BOMET COUNTY GOVERNMENT

DEPARTMENT OF WATER, ENVIRONMENT & NATURAL RESOURCES

DRAFT SESSIONAL PAPER

BOMET COUNTY RIPARIAN LANDS PROTECTION POLICY

'From Riverbanks to Prosperity: Restoring Bomet's Lifelines Together'

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Water is life. Our rivers, wetlands, and riparian ecosystems are the lifelines that sustain our communities, agriculture, and biodiversity. However, unchecked human activity has pushed these vital resources to the brink—threatening water security, increasing flood risks, and degrading the natural heritage we must preserve for future generations.

This County Riparian Lands Protection Policy represents our bold commitment to reverse this decline. It provides a clear roadmap for restoring and safeguarding our waterways through science-based conservation, community empowerment, and accountable governance.

As a county, we have witnessed firsthand the consequences of wetland destruction—drying streams, disappearing wildlife, and rising conflicts over dwindling resources. But we have also seen the power of collective action. Where communities have partnered with government to protect riparian zones, water flows have returned, farms have become more productive, and new green enterprises have emerged.

This policy builds on those successes while addressing critical gaps in enforcement, awareness, and sustainable land use. It establishes 30-meter protected buffers for our rivers, promotes wetland-friendly farming, and creates green jobs in restoration and eco-tourism. Critically, it ensures those most affected by environmental degradation—women, youth, and vulnerable households—are active participants in crafting solutions.

My administration will prioritize implementation through: dedicated funding in annual county budgets, strengthened enforcement against illegal encroachment and regular progress tracking with public scorecards

To all residents of Bomet: This policy is your achievement. It reflects thousands of voices from public participation forums, the expertise of our technical teams, and global best practices. Now, we move together to execution—village by village, river by river.

Let this document mark the turning point where we shift from exploitation to stewardship, ensuring our children inherit a Bomet where rivers run clean, wetlands teem with life, and prosperity flows from sustainable coexistence with nature.

H.E. Prof. Hillary Barchok
GOVERNOR, BOMET COUNTY

PREFACE

As the steward of Bomet County's natural resources, I am proud to present this Riparian Lands Protection Policy—a transformative blueprint for securing our water ecosystems, which are the foundation of our health, livelihoods, and resilience to climate change.

For too long, our rivers and wetlands have faced unregulated exploitation, leading to shrinking water flows, polluted sources, and lost biodiversity. This policy marks our collective resolve to change that trajectory. It is the product of extensive consultation with farmers, community leaders, scientists, and national partners, all united by a shared vision: to protect every meter of our riparian corridors so they can protect us in return.

The policy's strength lies in its balanced approach:

- Restoration guided by hydrology and traditional knowledge
- Livelihood alternatives that make conservation profitable
- Smart enforcement prioritizing education over punishment

My department will lead implementation through:

- Ward-level restoration committees to localize action
- Climate-smart incentives for farmers adopting wetland-friendly practices
- Real-time monitoring via community rangers and technology

To our partners—from WRUAs to NGOs—your expertise will remain invaluable. To residents, I urge you to own this policy: report violations, join tree-planting drives, and innovate sustainable wetland enterprises.

Together, we will prove that environmental protection and development are not opposites, but inseparable partners. Let this policy be remembered as the turning point where Bomet's waters returned to life.

Hon. Juliah Chepkuto
CECM, WATER & ENVIRONMENT

EXECUTIVE SUMMARY

The **Bomet County Riparian Lands Protection Policy** is a bold and transformative framework that sets out to restore and protect the county's rivers, wetlands, and riparian ecosystems, which have been severely degraded by human activities and environmental pressures. Recognizing the crucial role these ecosystems play in supporting water security, biodiversity, and community livelihoods, the policy seeks to reverse current trends of destruction and build a future rooted in sustainable coexistence with nature.

The policy is a response to multiple challenges that have pushed these critical areas to the brink. Encroachment for farming, the proliferation of water-intensive eucalyptus plantations, pollution from car washing and waste disposal, and the persistent impacts of climate change have all conspired to degrade water quality, reduce biodiversity, and undermine the natural resilience of these ecosystems. Previous efforts—while valuable—have often lacked the enforcement, resources, and community engagement needed for sustained impact.

