LEGAL NOTICE NO. 142

THE WATER ACT

(Cap. 372*)*

IN EXERCISE of the powers conferred by section 22 of the Water Act, the Water Resources Authority makes the following Order—

THE ENEYAMPUIPUI WETLAND CATCHMENT PROTECTION ORDER, 2024

Citation.

1. This Order may be cited as the Eneyampuipui Wetland Catchment Protection Order, 2024.

Interpretation.

2. In this Order, except where the context otherwise requires—

"Act" means the Water Act; Cap. 372.

"association" means a water resources users association registered by the Authority in accordance with the Act;

"Authority" means the Water Resources Authority established under section 11 of the Act;

"basin area" means the area designated by the Authority as a basin area under section 24 of the Act;

"Plan" means the Eneyampuipui Wetland Catchment Management Plan set out in the Second Schedule;

"Protected Area" means the area declared to be a protected area under paragraph 4 and is demarcated for protection and conservation within the Eneyampuipui Wetland Catchment Management Plan;

"riparian reserve" means land in respect of which management obligations are imposed on users or owners by the Authority due to its proximity to the Protected Area;

"soil and water conservation plan" means soil and water conservation plan as defined in regulations relating to water resources; and

"sub-basin area" means the area designated by the Authority as a basin area under section 24(2) of the Act.

Application of the Order.

3. This Order shall apply to the National Government, national government entities, county governments, county government entities and any other person being a user of water resources and the riparian reserve of the Protected Area.

Declaration of a protected area.

4. (1) The Eneyampuipui Wetland Catchment Protection Area is declared to be a protected area for purposes of the Act.

(2) The Eneyampuipui Wetland Catchment Protection Area shall be as per the extent and description set out in the First Schedule and is demarcated for protection and conservation within the Eneyampuipui Wetland Catchment Management Plan.

Eneyampuipui Wetland Catchment Management Plan.

5. (1) The Plan set out in the Second Schedule shall, without prejudice to the provisions of the Regulations made pursuant to the Act, be the basis for protection, conservation and use of the water resources within the protected area.

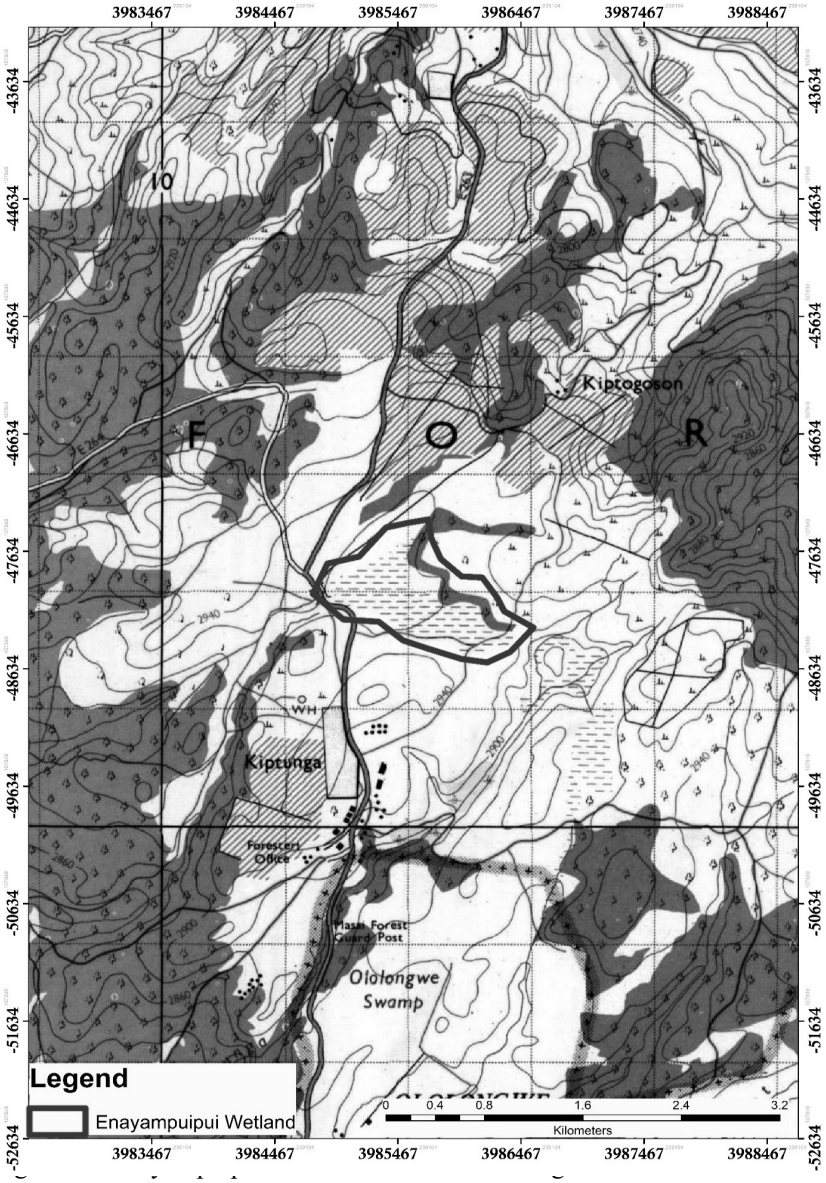
(2) The Authority shall place signboards and beacons in or near the protected area or in appropriate public places frequented by land and water users and at the Authority's offices; displaying up-to-date information about the condition of the water resources of the Protected Area.

