The Board shall automate its processes both citizen-facing and back office for wide coverage.

### 3.1.2. Summary of Opportunities and Threats

**Table 3.1: Summary of Opportunities and Threats**

<b>Environment Factor</b>	<b>Opportunity</b>	<b>Threats</b>
Political	<ul style="list-style-type: none"><li>• Change in political leadership</li><li>• Devolution</li><li>• Increase in demand for Hydrological services</li></ul>	<ul style="list-style-type: none"><li>• Change in Government policies and priorities impacting on the functioning of the Board.</li><li>• Poor collaboration and weak linkages between county governments and the Board.</li></ul>
Economic	<ul style="list-style-type: none"><li>• High public debt</li><li>• High Taxation</li></ul>	<ul style="list-style-type: none"><li>• Increased interests leading to reduced funds allocated to the water sector.</li></ul>

<b>Environment Factor</b>	<b>Opportunity</b>	<b>Threats</b>
		<ul style="list-style-type: none"> <li>● Increased interests leading to reduced funds allocated to the water sector.</li> <li>● Inflation</li> </ul>
Social	<ul style="list-style-type: none"> <li>● Increased water demands due to High population growth</li> </ul>	<ul style="list-style-type: none"> <li>● Increased demand for and abstraction of water resources, increased development in roads infrastructure, agriculture, leading to conflicts.</li> <li>● Pollution of water resources.</li> <li>● Water catchment degradation.</li> </ul>
Technological	<ul style="list-style-type: none"> <li>● Rapid technological advancements</li> <li>● Automation</li> </ul>	<ul style="list-style-type: none"> <li>● Cyber-crime.</li> <li>● Redundancy brings about increased costs.</li> <li>● High rate of technological obsolescence</li> </ul>
Legal	<ul style="list-style-type: none"> <li>● Hydrologists Act, 2017</li> <li>● Improved legal framework</li> </ul>	<ul style="list-style-type: none"> <li>● Inconsistencies and gaps in the Act.</li> <li>● Changing legal and regulatory environment</li> </ul>
Ecological	<ul style="list-style-type: none"> <li>● Climate change Financing</li> <li>● Land use and land cover change</li> <li>● Pollution of water resources awareness</li> </ul>	<ul style="list-style-type: none"> <li>● Drought, floods and desertification.</li> <li>● Decrease in quantity of water resources.</li> <li>● Decrease in quality of water resources.</li> <li>● Catchment degradation</li> </ul>
Labour market	<ul style="list-style-type: none"> <li>● Availability of Skilled hydrology professionals</li> <li>● Existence of Training programs on hydrology field</li> </ul>	<ul style="list-style-type: none"> <li>● Low number of students graduating in hydrology</li> <li>● Low demand for hydrology study courses in higher learning institutions</li> </ul>
Customer profile	<ul style="list-style-type: none"> <li>● Unregistered hydrology professionals</li> <li>● Requirement of hydrological studies in design of hydraulic structures</li> </ul>	<ul style="list-style-type: none"> <li>● Un-gazetted hydrologist regulations</li> <li>● Low registration of hydrological professionals</li> <li>● Low investment on hydraulic structures in the water sector</li> </ul>
Information and Technology capacity	<ul style="list-style-type: none"> <li>● Availability of advanced technology</li> </ul>	<ul style="list-style-type: none"> <li>● Limited professional Capacity to operate the acquired technology</li> <li>● Potential cyber security attacks to installed ICT infrastructure</li> <li>● Dependency on technology can lead to vulnerabilities if systems fail.</li> </ul>

### **3.1.3. Internal Environment**

The Board further analysed the strengths and weaknesses performance of the Board in terms of governance and administrative structure, internal business process and resource and capabilities.

#### **3.1.3.1. Governance and Administration Structure**

The Board governance and administrative structures ensure that decision-making processes remain structured, transparent, and focused on achieving its mandate. The top decision-making organ of the Hydrologist Registration Board is the Board of Directors, which sets the Board's mission, vision, purpose, and core values; strategic directive and oversees the overall strategy implementation; and approves operational policies of the organisation. The Board also approves the Board's organisational structure and appoints a Registrar, who is responsible for its day-to-day operations.

#### **3.1.3.2. Internal Business Process**

The Board will put effort to strengthen business systems and processes to enhance performance by upgrading ICT infrastructure, automating business systems and processes, undertaking productivity mainstreaming and performance management, and undertaking branding and public awareness to improve its operations of registration and licensing of hydrologists, human resource management, financial management, procurement services, and overall service delivery.

#### **3.1.3.3. Resources and Capabilities**

The Board has an opportunity to have a robust portfolio of resources and capabilities to undertake its mandate. The Board's core strengths lie in its ability to leverage on its own source revenue which will be generated through the registration and licensing of hydrologists and to effectively meet the evolving needs of hydrology governance in the country. These collective resources and capabilities empower the Board to not only meet its strategic goals but also to be in a position to face market disruptions and challenges.

The Board will continuously leverage on the available opportunities to ensure successful implementation of programmes and growth, creating an enabling environment for improved hydrology governance in the country. Collaborations and partnerships will be established by developing appropriate frameworks to support human capacity development and equipment to enhance performance in hydrology functions.

### 3.1.4. Summary of Strengths and Weaknesses

**Table 3.2: Summary of Strengths and Weakness**

<b>Factors</b>	<b>Strengths</b>	<b>Weaknesses</b>
Governance and Administrative Structure	<ul style="list-style-type: none"> <li>● Good governance and management structure</li> <li>● Well outlined mandate and objectives</li> <li>● Strategic guidance and policy formation</li> <li>● Program design and implementation</li> <li>● Complying to the provision of Act</li> <li>● Mobilisation of financial resource funds</li> <li>● Financial management</li> <li>● Public participation in policy development</li> <li>● Establish partnership for implementation of Continuous Development Policy</li> <li>● Litigation and regulatory compliance</li> </ul>	<ul style="list-style-type: none"> <li>● Inadequate funding for operations</li> <li>● Lack of Hydrologists Regulations</li> <li>● Low staffing level in key technical operations</li> <li>● Stakeholder involvement reduced</li> <li>● Low visibility and awareness of the Board</li> <li>● Limited office space</li> <li>● Inability of the Board to ensure proper hydrological designs and reports</li> </ul>
Internal Business Process	<ul style="list-style-type: none"> <li>● Robust Hydrological Practice and management</li> <li>● Approved Human Resource Policy Instrument</li> <li>● Developing board's operations and integrating ICT systems in</li> <li>● Compliance with the budget</li> <li>● Timely audit activities</li> </ul>	<ul style="list-style-type: none"> <li>● Inadequate automation processes</li> <li>● Lack of comprehensive data on the number of Hydrology Professionals in the Country</li> <li>● Lack of system integration</li> </ul>
Resource and Capability	<ul style="list-style-type: none"> <li>● Financial support from the National Government</li> <li>● Opportunities for partnerships and collaborations</li> </ul>	<ul style="list-style-type: none"> <li>● Inadequate human resource capacity</li> <li>● Inadequate funding to complete Board's programs</li> <li>● Lack of office space and equipment.</li> </ul>

### 3.1.5. Analysis of Past Performance

During the year 2022/2023, the Hydrologists Registration Board developed its first strategic plan 2022-2026. The strategic plan has been implemented for one year and is being reviewed to align to the MTP IV and the BETA plan.

#### **3.1.5.1. Key Achievements**

Significant achievements have been made for the one-year period in which the strategic plan has been implemented. Some of the achievements are; Operational Budget, Review and approval on grading structure by the Salary Remuneration Commission (SRC), implementation of the Human Resource and policy Instruments by recruitment of staff, Development of Draft Hydrologists Regulations and Draft Hydrologists (amendments) Bill, 2023. The Board has also developed the Continuous Professional Development (CPD) policy, Road safety Policy, Risk Management Framework policy and the Board Charter.

#### **3.1.5.2. Challenges**

The challenges faced by the Board since the inception in 2019 hinders the achievement of the set targets during the last year. These challenges are as follows:

- i. **Limited budgetary allocation to implement the planned activities:** The Board's budget allocation is Ksh 25 million which recurrent in nature and it is inadequate to fully implement planned programmes
- ii. **Omissions and inconsistencies in the Hydrologists Act, 2017 leading to delays in the finalisation of the Hydrologists Regulations:** The Act has some omissions and inconsistencies such as lack of proper definition of some terminologies, ; lack of description or definition for different category of hydrology professionals; lack of provision for associate/graduate hydrologists; lack of provision for the requirements of registrar and the functions of the Board are restrictive which calls for expanded mandate.
- iii. **Weak institutional capacity:** The Board has low staffing levels, limited office space, limited mobility due to lack of Board official vehicles and low level of automation because of inadequate ICT infrastructure
- iv. **Climate change mitigation and adaptation challenges:** Frequent and increased intensity of floods and droughts and land degradation due to climate change has greatly affected the quality of water resources. The board is required to certify hydrological reports for quality assurance to designing of climate proof hydraulic structures and also coordinate hydrological research and studies in relation to climate change impacts.