Drawing on lessons from past interventions, the policy is anchored in four central rationales: the ecological imperative to restore and protect riparian ecosystems as natural infrastructure; the economic justification that proactive conservation reduces costly damage and ensures livelihoods; the legal need for clear enforcement and institutional mandates; and a social equity focus that empowers women, youth, and vulnerable households who are most affected by environmental degradation. At its heart lies a vision of a Bomet County where thriving rivers and wetlands are fully restored and managed as shared resources—supporting climate adaptation, food security, and the cultural heritage of all residents.

To achieve this vision, the policy establishes five key goals: to restore and protect critical riparian and wetland ecosystems through habitat restoration and the removal of invasive species; to enhance water security and quality by reducing pollution and safeguarding water catchment areas; to strengthen climate resilience and disaster risk reduction by restoring natural floodplains and drought preparedness; to support sustainable livelihoods and community stewardship through green jobs and inclusive governance; and to establish robust governance and enforcement mechanisms to ensure long-term compliance and accountability.

Implementation of the policy will rely on a blend of regulatory measures, economic incentives, and community empowerment. Legally binding riparian buffer zones will be demarcated and enforced, while incentives such as payment for ecosystem services and green enterprise funds will create alternatives to destructive practices. Participatory approaches will bring communities into the fold as stewards and beneficiaries of riparian protection, ensuring that conservation becomes a shared responsibility.

Integration with national and county-level plans—such as Kenya Vision 2030, the National Climate Change Action Plan, and the Bomet County Integrated Development Plan—ensures coherence and resource alignment. A robust monitoring and evaluation system, leveraging satellite imagery, drone technology, and citizen science, will track progress and adapt strategies as needed. Financial sustainability is secured through a diversified funding approach, combining county budget allocations, national grants, development partner support, and private sector investments.

By 2030, this policy aims to deliver profound outcomes: restored biodiversity and water quality, enhanced climate resilience, improved livelihoods, and strengthened governance. Beyond these tangible gains, it promises a cultural shift towards stewardship and sustainability, ensuring that the natural assets of Bomet County are conserved for future generations. The policy thus marks a turning point, moving from short-term exploitation to long-term prosperity built on the foundation of thriving rivers and wetlands.

CHAPTER 1: BACKGROUND AND INTRODUCTION

1.1. BACKGROUND INFORMATION

Bomet County is endowed with numerous riparian lands along rivers and wetlands, which play a critical role in maintaining ecological balance, supporting biodiversity, and ensuring sustainable water resource management. These riparian zones, demarcated by the highest water mark, serve as natural buffers that protect water bodies from pollution, erosion, and sedimentation. However, these areas have faced significant degradation due to unsustainable human activities such as the planting of water-intensive tree species like eucalyptus, agricultural encroachment, car washing, sand mining, and other unfriendly practices.

The degradation of riparian lands and wetlands in the county threatens water quality, reduces habitat for aquatic and terrestrial species, and undermines the resilience of these ecosystems to climate change. Recognizing these challenges, the Environmental Management and Co-ordination (Wetlands, River Banks, Lake Shores, and Sea Shore Management) Regulations, 2009 (Legal Notice No. 19) provides a legal framework for the conservation and sustainable management of these critical ecosystems. These regulations emphasize the protection of wetlands and riparian areas through measures such as controlled resource use, community participation, and enforcement of environmental standards.

In alignment with national policies and the Environment Management and Coordination Act (1999), Bomet County seeks to address these issues by developing a Riparian Lands Protection Policy. This policy will aim to halt further encroachment, promote restoration efforts, and engage local communities in sustainable practices to safeguard these vital ecosystems for present and future generations.

1.2. OVERVIEW OF THE PROBLEM SITUATION

Riparian lands and wetlands in Bomet County are under significant threat from a combination of human activities and environmental pressures, leading to widespread ecological degradation. These critical ecosystems, which serve as natural buffers protecting water quality, supporting biodiversity, and regulating hydrological cycles, are being progressively degraded through unsustainable land use practices. The problem is multifaceted, with encroachment for agriculture, deforestation, pollution, and weak regulatory enforcement all contributing to the deterioration of these vital areas.

One of the most pressing issues is the unchecked expansion of farming activities into riparian zones and wetlands. As agricultural land becomes scarce, farmers increasingly cultivate areas right up to riverbanks and within wetlands, removing natural vegetation that stabilizes soils and filters runoff. This not only accelerates erosion but also introduces agrochemicals—such as fertilizers and pesticides—directly into water systems, contaminating streams and harming aquatic life. Similarly, the proliferation of eucalyptus plantations along waterways has exacerbated water scarcity, as these fast-growing trees

consume large quantities of groundwater, leading to the drying up of springs and streams that communities depend on.