(3) The public notices shall contain information regarding the action required of water and land users to conserve and protect the water resources of the Protected Area.

Offence.

6. A person who contravenes this Order commits an offence and shall, on conviction, be liable to the penalty prescribed under section 147 of the Act.

FIRST SCHEDULE



SECOND SCHEDULE

THE ENEYAMPUIPUI WETLAND CATCHMENT MANAGEMENT PLAN

(p. 2, 5(1))

PART I: INTRODUCTION

1.1 Citation

This Plan may be cited as the Eneyampuipui Wetland Catchment Management Plan.

1.2 Acronyms

The following acronyms shall have the meanings as assigned below:

LVSBA	Lake Victoria South Basin Area
AG	Attorney General
Ha	Hectares
KFS	Kenya Forest Service
Km	Kilometer
Km^2	Square Kilometer
KWS	Kenya Wildlife Service
mm	Millimeters
NEMA	National Environment Management Authority
NGAO	National Government Administration Officer
^oC	Degrees Celsius
WDC	WRUA Development Cycle
WRA	Water Resources Authority
WRUA	Water Resources Users Association

1.3 Objectives

1.3.1 The general objectives of this Management Plan are to:

(a) ensure sustainable management and use of the Wetland resources; and

(b) ensure the conservation of the Wetland and its catchment areas to improve on the water quantity and quality.

1.3.2 The specific objectives of this Management Plan are to:

(a) enhance implementation of existing regulations to protect the rights of all the wetland users; and

(b) identify funding sources to implement water conservation programs that help to enhance the Wetland water resources.

1.4 Background Information

In the context of water resources, a catchment area is an area of land from which water naturally flows into a water course. A catchment area provides a natural water storage mechanism or facility. During rainfall, the vegetation cover allows the water ample time to infiltrate through the soil and form sub-surface flow that recharges the rivers, springs and groundwater aquifers. Often, sub-surface flow is a relatively slow process, which explains the existence of permanent (perennial) rivers in various areas.

The environmental status and conditions of a catchment influences the quantity and quality as well as sustainability of its water resources; for instance, rivers in a well-maintained catchment often have higher base flows even during the dry season with boreholes in such areas recording good or high yields. However, in poorly maintained and degraded catchments, poor infiltration of rainwater results into rapid surface run-off flowing into the river courses. This often causes flash-floods and large volumes of suspended solids which may aggravate siltation of water infrastructure. Furthermore, rivers in degraded catchment have unsustainable base flows during the dry season, hence prevalence of seasonal rivers.

From the foregoing, catchment areas are vital components in water resource management whose protection is imperative. Particularly, vulnerable catchment areas or water resources such as wetlands and those which serve critical purposes such as groundwater recharge areas require more targeted conservation and protection interventions. Such areas need to be formally and legally delineated and protected from encroachment, pollution, overexploitation and destruction to ensure sustainable management, exploitation and ecological integrity.

1.5 Legal and Policy Framework for Catchment and Wetland Protection

The Constitution of Kenya, 2010

Article 66 of the Constitution provides that the State may regulate the use of any land, or any interest in or right over any land, in the public interest, or land use planning. Furthermore, Article 69 (1) obligates the state to, *interalia*, ensure sustainable exploitation, utilization, management and conservation of the environment and natural resources, and equitable sharing of the accruing benefits; encourage public participation in the management, protection and conservation of the environment; and eliminate processes and activities that are likely to endanger the environment. Article 69 (2) on the other hand places responsibility on every person the duty to cooperate with State organs and other persons to protect and conserve the environment and ensure ecologically sustainable development and use of natural resources. Further, Article 70 provides a legal framework through which any person may seek redress in case of violation of their environmental rights.

1.5.1 The Water Act (Cap. 372)

The Water Act provides a framework for the regulation, management and development of water resources, water and sewerage services. The Act establishes the Water Resources Authority (WRA) to regulate the management and use of water resources. The Act defines Catchment Area as an area that is part of a basin designated as such under the Act. In particular, section 22 and 23 provides for protection of catchment areas and conservation of ground water. Regulations relating to water resources made pursuant to the Act addresses the management and use of water resources including the manner of identification and protection of vulnerable catchment areas.

1.5.2 The Environmental Management Coordination Act (Cap. 387)

The Environmental Management Coordination Act generally provides for sustainable management and exploitation of wetlands. Specifically, section 42 of the EMCA proscribes certain activities from wetlands and empowers the Minister responsible for environment to declare wetlands as protected areas and issue specific orders and standards for sustainable management of wetlands.