#### **3.1.5.3. Lessons Learnt**

- i. Development of a clear resource mobilisation strategy is required to bridge exchequer funding gap;



- ii. The Ministry’s intervention is required to Fastrack amendment of Hydrologist Act 2017 and finalisation of hydrologists regulations which still hinders full implementations of the Board’s mandate
- iii. Adequate institutional capacity development is critical for effective implementation of the Board’s current programs and work plans.
- iv. Fast tracking the operationalization of the Hydrologists Act is required because the board has a role in mitigating effects of climate change by providing competent, registered and licenced professionals required to guide design of climate proof hydraulic structures, certification of hydrological reports and to coordinate hydrological research to inform the design and protection of water infrastructure and water resources strategies.

### 3.2. Stakeholder Analysis

A stakeholder is an individual/group/entity with symbiotic relationship with the institution. A stakeholder analysis is the process of assessing the impact of a decision on relevant parties. This information is used to assess how the interests of those stakeholders and those of the organisation should be addressed in a project plan, policy, program, or other action. The following is the outcome of the stakeholder analysis in table 3.3:

**Table 3.3: Stakeholders Analysis**

S/No.	Stakeholder	Role	Stakeholder expectation from the Board	Board’s Expectation from the stakeholder
1.	Public/citizenry	<ul style="list-style-type: none"> <li>● Consumers of services from the Board</li> </ul>	<ul style="list-style-type: none"> <li>● Involvement of stakeholder in development and review of policies and regulations</li> <li>● Enhanced awareness of Board activities and programs.</li> <li>● Efficient and effective services.</li> <li>● Transparency and accountability in service delivery.</li> </ul>	<ul style="list-style-type: none"> <li>● Active participation in stakeholders’ engagement.</li> <li>● Regular feedback on board services.</li> <li>● Responsive citizenry.</li> <li>● Compliance with laws and regulations.</li> <li>● Share data and information.</li> </ul>
2	Board of Directors	<ul style="list-style-type: none"> <li>● Oversight and strategic direction</li> </ul>	<ul style="list-style-type: none"> <li>● Implement Centre’s policies and guidelines;</li> <li>● continuous</li> </ul>	<ul style="list-style-type: none"> <li>● Oversight and policy direction;</li> <li>● support in</li> </ul>

S/No.	Stakeholder	Role	Stakeholder expectation from the Board	Board's Expectation from the stakeholder
			performance improvement; transparency, accountability, and teamwork; adherence to statutory requirements	resource mobilisation <ul style="list-style-type: none"> <li>Share data and information.</li> </ul>
3.	Staff	<ul style="list-style-type: none"> <li>Implementers of policies and Board's programmes</li> </ul>	<ul style="list-style-type: none"> <li>Commitment to staff welfare.</li> <li>Reward for excellent performance.</li> <li>Favourable terms and conditions of service.</li> <li>Conducive work environment.</li> <li>Skills and capacity development and career progression.</li> <li>Efficient and effective Human Resource services.</li> <li>Participatory and fair appraisal system.</li> </ul>	<ul style="list-style-type: none"> <li>Improved productivity.</li> <li>Provision of necessary skills and manpower.</li> <li>Exhibit a good image of the Board.</li> <li>Efficient and timely services to the citizens and stakeholders.</li> <li>Adherence to policies, rules, and regulations of the Board.</li> <li>Efficient utilisation of allocated resources</li> <li>Share data and information.</li> </ul>
4	Ministry of Water, Sanitation and Irrigation	<ul style="list-style-type: none"> <li>Provides Board's policy direction and oversight</li> </ul>	<ul style="list-style-type: none"> <li>Timely, efficient and prudent utilisation of allocated resources.</li> <li>To discharge the mandate as provided in the Hydrologists Act,2017 and regulations</li> </ul>	<ul style="list-style-type: none"> <li>Formulation of legal frameworks</li> <li>Appointment of board members</li> <li>Financial and technical support</li> <li>Timely disbursement of allocated resources.</li> </ul>

S/No.	Stakeholder	Role	Stakeholder expectation from the Board	Board's Expectation from the stakeholder
				<ul style="list-style-type: none"> <li>• Oversight over Board activities.</li> <li>• Regulate and protect water resources.</li> <li>• Provision of hydrological data</li> <li>• Share data and information.</li> </ul>
5.	Water Sector Trust Fund	<ul style="list-style-type: none"> <li>• Funding and mobilisation of resources</li> </ul>	<ul style="list-style-type: none"> <li>• Preparation of funding proposals</li> </ul>	<ul style="list-style-type: none"> <li>• Funding of Board proposals</li> </ul>
6.	National Treasury	Allocate National Revenue	<ul style="list-style-type: none"> <li>• Prudent management of the resources allocated</li> <li>• Timely financial reports</li> </ul>	<ul style="list-style-type: none"> <li>• Allocate adequate financial resources</li> <li>• Support in negotiation processes</li> </ul>
7.	Parliament	<ul style="list-style-type: none"> <li>• Enactment of laws and regulations on water policy framework</li> </ul>	<ul style="list-style-type: none"> <li>• Prudent utilisation of allocated funds</li> <li>• Timely response to all parliamentary questions</li> </ul>	<ul style="list-style-type: none"> <li>• Fast Track approval of water sector regulations and bills</li> <li>• Allocation of adequate resources</li> </ul>
8.	Judiciary	<ul style="list-style-type: none"> <li>• Arbitrate on Litigation matters</li> <li>• Interpretation and application of law</li> </ul>	<ul style="list-style-type: none"> <li>• Compliance with constitutional laws and court directives</li> </ul>	<ul style="list-style-type: none"> <li>• Fair and prompt dispensation of justice</li> <li>• Resolution of disputes</li> </ul>
9.	Attorney General	<ul style="list-style-type: none"> <li>• Drafting of Laws</li> <li>• Interpretation and application of law</li> </ul>	<ul style="list-style-type: none"> <li>• Compliance with constitutional laws and court directives</li> </ul>	<ul style="list-style-type: none"> <li>• Drafting of laws</li> <li>• Provide legal advice</li> </ul>
10.	Professional Bodies	<ul style="list-style-type: none"> <li>• Register professionals and enforce</li> </ul>	<ul style="list-style-type: none"> <li>• Compliance of staff through registration, renewal and</li> </ul>	<ul style="list-style-type: none"> <li>• Improved standards of technical expertise and</li> </ul>

<b>S/No.</b>	<b>Stakeholder</b>	<b>Role</b>	<b>Stakeholder expectation from the Board</b>	<b>Board's Expectation from the stakeholder</b>
		regulations and standards <ul style="list-style-type: none"> <li>• Provide necessary professional guidance</li> <li>• Training the professionals</li> <li>• Approve curriculums in training institutions</li> </ul>	continuous professional development <ul style="list-style-type: none"> <li>• Uphold professional ethics</li> <li>• Provide opportunities for continuous professional development</li> <li>• Support the staff to undertake CPD and annual renewals fees</li> </ul>	professional management in the sector <ul style="list-style-type: none"> <li>• Enforce professional ethics</li> <li>• Partner in the implementation of boards programmes</li> <li>• Share data and information.</li> </ul>
11.	Other Ministries Departments and Agencies	Suggest areas for partnership and collaboration	<ul style="list-style-type: none"> <li>• Partnership and Collaboration</li> </ul>	<ul style="list-style-type: none"> <li>• Collaboration in areas of mutual interests</li> <li>• Share data and information.</li> </ul>
12.	Hydrological Society of Kenya	<ul style="list-style-type: none"> <li>• Partnership and collaboration on Hydrological matters</li> </ul>	<ul style="list-style-type: none"> <li>• Operationalization of the Hydrologists Act, 2017.</li> <li>• Capacity building of Hydrology professionals</li> <li>• Registration and licensing of hydrology professionals</li> </ul>	<ul style="list-style-type: none"> <li>• Registration of members of the Society.</li> <li>• Partnership and collaboration</li> <li>• Share data and information.</li> </ul>
13.	Academic and research institutions	<ul style="list-style-type: none"> <li>• Undertake training and research</li> </ul>	<ul style="list-style-type: none"> <li>• Training and capacity development of hydrology professionals</li> <li>• Provide students for attachment and internship.</li> <li>• Share data and information.</li> </ul>	<ul style="list-style-type: none"> <li>• Qualified, competent and well-trained hydrology professionals</li> <li>• Partnerships and collaboration in capacity building of hydrology</li> </ul>