Pollution from human activities further compounds the problem. Car washing along riverbanks introduces oil, grease, and detergents into water bodies, while sand mining destabilizes riverbeds and banks, increasing sedimentation and altering natural water flow. Solid waste dumping, particularly plastics and organic waste, clogs waterways and degrades water quality, posing health risks to both humans and wildlife. Additionally, overgrazing by livestock in wetland areas tramples vegetation, compacting soils and reducing the land's ability to absorb and retain water, which in turn heightens vulnerability to both droughts and floods.

The loss of biodiversity is another critical concern. Wetlands and riparian zones are home to a variety of plant and animal species, many of which are now under threat due to habitat destruction. Fish populations, for instance, have declined due to siltation and pollution, affecting local livelihoods that rely on fishing. Native vegetation, which plays a crucial role in maintaining ecosystem balance, is being replaced by invasive species or cleared entirely for farming and settlement.

Weak enforcement of environmental regulations has allowed these destructive practices to persist. Despite the existence of the Environmental Management and Coordination (Wetlands, River Banks, Lake Shores, and Sea Shore Management) Regulations, 2009, implementation remains inconsistent due to limited resources, inadequate monitoring, and low awareness among communities. Many residents are unaware of the ecological importance of these areas or the legal protections in place, leading to continued exploitation.

Climate change further intensifies these challenges. Degraded wetlands lose their capacity to store water and buffer against extreme weather events, making the region more susceptible to both floods and prolonged droughts. The cumulative effect of these pressures not only threatens environmental health but also undermines the socioeconomic well-being of communities that depend on these ecosystems for water, agriculture, and other resources.

Addressing these issues requires urgent action, including stronger policy enforcement, community education, and the promotion of sustainable land-use practices. Without intervention, the continued degradation of riparian lands and wetlands in Bomet County will lead to irreversible ecological damage, water scarcity, and heightened vulnerability to climate-related disasters. A coordinated approach involving government agencies, local communities, and environmental stakeholders is essential to reverse these trends and ensure the long-term sustainability of these vital ecosystems.

1.3. PRIOR EFFORTS TO SOLVE THE PROBLEM

Over the years, multiple stakeholders have implemented various initiatives to address the degradation of riparian lands and wetlands in Bomet County. Government agencies, community groups, and non-governmental organizations have all played roles in these conservation efforts, though challenges in implementation and sustainability have limited their overall effectiveness.

The government has taken legislative action through the Environmental Management and Coordination (Wetlands, River Banks, Lake Shores, and Sea Shore Management) Regulations (2009), which established legal protections for these ecosystems. County authorities have attempted to enforce these regulations by conducting compliance drives, issuing fines, and demolishing illegal structures in riparian zones. However, inconsistent enforcement due to limited resources, corruption, and political interference has weakened these measures. Additionally, while afforestation programs have been promoted to restore degraded areas, the focus on fast-growing exotic species like eucalyptus has sometimes exacerbated water depletion rather than solving it.

At the community level, Water Resource Users Associations (WRUAs) have been active in monitoring river health and advocating for sustainable practices. These groups, supported by the Water Resources Authority, have successfully campaigned for the removal of water-intensive trees along riverbanks in some areas. NGOs and agricultural extension services have also conducted training programs to educate farmers on wetland-friendly practices, such as agroforestry and organic farming. Despite these efforts, adoption rates remain low, as many farmers prioritize immediate economic gains over long-term conservation. Community-led restoration projects, including clean-up exercises and replanting of native vegetation, have shown promise but often lack the funding and scale needed for lasting impact.

Research and awareness campaigns have complemented these efforts, with initiatives such as wetland mapping and public sensitization programs. The National Environment Management Authority and county officials have worked to inventory wetlands and identify at-risk areas, though outdated data and limited resources have hindered comprehensive planning. Awareness campaigns through radio programs, school initiatives, and community meetings have helped educate residents about the importance of conservation. However, deeply ingrained cultural practices and economic dependencies continue to drive harmful activities like sand mining and overgrazing, underscoring the need for more holistic solutions.

Despite these varied efforts, several challenges persist. Weak enforcement of existing laws, conflicting livelihood needs, and fragmented coordination between agencies have all limited progress. Many conservation projects rely on short-term donor funding, leaving them

vulnerable to discontinuation once support ends. These lessons highlight the need for a more integrated approach that combines stricter enforcement with sustainable livelihood alternatives and long-term community engagement. The proposed Riparian Lands Protection Policy aims to address these gaps by fostering coordinated action and creating incentives for conservation, building on the foundation laid by past initiatives while addressing their shortcomings.