1.5.3 The Sustainable Development Goals (SDGs)

The Sustainable Development Goals (SDGs), were adopted by the United Nations in 2015 as a universal call to action to end poverty, protect the planet, and ensure that by 2030 all people enjoy peace and prosperity. Different countries including Kenya have adopted the SDGs as part of its international obligation, prioritizing the SDG targets as integral part of its development agenda. With regard to water resources, SDG 6 which aims to ensure availability and sustainable management of water and sanitation for all is critical by 2030 in catchment protection agenda.

1.5.4 The Ramsar Convention on Wetlands

The Ramsar Convention on Wetlands is the International Convention that focuses on development of the wetlands policy. Kenya ratified the Convention in 1990. Since then, six Kenyan wetlands have been listed as wetlands of international importance. The convention provides a framework for national action and international cooperation for the conservation and prudent use of wetlands and their resources.

1.5.5 National Policies

The water and wetland resources management and use is also guided by various policies including:

(a) The National Water Policy, 2021 (Sessional Paper No.1 of 2021) which provides a framework for sustainable management and financing of water resources; water harvesting and storage; and for equitable, efficient, and universal access to water supply and reasonable standards of sanitation, for domestic, economic use and ecosystem sustenance.

(b) The National Wetlands Conservation and Management Policy, 2014 (Sessional Paper No.12 of 2014) whose goal is to ensure wise use and sustainable management of wetlands in order to enhance sustenance of their ecological and socio-economic functions for the present and future generations of Kenya.

PART II: BACKGROUND INFORMATION ON ENEYAMPUIPUI WETLAND

2.0 Eneyampuipui Wetland

Eneyampuipui Wetland collects water during rains and acts as a reservoir that releases streams flowing into the Amalo and Nyangores rivers forming the headwaters of the Mara River Basin which is globally known due to the Mara and Serengeti ecosystems and the world-famous annual wildebeest migration. As the main perennial source of water for the Serengeti-Mara ecosystem, it is an essential resource that supports high species density and diversity of large herbivores.

The Mara River is a transboundary river, shared between Kenya and Tanzania, and provides ecosystem services that underpin the economy of the 1.1 million people living in its basin. More than half of the basin's inhabitants directly rely upon the Mara River for domestic water needs, and at least 73% of households around the Mara Wetland in Tanzania harvest fish for both subsistence and commercial

purposes. Although the Mara River contributes about 5% of the volume of water flowing into Lake Victoria, it is regarded as one of the most important rivers flowing into the Lake.

2.1 Rationale for Eneyampuipui Wetland Protection

Eneyampuipui Wetland is a significant water recharge area which falls within the upper Lake Victoria Basin (Mara River Basin) and also contributes to some flows into rivers within the Rift Valley Basin Area (Njoro and Molo rivers). Over the years, the Wetland has been massively encroached for various land uses e.g. human settlements, cultivation, planting of eucalyptus/exotic trees and establishment of water pans, thus reducing the size of the Wetland from 280ha to 180ha. The swamp is known for its rich biodiversity and serves as an important habitat for various plant and animal species. It supports diverse flora, including aquatic plants, sedges, grasses, and shrubs.

The Wetland is home for Crowned and Ugandan cranes. It also provides essential nesting and foraging grounds for numerous bird species, making it a significant birding destination. The Wetland is located within a gazetted forest under Kenya Forest Service. The main vegetation cover in the Wetland are eucalyptus, pine, cypress, cider, grass and papyrus reeds.

A management plan is critical for the conservation and protection of Eneyampuipui Wetland. This will tackle poor land use practices and restoration of the destroyed wetland through implementation of the following strategies:

(a) Sensitization of the local community and stakeholders on the need to protect the Wetland to ensure environmental sustainability.

(b) Development of an action plan to protect and rehabilitate the Wetland.

(c) Participatory mapping of the protection zones around the Wetland with the community.

(d) Application of the law to protect the Wetland (enforcement for catchment and riparian protection).

2.2 Location and size

The area identified for protection is spread within Marioshoni location of Molo Sub County, Nakuru County. It is located about 36 km to the west of Nakuru City and within the Kaptunga Forest of the Eastern Mau Complex. The Wetland used to cover an area of approximately 280 hectares, which however has reduced to 180 hectares over time and is within the 1LB-sub basin of Lake Victoria South Basin Area.

2.3 Watershed area

The Wetland receives water from the surrounding higher grounds, and has an outlet on the western side locally known as Nyabuiyabu river outlet. On the north-eastern side, the Wetland has an outlet that eventually drains into Rongai river (within the Rift Valley Basin Area). The area measures 112 hectares (1.12 km^2) out of the 1,450.17 km^2 catchment area of the whole 1LB sub basin in Lake Victoria South Basin as shown in Figures 2 below.