S/No.	Stakeholder	Role	Stakeholder expectation from the Board	Board's Expectation from the stakeholder
			<ul style="list-style-type: none"> <li>● Partnerships and collaboration in research, education, governance and policy.</li> </ul>	<ul style="list-style-type: none"> <li>professionals. and research</li> <li>● Certification of academic transcripts, certificates and qualifications.</li> <li>● Development of academic programs</li> <li>● Technical support for training and research programs.</li> <li>● Share data and information.</li> </ul>
14.	Hydrology Professionals	<ul style="list-style-type: none"> <li>● Undertake hydrological surveys, investigations and studies</li> <li>● Prepare quality hydrological reports</li> </ul>	<ul style="list-style-type: none"> <li>● Efficient and timely services from the board</li> <li>● Facilitate CPD training</li> <li>● Certification of hydrological reports</li> </ul>	<ul style="list-style-type: none"> <li>● Compliance with laws and regulations</li> <li>● Professional analysis for hydrological programs and activities.</li> <li>● Timely payment of fees.</li> <li>● Continuous upgrading of skills and knowledge.</li> <li>● Provision of timely and quality hydrological services to clients.</li> <li>● Share data and information.</li> </ul>

<b>S/No.</b>	<b>Stakeholder</b>	<b>Role</b>	<b>Stakeholder expectation from the Board</b>	<b>Board's Expectation from the stakeholder</b>
15.	County Governments	<ul style="list-style-type: none"> <li>● Consumers of hydrological services</li> <li>● Providing employments and opportunities to the hydrology professionals</li> <li>● Provision of business permits</li> </ul>	<ul style="list-style-type: none"> <li>● Guidance on the Hydrologists Regulations and other laws and guidelines.</li> <li>● Capacity building of hydrology professionals</li> <li>● Advisory and technical support.</li> </ul>	<ul style="list-style-type: none"> <li>● Compliance with the Hydrologists regulations and other laws and guidelines.</li> <li>● Partnership and collaboration in training, research and other hydrological programs and activities.</li> <li>● Share data and information.</li> </ul>
16.	Development partners	<ul style="list-style-type: none"> <li>● Provision of financial and technical support</li> </ul>	<ul style="list-style-type: none"> <li>● Collaboration in development of programs and facilities for advancement of hydrology.</li> <li>● Accountability and efficient utilizations of resources.</li> <li>● Timely achievement of planned outputs and outcomes of programs and activities being implemented.</li> <li>● Sustainable programs and projects.</li> <li>● Involvement in stakeholder consultations in planning for the board</li> </ul>	<ul style="list-style-type: none"> <li>● Financial and technical support for specific programs and activities.</li> <li>● Timely disbursement of allocated resources.</li> <li>● Collaboration on hydrological Research and capacity building</li> <li>● Share data and information.</li> </ul>

<b>S/No.</b>	<b>Stakeholder</b>	<b>Role</b>	<b>Stakeholder expectation from the Board</b>	<b>Board's Expectation from the stakeholder</b>
17.	Regulatory bodies.	1 <ul style="list-style-type: none"> <li>• Enforce regulations and standards</li> <li>• Collaboration and partnership</li> </ul>	<ul style="list-style-type: none"> <li>• Efficient and timely board services.</li> <li>• Approval of hydrological reports</li> <li>• Collaboration and partnership</li> <li>• Compliance with laws and regulations</li> </ul>	<ul style="list-style-type: none"> <li>• Enforce regulations and standards within their mandate</li> <li>• Partnership in the implementation of development projects and programs.</li> <li>• Compliance with laws and regulations</li> <li>• Share data and information.</li> </ul>

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## **Chapter Four : STRATEGIC ISSUES, GOALS AND KEY RESULT AREAS**

### **4. Overview**

This chapter entails discussion of the board's strategic issues, strategic goals and Key result areas. The strategic issues emanate from the review of the situational analysis and the mandates of the board while the strategic goals are the desired outcomes addressing the strategic issues each of which is directly related to the mission and vision of the board, while the key results which are linked to the attainment of the strategic goals. The Plan has Five (5) Key Result Areas which are in line with Vision and Mission of the Board.

#### **4.1. Strategic issues**

The following 4 (four) strategic issues will inform the strategic directions covered in the Strategic Model:

##### **a) Non-operationalization of the hydrologists Act, 2017**

The Hydrologists Act, 2017 was gazetted to regulate the practice of hydrology, coordinate hydrological research and certify hydrological reports before implementation of projects and programs. However, the Act has not been operationalized because of setbacks in the Act occasioned by omissions and inconsistencies which has hindered finalization of the hydrologists regulations.

##### **b) Limited Financial capacity**

The Hydrologists Board has relied on government grants which are recurrent since its inauguration. The Funding is inadequate to meet the board's mandate. The board has not been able to raise revenue through the fees from its mandate due to the operationalization of hydrologists Act 2017 setback.

##### **c) Limited partnership and collaboration with stakeholders in Research, Education and Governance**

The board requires collaboration and partnership with stakeholders in research, education and governance in order to undertake its mandate. There is a need for the board to develop a partnership framework to enhance partnership and collaboration with key stakeholders.

##### **d) Inadequate institutional capacity and professional development and competence**

The Board has limited institutional capacity. Mainly the staffing level is low to function optimally. The Board working space is also limited as it is housed in the Ministry of Water headquarters with few offices allocated to officers. Mobility is also limited by lack of adequate



motor vehicles for its operation. There is also inadequate professional development across the Board members, staff members and professionals which the Board requires to address through training and continuous professional development in order to promote hydrological standards and professionalism.

## **4.2. Strategic Goals**

- i. Enhanced compliance to standards in hydrological practice
- ii. Financial sustainability
- iii. Enhanced Partnership and Collaboration with stakeholders in Research, Education and Governance
- iv. Enhanced institutional capacity

## **4.3. Key Results Areas**

In line with the Board's Vision and Mission, five (5 no.) Key Result Areas which reflect the Board's mandate and responsibilities in the realization of Kenya Vision 2030, MTP IV, Bottom-up Economic Transformation Agenda (BETA), SDG's and Agenda 2063 have been identified and will be the pillars of this Strategic Plan.

The Key Result Areas are:

### **KRA 1: Regulation, Coordination and Overseeing the Practice of Hydrology**

The Board will coordinate, regulate and oversee the practice of hydrology through registration, licensing and regulating hydrology professionals and by ensuring full operationalization of the Hydrologists Act, 2017.

### **KRA 2: Research in Hydrological Services**

The Board will promote hydrological development by facilitating resources for coordinating research, investigations and surveys and providing a platform for sharing with other hydrology professionals and with all other stakeholders, and shall provide to all stakeholders with professional advice, guidance and services concerning activities related to hydrology and the practice of hydrology in Kenya.

### **KRA 3: Certification of hydrological reports for the design of hydraulic structures**

The Board shall monitor and enforce adherence to set professional and ethical standards to protect the public and the hydrology profession from irresponsible work, through preparation of a guideline for the preparation of technical hydrology reports on design and implementation

of hydraulic structures and hydrological works, to be adhered to by all hydrologists undertaking such works.

The Board will certify and approve hydrological designs and reports to ensure professional standards have been adhered to.

#### **KRA 4: Partnerships and Resource mobilization**

The Board will promote education and training in hydrology by partnering with other institutions that have capacity to offer these services and will endeavor to raise financial resources from these partnerships to fund activities and programs aimed at strengthening and developing the Board and its members, and supporting its activities. The board will develop a resource mobilization strategy to guide resource mobilization for the board to adequately execute its programs.

#### **KRA 5: Institutional Development and Capacity Building**

The Board will build institutional capacity through enhancing corporate image and branding, acquiring office space, equipment and vehicles, enhancing human resources capacity through recruitment and training the board and staff and integrating ICT systems in its operations in order to deliver on this Strategic Plan. The board will also offer capacity building to the professionals through partnering with relevant institutions.

The strategic elements of the KRAs have been summarized in Table 4.1 below.

**Table 4.1: Strategic Issues, Goals and KRAs**

<b>Strategic Issue</b>	<b>Goal</b>	<b>KRAs</b>
Non-operationalization of the Hydrologists Act, 2017	Enhanced compliance to standards in hydrological practice	KRA 1: Regulation, Coordination and Overseeing the Practice of Hydrology  KRA 3: Certification of hydrological reports for the design of hydraulic structures
Limited Financial Capacity	Financial sustainability	KRA 4: Partnerships and Resource mobilization

Limited partnership and collaboration with stakeholders in Research, capacity building and Governance	Enhanced partnerships and collaboration in coordinated hydrological Research, capacity building and Governance	KRA 2: Research in Hydrological Services  KRA 4: Partnerships and Resource mobilization
Inadequate institutional capacity	Enhanced institutional capacity	KRA 5: Institutional Development and Capacity Building

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## Chapter Five : STRATEGIC OBJECTIVES AND STRATEGIES

### 5. Overview

This chapter discusses strategic objectives, strategic choices and strategies which the board will employ to achieve desired results. The chapter enumerates the various strategic objectives of each of the Key Result areas with their outcomes and outcome indicators. It also discusses the strategic Choices that the board will prioritize and their strategic objectives and specific course of action (strategy) to achieve the board's mandate.