Watershed area

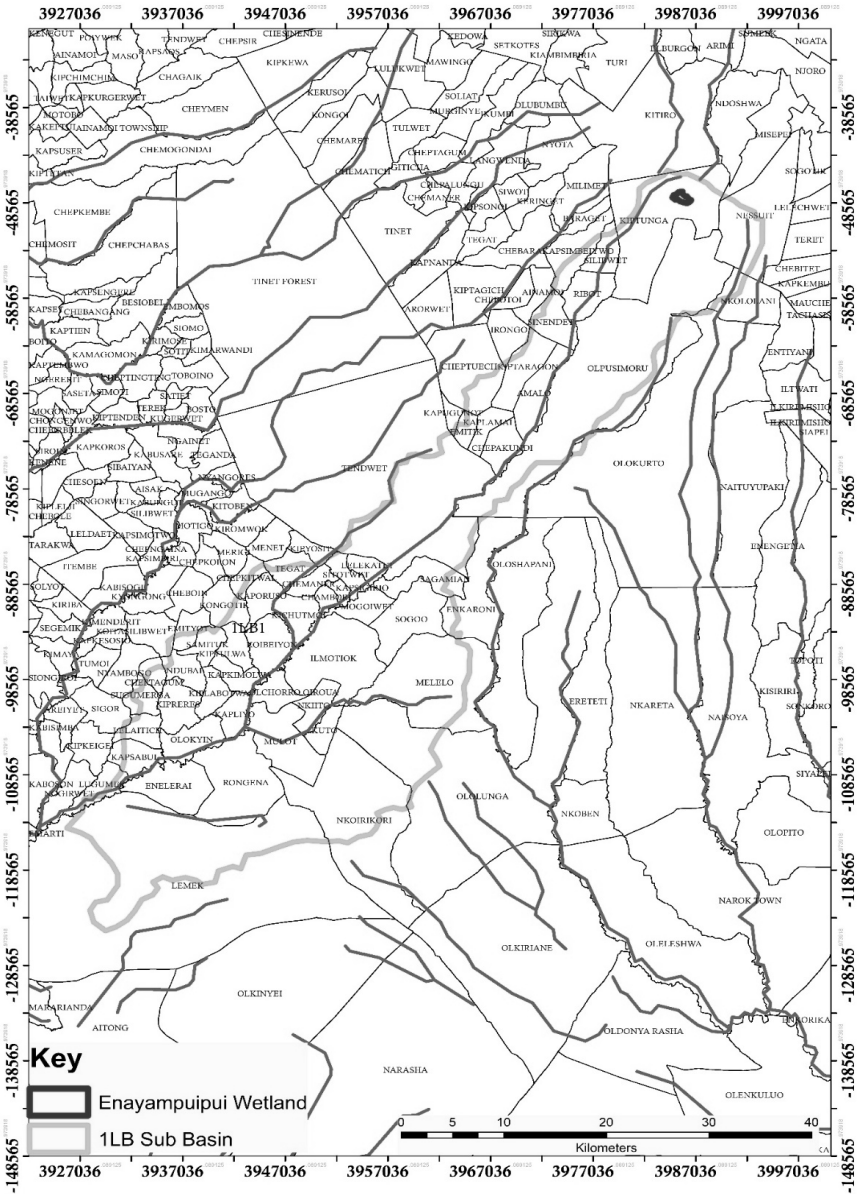


Figure 2. Location of Eneyampuipui Wetland within 1LB Sub Basin

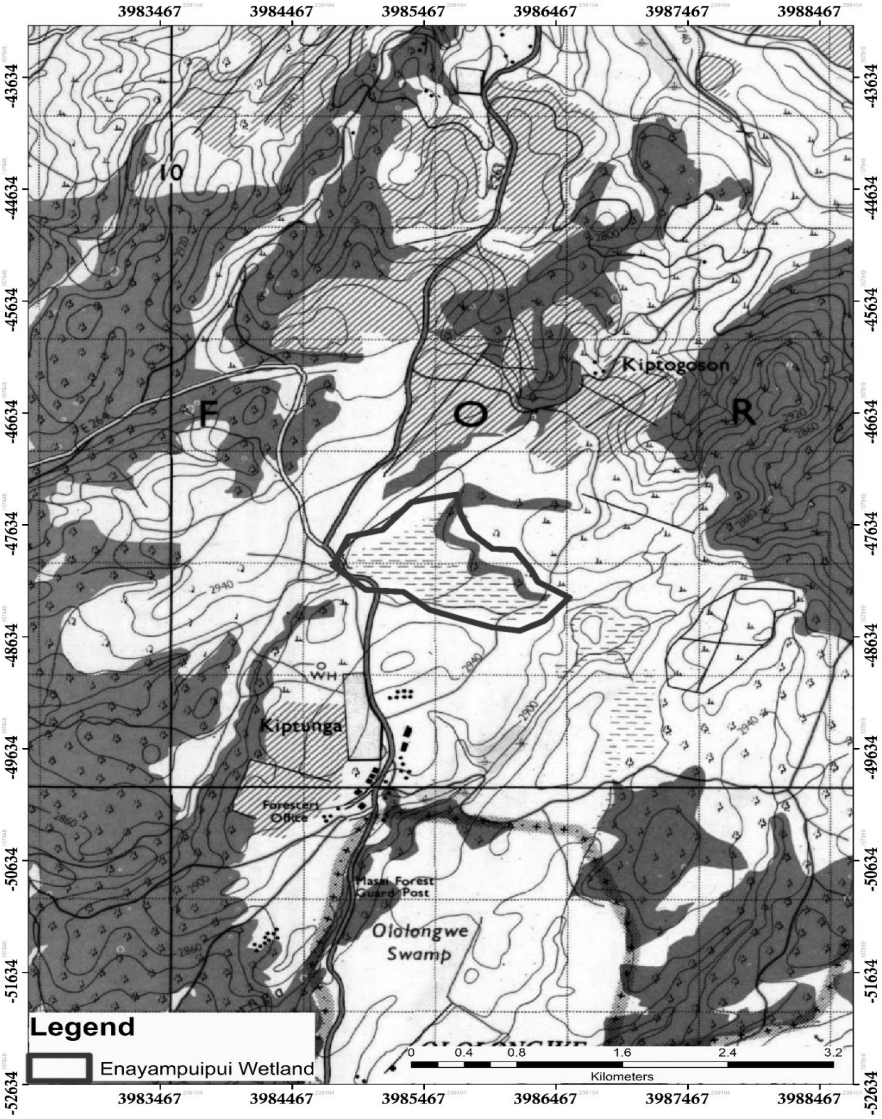


Figure 2. Location of Eneyampuipui Wetland on Topographic sheet

2.4 Physiography, climate and rainfall

2.4.1 Physiography

Eneyampuipui Wetland is located within the western part of Nakuru County at an elevation of about 2900masl. The area is enclosed within gentle slopes of less than 2%.

2.4.2 Climate

The climate around Mariashoni area is tropical with varying amount of rainfall during the year. According to Köppen and Geiger, the climate in the area is classified as Cfb. The Maximum temperatures are between 16.5° and 20.9°C and the minimum temperatures are between 7.7° and 9.6°C. Mean monthly temperatures around Mariashoni area are presented in Table 1 and Figure 3.

2.4.3 Rainfall

Monthly rainfall over the 3BA sub basin is shown in Figure 4.

Table 1: Mean Monthly Temperatures at Mariashoni Area

Temp	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Mean	13.9	14.8	14.9	14	13.4	12.5	11.8	11.9	12.6	13.1	12.8	13.1
Min	9.1	9.2	9.6	9.6	9.2	8.3	7.7	7.7	7.8	8.6	8.9	8.9
Max	19.4	20.8	20.9	19.3	18.4	17.4	16.5	16.8	17.7	18.1	17.7	18.1

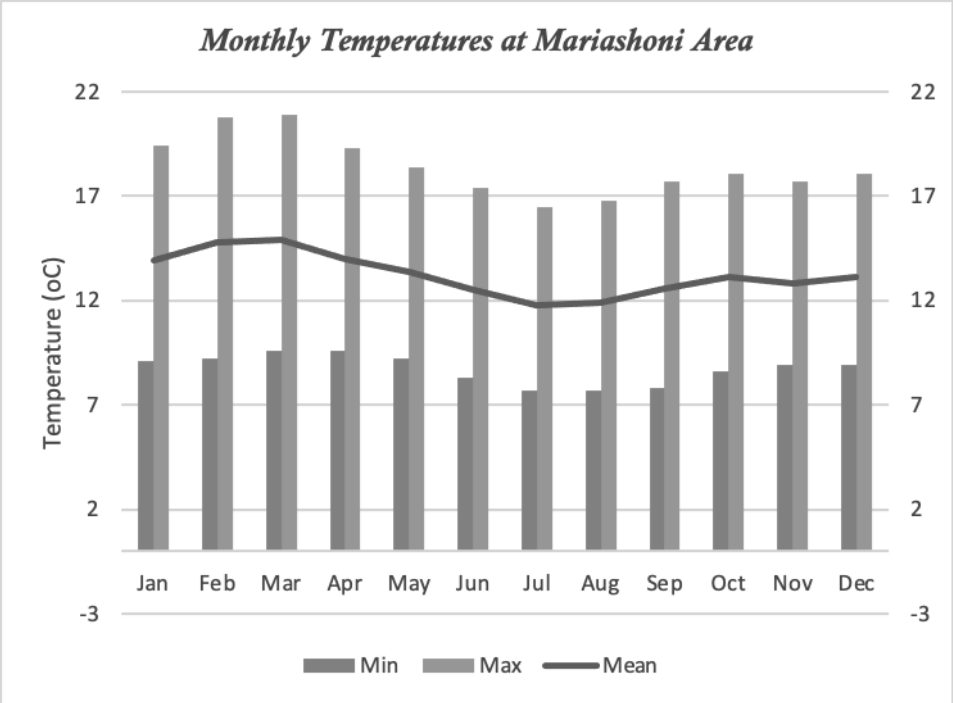


Figure 3. Mean Monthly Temperatures at Mariashoni Area

Table 2: Mean Monthly Rainfall at Mariashoni Forest Station

Month	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Rainfall (mm)	51.5	52.6	84.1	178	140.3	89.6	131.2	157.1	87.6	78.9	126.1	79.3