#### 5.1. Strategic Objectives

The Board will in the next five (5) years embark on the full operationalization of the Hydrologists Act, 2017 and Hydrologists Regulations, 2022 in the development of policies, standards and procedure manuals in order to effectively coordinate, regulate and oversee the practice of hydrology, coordinate research, investigations and surveys in the hydrological field, certify hydrological studies and reports necessary for the design of hydraulic structures. In order to enhance professional competence amongst hydrologists, the Board will partner with five (5) institutions or bodies in promoting research in hydrological services, training, resource mobilization and building institutional capacity.

**Table 5.1: Outcomes and Annual Projections**

Strategic Objective	Outcome	Outcome Indicator	Year 1	Year 2	Year 3	Year 4	Year 5
<b>KRA 1: Regulation, Coordination and Overseeing the Practice of Hydrology</b>							
To coordinate, regulate and oversee the practice of hydrology	Compliance with Hydrologists regulations and professional standards	Level of compliance	100	100	100	100	100
<b>KRA 2: Research in Hydrological Services</b>							
To coordinate research, investigations and surveys in the hydrological field	Effective coordination of research, investigations and surveys	Percentage increase of scientific research, investigations and surveys reports	20	40	60	80	100

Strategic Objective	Outcome	Outcome Indicator	Year 1	Year 2	Year 3	Year 4	Year 5
<b>KRA 3: Certification of hydrological reports for the design of hydraulic structures</b>							
To certify hydrological studies and reports necessary for the design of hydraulic structures	Safe and secure hydraulic structures	Percentage of certified hydrological studies and reports	100	100	100	100	100
<b>KRA 4. Partnership and Resource Mobilization</b>							
To partner with five (5) organizations in research, training and resource mobilization by 2027	A financially sustainable institution and strong partnerships	Percentage increase of mobilized financial resources	72.2	236.2	128.4	11	27.5
		Percentage increase of institutions in partnerships for training and research	20	40	60	80	100
<b>KRA 5: Institutional Development and Capacity building</b>							
To build institutional capacity by the year 2027	Efficient and effective institution	% increase of Staff recruited	20	40	60	80	100
		Staff Productivity index	1	1	1	1	1
		% Level of employees' satisfaction	100	100	100	100	100
		% Level of customers' satisfaction	100	100	100	100	100
		% Level of awareness of the services provided by the board	50	60	80	100	100
		% Effectiveness of capacity	100	100	100	100	100

Strategic Objective	Outcome	Outcome Indicator	Year 1	Year 2	Year 3	Year 4	Year 5
		building programs executed					

## 5.2. Strategic Choices

**Table 5.2: Strategic Objectives and Strategies**

KRA	Strategic Objective(s)	Strategies
KRA 1: Regulation, Coordination and Overseeing the Practice of Hydrology	To coordinate, regulate and oversee the practice of hydrology	Operationalize the Hydrologists Regulations, 2023
		Development of policies, standards and procedures manuals
		Registration and Licensing of hydrologists
		Review the Hydrologists Act, 2017
		Monitor and evaluate the level of compliance
KRA 2: Research in Hydrological Services	To coordinate research, investigations and surveys in the hydrological field	Establish an operational office for coordinating research, investigations and surveys carried out by stakeholders
		Establish and maintain a linked database of academic, professional and technical works in hydrology
		Establish a professional journal for publishing professional research, investigations and surveys carried out in Hydrology
KRA 3: Certification of hydrological reports for the design of hydraulic structures	To certify hydrological studies and reports necessary for the design of hydraulic structures	Develop Standards for preparation of Hydrological reports
		Certify hydrological designs and reports.

<b>KRA</b>	<b>Strategic Objective(s)</b>	<b>Strategies</b>
KRA 4: Partnership and Resource Mobilization	To partner with five (5) organizations in research, training and resource mobilization by 2027	Enter into memoranda of understanding with relevant organizations
		Mobilization of funds from the Exchequer, development partners and generation of A-in-A.
KRA 5: Institutional Development and Capacity building	To build institutional and capacity by the year 2027	Acquire Corporate Image and Branding
		Acquire office space, equipment and vehicles
		Implement the approved Human Resource and Policy Instruments
		Developing and Integrating ICT system in Board operations
		Capacity building of board of Directors and staff

## **Chapter Six : IMPLEMENTATION AND COORDINATION FRAMEWORK**

### **6. Overview**

This chapter presents the framework that will be used in the implementation of the strategic plan. It outlines the action plan, annual work plan & budget, performance contracting, coordination framework, institutional framework, staff establishments, skill set & competence development, leadership and risk management.

#### **6.1. Implementation Plan**

The Board will implement the Strategic plan through an action plan. The action plan gives the strategic objectives of each KRAs, expected outputs with set annual targets, annual budget and the responsibility for execution of activities.

##### **6.1.1. Action Plan**

Implementation of the strategic plan will be undertaken through various activities that have been outlined under each strategy. This has been set out in the action plan as presented in the implementation matrix shown in Annex II. It outlines the strategies, expected output, key performance indicators, annual targets, annual budgets and responsibilities for execution of the activities.

##### **6.1.2. Annual Work-plan and Budget**

Every year, a cost work plan will be developed based on the available budget. This work plan will be further cascaded to department and individual work plans. The annual work plan shall also form the basis of monitoring implementation of the strategic plan.

##### **6.1.3. Performance Contracting**

The cost annual work plans shall be the basis of the performance contracts of which the Board of Directors shall commit annually to ensure efficient service delivery. The PC will then be cascaded to Chief Executive Officer and further to departments in the Board.

#### **6.2. Coordination Framework**

The Board has outlined how the activities will be coordinated for effective implementation of the strategic plan as described below:

##### **6.2.1. Institutional Framework**

In line with its mandate the Board has developed an organisational structure that seeks to facilitate effective delegation management processes and information flow as shown in annex I



## **Structure of the Hydrologists Registration Board**

### **a) Board of Directors**

The Board of Directors has the role of setting and reviewing policy. The Board has no operational involvement in the conduct of the organisation's business activities and delivery of services and has delegated authority for the operations and administration of the organisation to the Registrar/CEO.

### **b) Registrar/Chief Executive Officer's Office**

This office shall be responsible for providing leadership, management and coordination roles in the administration and monitoring of the activities that will ensure efficacy in the implementation of policy decisions, for the organisation to deliver its mandate. The office shall have full operational responsibility in the development, implementation and evaluation of strategic business plans agreed by the Board of Directors.

### **c) Directorates and Departments**

Directorates are designed to focus on key roles, functions and responsibilities. Similarly, functions will be strengthened to give the Board the impetus to become relevant in the water sector. The Directorates are further divided into Departments so as to achieve greater functionality. The Hydrologists Registration Board is structured as follows:

#### **I. Registration, Licensing and Resource Centre Directorate**

This Directorate will regulate, coordinate and oversee the practice of hydrology; it is responsible for registration and licensing of hydrology professionals and hydrology consulting firms and is the repository of information with regard to hydrologists' registration and qualifications. It will have the following departments:

##### **a) Registration & Licensing Department**

The Department will be responsible for processing applications for registration and issuance of licences.

##### **b) Hydrology Resource Centre Department**

The Department is responsible for the collection and management of information relating to registration of hydrology professionals and their qualifications, and hydrological survey and research reports, hydrological designs, data and any other data.

#### **II. Hydrology Research, Standards and Compliance Directorate**

The Directorate will ensure compliance and enforcement of the Hydrologists Act, 2017 and the Hydrologists Regulations, 2022.

**a) Hydrology Research and Standards Department**

The Department is responsible for the development of Hydrology standards and will closely liaise and coordinate with other agencies in the formulation and development of the relevant Hydrology standards.

**b) Compliance and Enforcement Department**

The Department will be responsible for ensuring effective and efficient compliance and enforcement of the Hydrologists Act, 2017 and the regulations thereunder.

**III. Capacity Building and Accreditation Directorate**

The Directorate is responsible for the development of capacity in the Hydrology profession and providing accreditation for Hydrology education, training and practice. It consists of the following Departments.

**a) Training and Professional Development Department**

The Department is responsible for developing programs for the continuous improvement of hydrologists' knowledge, skills and competencies.

**b) Accreditation Department**

The Department is responsible for the accreditation of hydrology programmes and qualifications and ensuring compliance to accreditation parameters.

**IV. Policy, Corporate Research and Strategy Directorate**

The Directorate is responsible for the adoption and implementation of effective strategies for resource mobilisation, policy formulation, research, quality assurance, coordination of risks management and performance management. It consists of the following Departments.