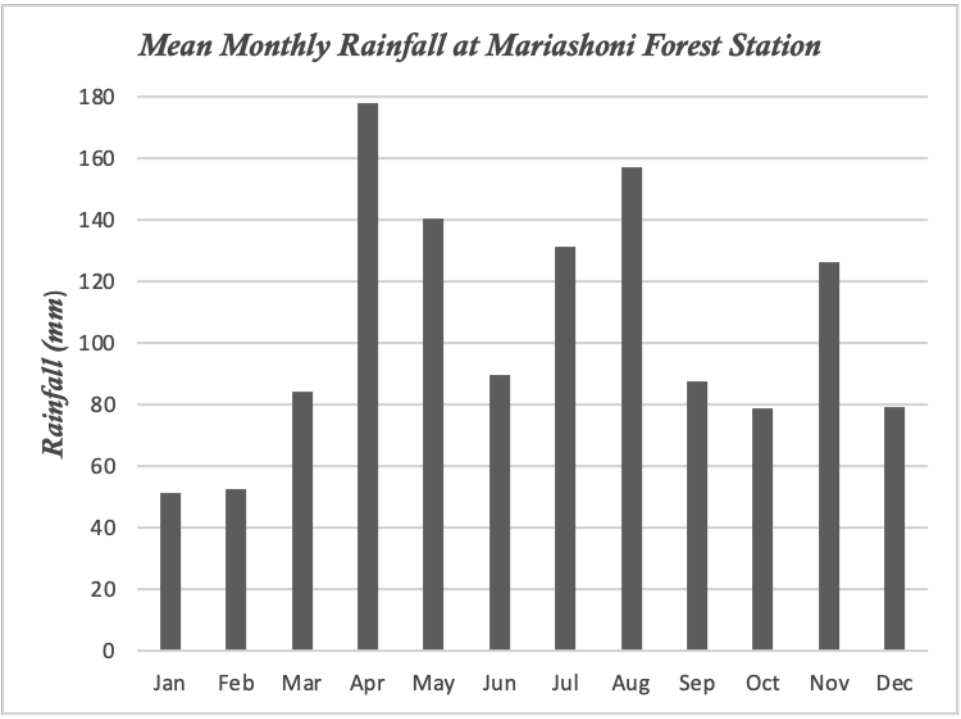


Figure 4. Mean Monthly Rainfall at Mariashoni Forest Station

PART III: SITUATIONAL ANALYSIS

3.1 The vulnerability of the water resource

Eneyampuipui Wetland falls under sub basin 3BA in upper Athi Basin Area and it is drained by several streams as shown in Figure 1 above. There is no major river around the Wetland, but several emanate downstream of the Wetland. Therefore, the surface water monitoring network cannot be used to determine the hydrology of the Wetland.

The encroachment and human activities within the Wetland riparian through cultivation, clearing of indigenous vegetation and the planting of exotic tree species has resulted into reduced recharge into the ground, lowering of the water table and a decrease in the Wetland hydrological water balance.

3.2 Land uses and their potential impact on the water resources

The area around Eneyampuipui Wetland is predominantly rural settlement with the main land use being cultivation and rearing of livestock. The potential impacts on the water resources as a result of human acts includes:

(a) Encroachment: People have encroached water catchment areas within the Wetland.

(b) Overexploitation of available resources: The population in the area has been rapidly growing over the years. This leads to excessive pressure on available natural resources that includes the Wetland leading to potential water use conflicts.

(c) Deforestation: The Wetland vegetation, the immediate catchment areas as well as the wider catchment has been depleted due human activities. Forests have been cleared to give way for farmlands, settlements as well as charcoal burning and timber.

(d) Water Pollution: Due to excessive economic activities around the Wetland and within the sub basin, the water has been polluted. The farms in the surrounding area use agro-chemicals which eventually find their way into the water bodies and leading to pollution. Other pollutants include solid waste that is washed into the rivers by runoff water during rains.

PART III: MEASURES FOR PROTECTION, CONSERVATION AND REHABILITATION OF THE AREA

In order to ensure the protection and conservation of Eneyampuipui Wetland is achieved and sustained, several measures and strategies will be applied. These include the following:

3.1 Proscribed activities

According to the applicable legal framework, protected areas can be used in a sustainable manner. The activities to be undertaken within the protected area are those with zero impact on its ecological status and integrity. Unless specifically approved in writing by the Authority, the following activities shall not be undertaken within the protected area:

(a) tillage or cultivation;

(b) clearing of indigenous trees or vegetation;

(c) building of permanent structures (especially boreholes and houses);

(d) disposal of any form of waste;

(e) excavation of soil or development of quarries; or

(f) planting of exotic species that may have adverse effect to the water resource.