**a) Corporate Research, Planning and Strategy Department**

The Department is responsible for coordinating research, policy formulation and the development of strategic plans.

**b) Quality Assurance and Performance Management Department**

The Department is responsible for quality assurance, business continuity processes, performance management contracting, and the development and monitoring of the implementation of the Board's annual works plans.

**c) Partnership & Resource Mobilization Department**

The Department is responsible for creating partnerships, and securing and mobilising resources for the Board.

## **V. Corporate Services Directorate**

This Directorate is responsible for providing leadership and coordination of the following Departments:

### **a) Finance and Accounts Department**

The Department is responsible for ensuring prudent management of financial resources and the reporting thereof within the existing legal framework.

### **b) Human Resource Management and Administration Department**

The Department is responsible for the provision of strategic leadership to ensure optimal utilisation and management of human resources in the Board.

### **c) Information and Communication Technology (ICT) Department**

This Department is responsible for promoting the use of ICT in delivery of services towards realisation of the Board's mandate.

### **d) Corporate Communications Department**

The Department is responsible for establishing the Board's visibility and managing branding activities.

## **VI. Corporate Secretary & Legal Services Directorate**

The Directorate is responsible for providing advice and support on all legal matters to the Board, providing secretariat services to the Board, ensuring Board evaluation for promotion of good corporate governance, ensuring compliance with all statutory, legal, social and regulatory requirements in the execution of the Board's mandate.

## **VII. Internal Audit Directorate**

This Directorate will be responsible for providing assurance on the Board's internal control systems, risk management framework and governance structure. It is also responsible for providing independent, objective assurance and consultative activity aimed at adding value and improving the Board's operations, ensuring compliance with statutory laws and regulations, gives risk assurance and seeks to identify breakdowns in internal controls.

## **VIII. Supply Chain Management Department**

This stand-alone Department is responsible for procurement of goods, works and services, inventory management as well as disposal of goods, and ensuring compliance with the Public Procurement and Asset Disposal Act, 2015 and other regulatory statutes.

## **Policies, laws and Regulations**

Policies, laws and regulations that will guide the board in implementation of its strategic plan includes:

### **Policies**

- a) **Human Resource Policy Instruments;**
- b) **Continuous Professional Development Policy;**
- c) **Risk Management Framework Policy**
- d) **Board Charter**
- e) **Road safety Policy**
- f) **National Water policy**

### **Laws**

- a) **Constitution of Kenya,2010**
- b) **Water Act, 2016**
- c) **Hydrologist Act, 2017**
- d) **Kenya Information and Communication Act,**
- e) **Public Procurement and Asset Disposal Act, 2015**
- f) **The State Corporation Act:2015**
- g) **Public Officers Act Code of Conduct**
- h) **Public Audit Act, 2015**
- i) **Public Service Commission Act 2017**
- j) **Ethics and Anti-Corruption Act,2011**
- k) **Public Finance Management Act 2015**

### **Regulation**

- a) **National Water Resources Regulations**
- b) **Hydrologists Regulations**
- c) **Public Finance Management Regulations 2015**

### **Strategies.**

- a) **Resource mobilization strategy**
- b) **Communication Strategy**
- c) **National Water Resources Strategy**

#### **6.2.2. Staff Establishment, Skills Set and Competence Development**

The Board currently has only five full time employees, who are headed by the Registrar/CEO and other staff deployed on a short-term basis from the Ministry of Water, Sanitation and

Irrigation. The Board therefore anticipates hiring a number of employees to meet its human resource needs as shown in table 6.2.

**Table 6.1: Staff Establishment**

<b>Cadre</b>	<b>Approved Establishment (A)</b>	<b>Optimal Staffing Levels (B)</b>	<b>In-Post (C)</b>	<b>Variance D=(B-C)</b>
Registrar/CEO	1	1	1	0
Personal Assistant	1	1	0	-1
Office Administrator/ Senior	1	1	0	-1
Driver/Senior Driver	1	1	0	-1
Office Assistant	1	1	0	-1
<b>Sub-Total</b>	<b>5</b>	<b>5</b>	<b>1</b>	<b>-4</b>
Director, Registration, Licencing & Resource Centre	1	1	0	-1
Manager, Registration & Licencing	1	1	1	0
Principal Hydrologist	1	1	0	-1
Hydrologist/ Senior	4	4	0	-4
Manager, Hydrology Resource Centre	1	1	0	-1
Principal Hydrologist	1	1	0	-1
Hydrologist/Senior	2	2	0	-2
<b>Sub-Total</b>	<b>11</b>	<b>11</b>	<b>1</b>	<b>-10</b>
Director, Hydrology Research, Standards & Compliance	1	1	0	-1
Manager, Hydrology Research and Standards	1	1	0	-1
Principal Hydrologist	2	2	0	-2
Hydrologist/ Senior	2	2	0	-2
Hydrologists Assistant/ Senior	2	2	0	-2
Manager, Compliance and Enforcement	1	1	0	-1
Principal Hydrologist	2	2	0	-2
Hydrologist/ Senior	4	4	0	-4
Hydrologists Assistant/ Senior	4	4	0	-4
<b>Sub-Total</b>	<b>19</b>	<b>19</b>	<b>0</b>	<b>-19</b>

<b>Cadre</b>	<b>Approved Establishment (A)</b>	<b>Optimal Staffing Levels (B)</b>	<b>In-Post (C)</b>	<b>Variance D=(B-C)</b>
Director, Capacity Building & Accreditation	1	1	0	-1
Manager, (Training and Professional Development)	1	1	0	-1
Principal Hydrologist	1	1	0	-1
Hydrologist/ Senior	4	4	0	-4
Manager, Accreditation	1	1	0	-1
Principal Hydrologist	1	1	0	-1
Hydrologists/ Senior	1	1	0	-1
<b>Sub-Total</b>	<b>10</b>	<b>10</b>	<b>0</b>	<b>-10</b>
Director, Policy, Corporate Research & Strategic	1	1	0	-1
Manager, Corporate Research, Planning and Strategy	1	1	0	-1
Principal Planning Officer	1	1	0	-1
Planning Officer/ Senior	1	1	1	0
Manager, Quality Assurance and Performance Management	1	1	0	-1
Principal Planning Officer	1	1	0	-1
Planning Officer/ Senior	1	1	0	-1
Manager, Partnership & Resource Mobilization	1	1	0	-1
Principal Planning Officer	1	1	0	-1
<b>Sub-Total</b>	<b>9</b>	<b>9</b>	<b>1</b>	<b>-8</b>
Director, Corporate Services	1	1	0	-1
Manager, Finance and Accounts	1	1	0	-1
Principal Accountant	1	1	0	-1
Accountant/senior	1	1	1	0
Manager, Human Resource Management and Administration	1	1	0	-1
Principal Human Resource Management	1	1	1	0

<b>Cadre</b>	<b>Approved Establishment (A)</b>	<b>Optimal Staffing Levels (B)</b>	<b>In-Post (C)</b>	<b>Variance D=(B-C)</b>
Human Resource Management Officer/ Senior				
Office Administrator/ Senior	2	2	0	
Senior Assistant Office Administrator				-2
Administration Assistant/Senior	1	1	0	-1
Drivers/Senior	2	2	0	-2
Office Assistant/ Senior	2	2	0	-2
Manager, ICT	1	1	0	-1
Principal ICT Officer	1	1	0	
ICT Officer/ Senior				
ICT Assistant/ Senior				-1
Manager, Corporate Communications	1	1	0	-1
Principal Corporate Communications Officer	1	1	0	
Corporate Communications Officer/Senior				-1
<b>Sub-Total</b>	<b>17</b>	<b>17</b>	<b>2</b>	<b>-15</b>
Corporation Secretary and Director, Legal Services	1	1	0	-1
Manager, Legal Services	1	1	0	
Principal Legal Officer				-1
Legal Officer/Senior				
<b>Sub-Total</b>	<b>2</b>	<b>2</b>	<b>0</b>	<b>-2</b>
Manager, Supply Chain Management	1	1	0	-1
Principal Supply Chain Management Officer	1	1	0	-1
Supply Chain management Officer/Senior	1	1	0	-1

<b>Cadre</b>	<b>Approved Establishment (A)</b>	<b>Optimal Staffing Levels (B)</b>	<b>In-Post (C)</b>	<b>Variance D=(B-C)</b>
Supply Chain Management Assistant/Senior				
<b>Sub-Total</b>	<b>3</b>	<b>3</b>	<b>0</b>	<b>-3</b>
Director, Internal Audit	1	1	0	-1
Manager, Internal Audit	1	1	0	
Principal Internal Auditor				
Internal Auditor/Senior				-1
<b>Sub-Total</b>	<b>2</b>	<b>2</b>	<b>0</b>	<b>-2</b>
<b>Grand Total</b>	<b>78</b>	<b>78</b>	<b>5</b>	<b>-73</b>

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The set skills, skill gaps and the required competence development for each of the cadres is as provided in table 6.3.