3.2 Catchment protection plan

The objective of the protection plan is to protect Eneyampuipui Wetland by encouraging activities that enhance both water quality and quantity while discouraging activities that cause the catchment degradation and promoting beneficial land and water management practices. This will be achieved through:

(a) sensitization on catchment management;

(b) revegetation of the catchment area through—

(i) indigenous and water friendly plant propagation;

(ii) exotic species control;

(c) regulating activities that may lead to pollution and destruction of the eco-system (e.g. charcoal burning, grazing, cultivation); and

(d) controlling encroachment and liaising with other relevant government agencies to facilitate cancellation of illegally acquired land title deeds.

Table 3 : Catchment protection activities planned to be undertaken

Activity	*Sub-activity*	*Timeframe*	*Cost (Ksh)*	*Responsibility*
Gazettement of Eneyampuipui Wetland as a Protected Area.	Delineate & survey the wetland's catchment area.	2024	800,000	WRA, KFS, Nakuru County Lands & Survey Team
	Development of management Plan for the Wetland Catchment.	2024	500,000	WRA, KFS, Physical Planning Dept., Nakuru County
	Create awareness on the status of the Wetland's Catchment Area.	Continuous	500,000	WRA, KFS, NEMA, County Government of Nakuru (CGN),
	Develop guidelines and conservation/protection plan through stakeholders' engagement.	2024	5,000,000	WRA with all stakeholders
	Submit gazettement instrument to the AG.	2024	100,000	WRA
Enforcement of Eneyampuipui Wetland Catchment Management Plan and other legislations.	Enforce Eneyampuipui Wetland Catchment Management Plan and relevant legislations.	continuous	5,000,000	WRA, KFS.
Restricting activities that may lead to pollution and destruction of the catchment.	Public awareness creation	Annually	1,000,000	WRA, CGN, KFS,
	Controls/restrictions on charcoal burning, grazing, and farming near sensitive areas.	Continuous	300,000	WRA, CGN, KFS,
	Enforcement	Quarterly	5,000,000	NGAO, WRA, KFS, NEMA.

Activity	*Sub-activity*	*Timeframe*	*Cost (Ksh)*	*Responsibility*
Alternative livelihood activities.	Promote eco-friendly socio-economic activities (bee keeping, poultry farming and butterfly keeping, eco-tourism).	Continuous	10,000,000	WRA, Agriculture and Livestock
TOTAL			23,700,000	

3.1 Conservation Plan

The objective of the conservation plan is to protect the long-term environmental sustainability of the catchment area for enhanced water resources yield and to maintain its ecological functions in terms of flora and fauna.

In the development of the management programmes, care has been taken to ensure that there are explicit and logical links between the vision statement, management objectives, and the management strategies to achieve the objectives. Each management programme is discussed in further detail in the following sections.

Table 4 : Catchment conservation activities planned to be undertaken

Activity	*Sub-activity*	*Timeframe*	*Cost*	*Responsibility*
Establish the Wetland and sub basin water balance.	Assess demand and availability.	2024	1,000,000	WRA, County Government, KFS
Enhance Water use efficiency (introduction of technologies).	Sensitization and demonstration on efficient water use (irrigation, domestic) technology.	Continuous	8,000,000	WRA, WRUA, County Government
Re-vegetation of the catchment area.	Establish indigenous vegetation Propagation.	Continuous	10,000,000	WRA, KFS
	Grow live fence on the boundary of the catchment.	Continuous	10,000,000	WRA, KFS
	Planting and growing of propagated seedlings (Watering and tending).	Continuous	5,000,000	WRUA
	Exotic species control.	Continuous	500,000	WRUA
Total			34,500,000	

3.2 Catchment Monitoring Plan

The objective of the monitoring plan is to collect water resources data and maintain a comprehensive database on the Eneyampuipui Wetland and its catchment that provides information on water levels and quality of the Wetland.

3.2.1 Actions

(a) Establish a water quality and pollution control plan;

(b) Water sampling and analysis.

(c) establish a water resources database.

Table 5 : Catchment Monitoring Plan activities

Action	*Sub Activities*	*Time frame*	*Costs*	*Responsibility*
Water sampling and analysis	Collect water resources samples and conduct analysis for biological and physico-chemical parameters.	Quarterly	1,500,000	WRA
Capacity Building	Capacity building on data collection and monitoring.	Continuous	500,000	Stakeholders and WRA
Water resources monitoring	Install automatic water level station within the Wetland and rehabilitate existing one downstream.	1 year	5,500,000	WRA,
Total			7,500,000	

3.3 Establishment and operationalization of management structure for Eneyampuipui Wetland

The objective of the management structure is to ensure that Eneyampuipui Wetland Catchment Protected Area is managed in a sustainable manner with the involvement of all stakeholders under the leadership and coordination of WRA - LVSBA. This will be achieved through:

(a) Setting up the management structure with defined Terms of Reference and mandates.