**Table 6.2: Set and Competence Development**

<b>Cadre</b>	<b>Skills Set</b>	<b>Skills Gap</b>	<b>Competence Development</b>
<b>Registrar</b>	-Corporate governance course not lasting 4 weeks	-Corporate governance course -GIS hydrological modelling	Competence development in GIS-hydrological modelling & Corporate governance
<b>Manager (R &amp;L)</b>	Leadership course lasting not less 4 weeks	Leadership course lasting not less 4 weeks	Leadership course lasting not less 4 weeks
<b>Human Resource Management &amp; Development Officer</b>	-Proficiency in advanced Excel course not lasting 3 months -Management course not lasting 3 months	-Advanced Excel -Management course	-Undergoing training in advance Excel and Management course
<b>Accountant</b>	Public sector accounting course not lasting less 1 week -Financial reporting course not lasting 2 weeks -SMC course not lasting 4 weeks	-Public sector accounting -Financial reporting course -SMC course	-Undergoing Public sector accounting training, Financial reporting, and SMC training
<b>Planning Officer</b>	Project management course not lasting 3 weeks -Monitoring & evaluation course not lasting 3 months	-Project management course -Monitoring & evaluation course	-Competence development in Project Management and Monitoring & evaluation

Internal analysis revealed that most of the technical functions are understaffed. It is therefore imperative that some of the critical functions need to be adequately staffed to support

successful implementation of the Strategic Plan. Additionally, there is a need to update the policies and procedures to respond to the current policy and legislative environment.

### 6.2.3. Leadership

The role of the Board of Directors as outlined in the Hydrologists Act No 19 of 2017 is to regulate, coordinate and oversee the practice of hydrology while the office of the CEO Shall be responsible for the overall coordination of strategic plan implementation. There shall be a strategic plan implementation committee chaired by a Manager and shall draw membership from all the departments. The Research, Planning and Strategy Department shall coordinate, monitor, evaluate and report implementation of the strategic plan.

### 6.2.4. Systems and Procedures

The board is in the process of developing a pre-requisite system necessary for implementation of the strategic plan. Internal systems that the board is currently developing and domesticating is for is IPPD and GHRIS for Human resources and performance management

Processes for the Registration and licensing of hydrology professionals, certification of hydrological reports and continuous professional development are also being developed for digitalization and on-boarding of the services on the e -citizen platform.

Other processes the board plans to develop includes the financial management and information and communication

## 6.3. Risk Management Framework

**Table 6.3: Risk Management Framework**

No .	Risks	Risk Likelihood (L/M/H)	Severity (L/M/H)	Overall Risk Level (L/M/H)	Mitigation Measure(s)
1.	Delay in operationalization of the Act	High	High	High	Fastrack review of the Hydrologists Act,2017 and finalization of the regulations
2.	Failure to Generation of A-in-A	High	High	High	Fastrack finalization of the regulations

3.	Loss of data and information	High	High	High	Establishment of Integrated Security Management Systems
4.	Delay of project implementation due to inadequate funding	High	High	High	Resource mobilization strategy
5.	Litigations (the conduct of lawsuit)	High	High	High	<ul style="list-style-type: none"> <li>• Compliance with laws and regulations</li> <li>• Continuous sensitization and stakeholder engagement.</li> </ul>
6	Changes in Government laws or regulations	High	High	High	<ul style="list-style-type: none"> <li>• Compliance with laws and regulations</li> </ul>

## Chapter Seven : RESOURCE REQUIREMENTS AND MOBILIZATION STRATEGIES

### 7. Overview

This chapter looks at the financial requirements for implementing the strategic plan, the available funds, the funding gaps and resource mobilisation strategies of the Hydrologists Registration Board.

#### 7.1. Financial Requirements

The Board will require Ksh.1, 351,780,000 to implement this Strategic Plan over the five-year period. Table 7.1 gives an annual breakdown of this requirement by KRA and administrative costs. Table 7.2 displays the funding deficit.

**Table 7.1: Financial Requirements for Implementing the Strategic Plan**

Cost Item	Projected Resource Requirements (Ksh. Mn)					
	Year 1	Year 2	Year3	Year4	Year 5	Total
KRA1	10.85	11.05	15.9	11.1	11.2	60.1
KRA2	1	11.2	66.3	66.5	132	277
KRA 3	0.8	6.9	7.2	7.2	7.2	29.3
KRA 4	3.1	3.1	3.1	3.1	3.1	15.5
KRA 5	15.9	77.9	173.2	199.4	204.5	670.9
Administrative Cost	11.4	34.61	64.9	77.97	110.1	298.98
<b>Total</b>	<b>43.05</b>	<b>144.76</b>	<b>330.6</b>	<b>365.27</b>	<b>468.1</b>	<b>1351.78</b>

The increase in resource requirements for Research in Hydrological Services is to cater for implementation of the Board's proposed development projects.

The increase in resource requirements for the Institutional Development and Capacity Building is to cater for establishment of the Board's offices, recruitment of key staff, incorporation of ICT in the Board's operations, and creating awareness about the Board's mandate and the services it offers.

**Table 7.2: Resource Gaps**

<b>Financial Year</b>	<b>Estimated Financial Requirements (Kshs. Mn)</b>	<b>Estimated Allocations (Kshs. Mn)</b>	<b>Variance (Kshs. Mn)</b>
Year 1	43.05	25.0	18.1
Year 2	144.76	103.0	41.8
Year 3	330.6	215.0	115.6
Year 4	365.27	251.6	114.2
Year 5	468.1	295.1	173.0
<b>Total</b>	<b>1351.78</b>	<b>889.7</b>	<b>462.08</b>

## **7.2. Resource Mobilization Strategies**

The overall goal of resource mobilization is to strengthen the Board's funding through diversification of revenue streams. In this regard, the following strategies will be used to generate revenue:

### **a) Government grants**

The Board intends to mobilize additional funds from the Exchequer to facilitate the implementation of the strategic plan. This will be done by developing the concept and project proposals for funding.

### **b) Grants from Development partners**

The Board intends to mobilize funds for programs related to its core mandate.

The board intends to develop concept and project proposals for coordinating research and capacity building of hydrology professionals for funding through the partnerships with development partners. The board intends to identify development partners and organize for roundtable negotiations for partnership in financial and technical assistance to raise the Million to facilitate the implementation of the strategic plan.

### **c) Internally-generated funds**

The Board intends to mobilize funds from fees charged for registration and licensing of hydrology professionals; for certification and approval of hydrological reports; from the facilitation and administration of CPD courses; and from associated fees as detailed in the

Hydrologists Regulations, 2022. The board intends to sensitize hydrology professionals on the regulation's adherence. From the fees on the services offered by the board it intends to raise 162 million within the five years' period.

### **7.3. Resource Management**

The Board will undertake the following strategic measures to enhance resource management:

- a) Digitise and automate key processes to improve on the efficiency and effectiveness;
- b) Ensure prudent financial management and optimal utilisation of funds allocated as per the Public Financial Management Act, 2012, Public Procurement and Disposal Act, 2015 and Public Procurement and Asset Management Regulation, 2020;
- c) Enhance compliance with budgets and other statutory requirements; and
- d) Strengthen the internal audit function.

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## **Chapter Eight : MONITORING, EVALUATION AND REPORTING FRAMEWORK**

### **8. Overview**

The purpose of Monitoring and Evaluation is to guide the implementation of the Plan by tracking activities, outputs and outcomes to find out whether targets are being achieved. In case the targets are not achieved, corrective actions are suggested. Due to the important role played by M&E, as well as the reporting process, in providing information for decision-making, the Board developed a Monitoring and Evaluation Framework. However, for M&E and consequent reporting to be undertaken successfully, funds amounting to at least 1% of the Board's approved budget should be made available for that purpose.

#### **8.1. Monitoring Framework**

The monitoring of the Strategic Plan will be a continuous function that uses systematic data collection on specified indicators to give management and the main stakeholders in the ongoing interventions, indications on the extent of progress, achievement and progress in the use of allocated funds. The data collected will be analysed to prepare quarterly and annual reports.

#### **8.2. Performance Standards**

The following indicators shall guide the board in the monitoring and evaluation.

##### **Outcome indicators.**

Outcome indicators assess the results that come with the interventions. Therefore, we can quantify the number of journal articles published, the total number of partnerships for training and research.

##### **Output indicators.**

The output indicator directly estimates the products, services or activities achieved by a project. This indicator measures the level of compliance by the number of competent and skilled hydrologists registered, the percentage increase in compliance with the hydrological reports used for the well designing of hydraulic structures.

##### **Effectiveness indicators.**

Effectiveness indicator measures to what extent an intervention achieves its goal such as percentage increase in mobilised resources rendering an institution financially sustainable.

##### **Stakeholder satisfaction.**

This measures the insight and feedback of the board members, government, citizens, Hydrological Society of Kenya, academic institutions, development partners, staff among other stakeholders concerning the quality and impact. Customer satisfaction is one of the measures of stakeholder satisfaction

### 8.3. Evaluation Framework

An evaluation framework provides an overall framework for evaluation across different programmes in the Board. The main purpose of evaluation is to summarise the essential elements to evaluate, provide framework for conducting effective program evaluations and to clarify steps in the program evaluation. The Board shall undertake evaluation in two phases; Mid-term and end term.

**Table 8.1: Outcome Performance Matrix**

Key Result Area	Outcome	Outcome Indicator	Baseline		Target	
			Value	Year	Mid-Term Period	End-Term Period
Regulation, Coordination and overseeing the Practice of Hydrology	Compliance with Hydrologists regulations and professional standards	Level of compliance	100%	2023	100%	100%
Research in hydrological services	Effective coordination of research, investigations and surveys	Percentage increase of scientific research, investigations and surveys reports	20	2023	60	100
Certification of hydrological studies for design of hydraulic structures	Safe and secure hydraulic structures/ well-designed hydraulic structures	Percentage of certified hydrological studies and reports	100	2023	100	100
Partnership and resource mobilization	A financially sustainable institution	Percentage increase of mobilized resources	25	2023	48	100



Key Result Area	Outcome	Outcome Indicator	Baseline		Target	
			Value	Year	Mid-Term Period	End-Term Period
	Partnerships for research and training	Percentage increase of institutions in partnerships for training and research	20	2023	60	100
Institutional development and Capacity Building	Efficient and effective institution and competent hydrologist profession	% increase of staff recruited	20	2023	60	100
		Staff Productivity index	1	2023	1	1
		% Level of employees' satisfaction	100	2023	100	100
		% Level of customers' satisfaction	100	2023	100	100
		% Level of awareness of the services provided	50	2023	80	100
		% Effectiveness of capacity building programs executed	100	2023	100	100

*NB: Evaluation of the Plan should be undertaken at least mid-term and end-term*

### **8.3.1. Mid-Term Evaluation**

The Board will carry out a mid-term evaluation which will be a systematic and objective assessment of the ongoing or completed projects, programs or policy formulation including their design, implementation and results. The aim will be to determine the relevance and fulfilment of objectives, development efficiency, effectiveness and sustainability. Evaluation will be institutionalised through the formation of a Monitoring and Evaluation Committee. The mid-term review will be conducted after two and half (2.5) years which will be at the end of 2025.

### **8.3.2. End-Term Evaluation**

End-term reports will be prepared to guide decision-making and for dissemination to the various stakeholders. Throughout the period of development of the Strategic Plan, it will be very critical for incorporation of stakeholders to ensure there is concurrence on key milestones to be achieved. This will make it easier to implement the various strategies. The strategies chosen should have clear outcomes and monitoring of each small milestone undertaken regularly to ensure that any bottlenecks are removed early enough to ensure achievement of the strategies. The end term review will be undertaken in 2028 which will be the final plan evaluation.

## **8.4. Reporting Framework and Feedback Mechanism**

The monitoring of the Strategic Plan will be a continuous function that uses systematic data collection on specified indicators to give management and the main stakeholders in the ongoing interventions, indications on the extent of progress, achievement and progress in the use of allocated funds. The data collected will be analysed to prepare quarterly and annual reports. The Board's Monitoring and Evaluation Framework is contained in Table 8.2, 8.3 and 8.4.

**HYDROLOGISTS REGISTRATION BOARD**

**QUARTERLY PROGRESS REPORT**

**QUARTER ENDING: ...**

**Table 8.2: Quarterly Progress Reporting Template**

Expected Output	Output Indicator	Annual Target (A)	Quarter for year....			Cumulative to Date			Remarks	Corrective Intervention
			Target (B)	Actual (C)	Variance (C-B)	Target (E)	Actual (F)	Variance (F-E)		

**HYDROLOGISTS REGISTRATION BOARD**

**ANNUAL PROGRESS REPORT**

**YEAR ENDING: .....**

**Table 8.3: Annual Progress Reporting Template**

Expected Output	Output Indicator	Achievement for year....			Cumulative to Date			Remarks	Corrective Intervention
		Target (A)	Actual (B)	Variance (B-A)	Target (D)	Actual (E)	Variance (E-D)		

**Table 8.4: Evaluation Reporting Template**

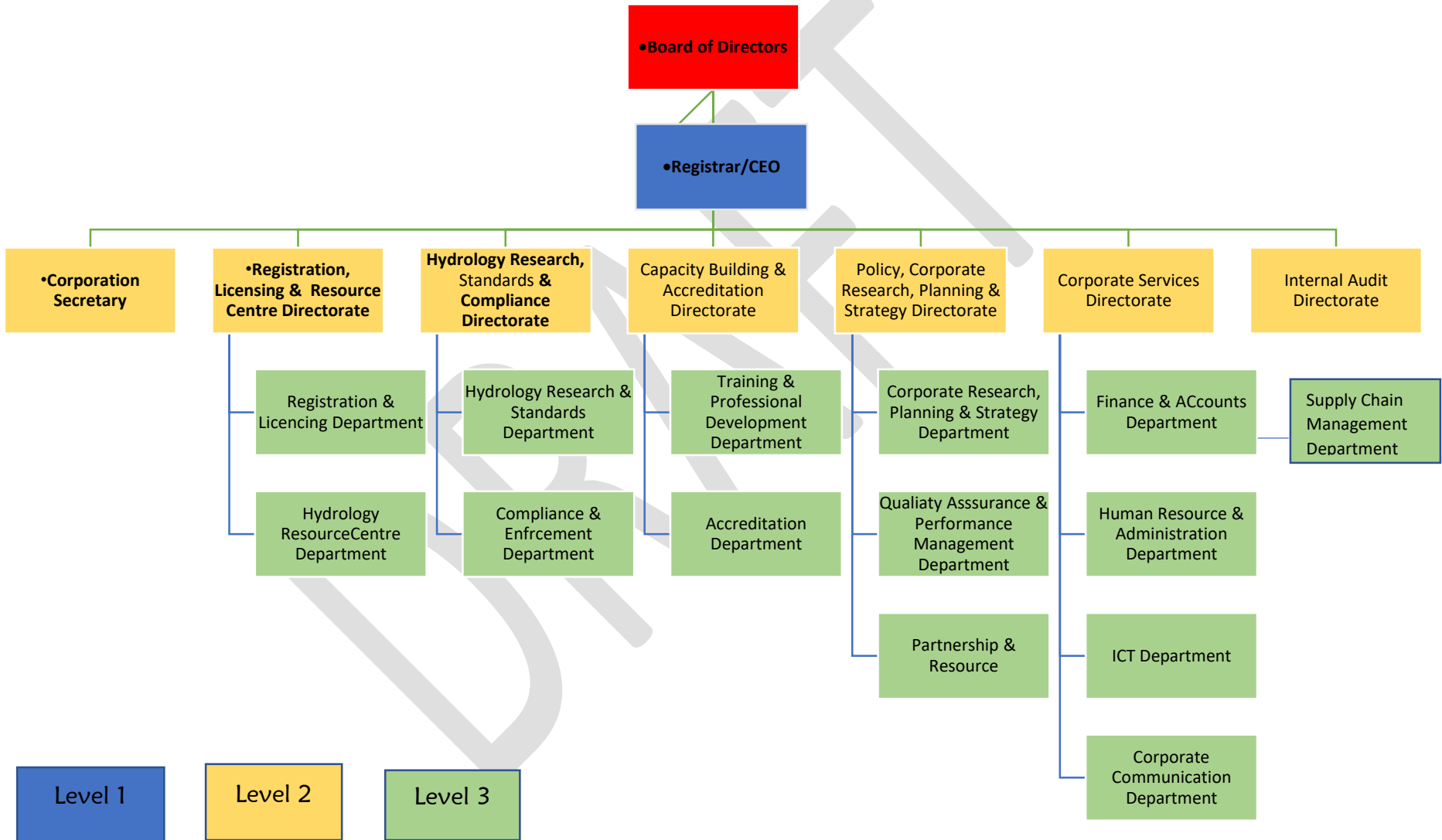
Key Result Area	Outcome	Outcome Indicator	Baseline		Mid-Term Evaluation		End of Plan Period Evaluation		Remarks	Corrective Intervention
			Value	Year	Target	Achievement	Target	Achievement		
KRA 1										
KRA 2										
KRA 3										
KRA 4										
KRA 5										