(b) Development of resources mobilization strategies to raise funds for operations, maintenance and conservation of the protected area.

WRA as the agent of the National Government in the regulation of use and management of water resources, will be the co-ordinator of the committee. The members appointed to the Management Committee will serve on honorary basis as this will be a non-profit, non-commercial venture. The Committee will be required to solicit for funding from well-wishers and other sources to supplement the income that may be derived from activities permitted in a protected area.

Figure 5 shows the proposed linkages between various stakeholders. The arrows indicate the direction of flow of information. The dotted lines indicate WRUA can also communicate directly to communities and vice versa.

Table 6: Activities related to establishment and operationalization of management structure

Activity	*Sub-activity*	*Timeframe*	*Cost*	*Responsibility*
Setting up the management structure	Form a management committee with one member from each of the following stakeholders: (i) Kenya Forest Service; (ii) National Environment Management Authority; (iii) National Government Administration in Kiambu County; (iv) Kenya Wildlife Service; and (v) Ministry of Agriculture.	3 months	0	WRA
	Terms of References (ToR) will include but not limited to: (i) manage the catchment prudently on behalf of other stakeholders. (ii) submit quarterly reports to WRA - LVSBA on all planned and implemented activities. (iii) develop by - laws and submit a copy to WRA – LVSBA for approval before implementation.	Continuous	0	WRA, WRUA
Develop and implement resources mobilization strategies.	Mandate and responsibilities: (i) Promote the conservation and protection of the catchment. (ii) Promote equitable distribution of the resources within the catchment. (iii) Promote socio-economic and environmental sustainability of the catchment.	Continuous	0	Management Committee
	The sources of funds for the committee may include: (i) Bee keeping. (ii) Tree Nursery. (iii) Eco-tourism. (iv) Well-wishers/Donors. (v) WRA/WRUA - (WDC).	Continuous	5,000,000	WRA
Sub Total			5,000,000	

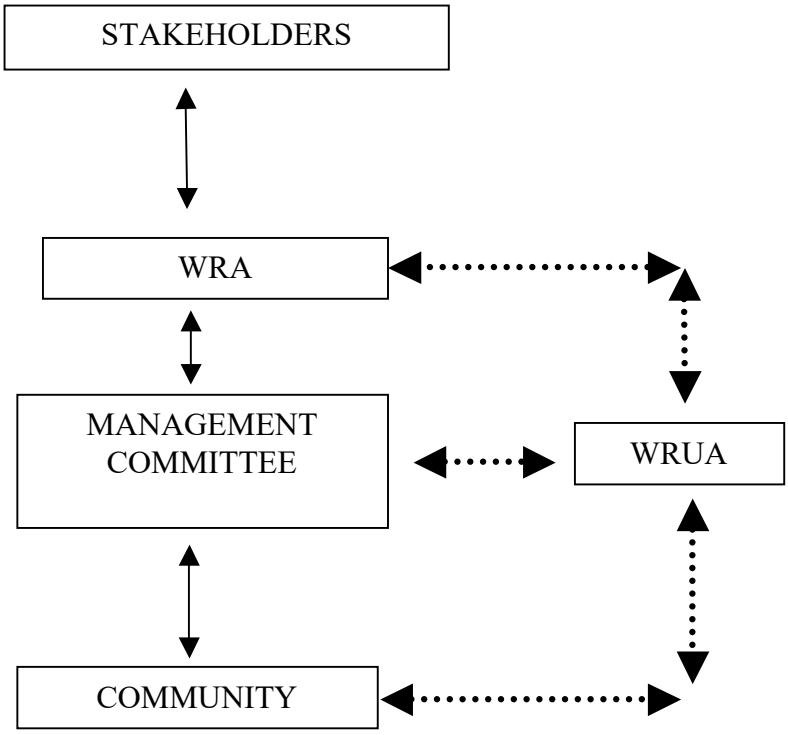


Figure 5. Reporting Linkages for the Management Committee

3.4 Catchment and Water Resources Monitoring

The objective of the monitoring plan is to collect and analyse Eneyampuipui Wetland and water resources data to provide information on water discharge/recharge, water quality and catchment health as a response to human activities within the neighbourhood.

3.4.1 Monitoring and Evaluation Matrix

The following matrix will be used for Monitoring and Evaluation to capture detail of the progress of implementation of the planned activities.

Table 7: Monitoring and Evaluation matrix template

Activities	Implementation Schedule		Status (% completion)	Planned Cost Ksh.	Total expenditure to date	Source of funds	Output	Comments
	Start date	End date						

Made on the 12th August, 2024.

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