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# ANNEXES

## ANNEX I: HRB Organization Structure



## ANNEX II IMPLEMENTATION MATRIX

Strategy	Key Activities	Expected Output	Output Indicators	Target for 5 Years	Target					Budget (Ksh. Mn.)					Responsibility	
					Y1	Y2	Y3	Y4	Y5	Y1	Y2	Y3	Y4	Y5	Lead	Support
<b>Strategic Issue:</b> Non-operationalization of the hydrologists Act, 2017																
<b>Strategic Goal:</b> Enhance compliance to standards in hydrological practice																
<b>KRA 1:</b> Regulation, Coordination and Overseeing the Practice of Hydrology																
<b>Outcome:</b> Compliance with hydrologists regulations and professional standards																
<b>Strategic Objective:</b> To Coordinate, Regulate and Oversee the Practice of Hydrology																
Operationalize the Hydrologists Regulations, 2022	Miscellaneous Amendment of the hydrologists Act Gazettement of the Regulations	Hydrologists Regulations are Gazetted.	Gazette Notice	1	1	-	-	-	-	3	2	1.5	1	0.5	Registrar/ CEO	
Establish and maintain a linked database	Development of Database	Data base of hydrology professionals developed and updated	Database of hydrology professionals	5	1	1	1	1	1	0.3	1	3	0.5	0.5	Registrar/ CEO	

of academic, professional and technical works in	Curriculum development		Curriculum	5	0	1	1	2	1	0.05	1	2.5	3.5	2.5		
Development of policies, standards and procedures manuals	Implementation and review of CPD policy	CPD Policy Implementation	, No of hydrologists professionals trained	100	0	50	100	100	100	0	1.25	2.5	2.5	2.5	Registrar/CEO	
	Development and dissemination of Standard Operations (SOP) manuals	Standards and Operations (SOPs) Manuals	No. of SOPs	3	3	-	-	-	-	2				1	Registrar/CEO	
Registration and Licensing hydrologists	Registration and Licencing of Hydrologists	Registered Hydrologists	No of hydrologists professionals registered	1460	25	220	305	410	500	0.5	0.6	1	1	1	Registrar/CEO	



		Licenced hydrologists	No of licenced hydrologists professional	1460	25	220	305	410	500	1	1	1	1	1.2	Registrar/CEO	
Review the Hydrologists Act, 2017	Review of the hydrologists Act	Hydrologists Act, 2017 amended	Amended Act	1	-	-	1	-	-	3	3	3	-	-	Registrar/CEO	
Monitor and evaluate the level of compliance	Monitoring and evaluation	Compliant Hydrological Reports	% of Compliance	100	100	100	100	100	100	1	1.2	1.4	1.6	2	Registrar/CEO	
<b>Sub-Total</b>										<b>10.85</b>	<b>11.05</b>	<b>15.9</b>	<b>11.1</b>	<b>11.2</b>		
<b>Strategic Issue:</b> Limited partnership and collaboration with stakeholders in Research, Education and Governance																
<b>Strategic Goal:</b> Enhanced Partnership and Collaboration with stakeholders in coordinated Research, Education and Governance																
<b>KRA 2:</b> Research in Hydrological Services																
<b>Outcome:</b> Effective coordination of research, investigations and surveys																
<b>Strategic Objective:</b> To Coordinate Research, Investigations, and Surveys in the Hydrological Field																

Establish an operational office within the Board for coordinating research, investigations and surveys carried out by stakeholders	Holding Conference	National/Regional / international conferences held for Knowledge sharing and transfer	Conference report	3	-	-	1	1	1	-	-	15	15	30	Registrar/CEO	
	Coordinating Research	Research undertaken in the hydrological Field.	No. of research	3	-	1	-	1	1		10	50	50	100	Registrar/CEO	
Establish a professional journal for publishing professional research, investigations and	Establish a professional journal	Professional hydrological journal	Journal No. of publications	1	-	-	1	-	-	1	1.2	1.3	1.5	2	Registrar/CEO	

surveys carried out in Hydrology																
<b>Sub-Total</b>										<b>1</b>	<b>11.2</b>	<b>66.3</b>	<b>66.5</b>	<b>132</b>		
<b>Strategic Issue:</b> Non-operationalization of the hydrologists Act, 2017																
<b>Strategic Goal:</b> Enhanced compliance to standards in hydrological practice																
<b>KRA 3:</b> Certification of hydrological studies for the design of hydraulic structures																
<b>Outcome:</b> Safe and secure hydraulic structures																
<b>Strategic Objective:</b> To certify hydrological studies and reports necessary for hydraulic structures																
Develop Standards for preparation of Hydrological reports	Creation of Awareness	Awareness creation/ Stakeholder engagements /Dissemination of Standards developed	No. of Meetings/ Workshops No. of Publications	2	1	1	-	-	-	0.3	1	1	1	1	Registrar/ CEO	

Certify hydrological designs and reports.	Certification of hydrological reports	Certification of reports done	No. of reports certified	300	50	50	50	50	100	0.5	0.9	1.2	1.2	1.2	Registrar/CEO	
	Field verification of hydraulic structures	verification reports									5	5	5	5		
<b>Sub-Total</b>										<b>0.8</b>	<b>6.9</b>	<b>7.2</b>	<b>7.2</b>	<b>7.2</b>		
<b>Strategic Issue:</b> Limited Financial capacity																
<b>Strategic Goal:</b> Financial sustainability																
<b>KRA 4:</b> Partnership and Resource mobilization																
<b>Outcome:</b> A financially sustainable institution and strong partnerships																
<b>Strategic Objective:</b> To partner with 5 institutions in research, training and resource mobilization																
Enter into memoranda of understanding with relevant institutions or Bodies.	Development and Implementation of MoU	MoUs	No. of MoUs	5	1	1	1	1	1	1	1	1	1	1	Registrar/CEO	

Mobilization of funds from the Exchequer, development partners and generation of A-in-A.	Develop of Resource mobilization strategy	Kshs 890 million secured from Exchequer	Amount in Kshs (Mn)	890	25	103	215	252	295	1	1	1	1	1	Registrar/CEO	
		Kshs 300 million secured from development Partners	Amount in Kshs (Mn)	300	0	0	50	100	150	1	1	1	1	1	Registrar/CEO	
		Kshs. 162 million from fees (A-in-A)	Amount in Kshs (Mn)	162	0.5	1.5	35	62.5	62.5	0.1	0.1	0.1	0.1	0.1	Registrar/CEO	
<b>Sub-Total</b>										<b>3.1</b>	<b>3.1</b>	<b>3.1</b>	<b>3.1</b>	<b>3.1</b>		
<b>Strategic Issue:</b> Inadequate institutional capacity																
<b>Strategic Goal:</b> Enhanced institutional capacity																
<b>KRA 5:</b> Institutional Development and Capacity Building																
<b>Outcome:</b> Efficient and effective institution																
<b>Strategic Objective:</b> To build institutional capacity																
Acquire Corporate	Sensitization of stakeholders	Stakeholders sensitised	Percentage level of awareness	100	100	100	100	100	100	0.3	0.5	2	2	2	Registrar/CEO	

Image and Branding	Updating of service charter	Service Charter reviewed, Digitalization and on boarding of board services BPR Reports	Approved Service Charter	2	1	-	1	-	-	1		1		-	Registrar/CEO	
	Digitalization and on boarding of board services BPR Reports	Digitalization and on boarding of board services BPR Reports		23	6	6	6	5		0.5	0.5	0.5	0.5			
Acquire office space, equipment and vehicles	Procurement of office space	Office space procured	Lease documents	1	1	-	-	-	-	1	3.1	10	10	10	Registrar/CEO	
	Office space partitioning	Office space partitioned and furnished	% of office partitioned and furnished	100	20	20	20	20	20	0	0.7	10	10	10	Registrar/CEO	
	Procurement of Office	Vehicles procured	No. of vehicles	5	1	1	1	1	1	0	7	7	7	7	Registrar/CEO	

Implement the approved Human Resource and Policy Instruments	Recruitment and training	Staff employed	No. of staff employed	78	10	15	25	15	13	10	47.5	123.6	143	143	Registrar/CEO		
		Staff Trained	No. of staff trained	48	8	10	10	10	10	10	0.5	2.5	9.5	13.5	15	Registrar/CEO	
		Board members trained	% of Board members trained	100	100	100	100	100	100	100	2.1	2.1	3.5	4.2	5.5	Registrar/CEO	
Developing and Integrating ICT system in Board operations	Development of ICT security system	Computers procured	No. of computers	20	10	10	-	-	-	0.4	1	1.1	1.2	2	Registrar/CEO		
		ICT Security systems established	No. of software installed and updated	20	5	5	5	5	-	0.1	3	5	8	10	Registrar/CEO		
		Procurement and Installation of Servers	servers procured and installed	1	0	1	0	0	0		10	0	0	0	Registrar/CEO Director Corporate Services		
<b>Sub-Total</b>										<b>15.9</b>	<b>77.9</b>	<b>173.2</b>	<b>199.4</b>	<b>204.5</b>			

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