1.4. SIGNIFICANCE OF THE PROBLEM

The ongoing degradation of riparian lands and wetlands in Bomet County represents a critical environmental and socioeconomic challenge with far-reaching consequences. These ecosystems serve as vital natural infrastructure, providing essential services that sustain both ecological balance and human livelihoods. Their deterioration threatens water security, biodiversity, climate resilience, and the economic well-being of local communities, making their protection an urgent priority.

From an ecological perspective, healthy riparian zones and wetlands act as natural water filters, trapping sediments and pollutants before they enter rivers and streams. Their degradation compromises water quality, increasing the risk of waterborne diseases and reducing the availability of clean water for domestic and agricultural use. These areas also serve as crucial habitats for diverse plant and animal species, many of which are already under threat due to habitat loss. The decline of native vegetation and aquatic life disrupts food chains and reduces ecosystem productivity, with cascading effects on both wildlife and human populations that depend on these resources.

The economic implications of wetland and riparian degradation are equally severe. Agriculture, the backbone of Bomet County's economy, relies heavily on consistent water availability and fertile soils—both of which are jeopardized by the destruction of these ecosystems. Reduced water retention in degraded wetlands leads to lower groundwater recharge, exacerbating water shortages during dry seasons and diminishing irrigation potential. This directly impacts crop yields and livestock productivity, threatening food security and the livelihoods of farming communities. Additionally, the loss of fish populations due to pollution and habitat destruction affects local fisheries, while siltation and erratic water flows increase the costs of water treatment and infrastructure maintenance for public utilities.

Climate change amplifies these risks, as degraded wetlands lose their capacity to mitigate floods and droughts. Healthy riparian buffers absorb excess rainfall, reducing flood damage to crops, homes, and infrastructure, while their water storage capacity helps sustain flows during droughts. Without these natural safeguards, communities become more vulnerable to climate extremes, facing higher recovery costs and prolonged disruptions to their lives and livelihoods. Furthermore, the loss of wetlands diminishes their role in carbon sequestration, contributing to broader climate change challenges.

Socially, the degradation of these areas undermines cultural and recreational values tied to water bodies and wetlands, which are often central to community identity and traditions. Conflicts over dwindling resources, such as water and fertile land, may also escalate, straining relationships between neighboring communities and exacerbating existing inequalities.

Addressing the degradation of riparian lands and wetlands is therefore not just an environmental issue but a multifaceted imperative for sustainable development. Protecting and restoring these ecosystems will safeguard water resources, enhance climate resilience, preserve biodiversity, and support the long-term prosperity of Bomet County's residents. Failure to act risks irreversible damage, with consequences that will extend far beyond the present generation.

1.5. PAST POLICY PERFORMANCE

The effectiveness of past policies and regulations aimed at protecting riparian lands and wetlands in Bomet County presents a mixed record of partial successes and significant shortcomings. While various legal and institutional frameworks have been established over the years, their implementation has often fallen short of achieving meaningful, long-term conservation outcomes.

The Environmental Management and Coordination Act (1999) and its subsequent regulations, including the Wetlands, River Banks, Lake Shores and Sea Shore Management Regulations (2009), provided a comprehensive legal foundation for ecosystem protection. These policies established clear guidelines on buffer zones, prohibited activities, and enforcement mechanisms. However, their impact has been limited by weak implementation at the county level. Enforcement has been inconsistent due to inadequate staffing, limited funding for monitoring, and occasional political interference that prioritizes short-term development over environmental protection. Violations such as illegal farming in riparian zones, sand harvesting, and improper waste disposal have often gone unchecked due to these systemic challenges.

County-level initiatives have attempted to complement national policies through localized conservation programs. The Bomet County Integrated Development Plan has periodically included environmental protection as a priority, with specific allocations for tree planting campaigns and wetland restoration. However, these efforts have frequently lacked continuity between administrative terms, with projects often abandoned or deprioritized when leadership changes. The focus on quick, visible interventions like tree planting has sometimes come at the expense of more comprehensive ecosystem-based approaches that address root causes of degradation.

The performance of past policies has also been undermined by limited community engagement in their design and implementation. While regulations theoretically mandate public participation, in practice many decisions have been made centrally without adequate consultation of local stakeholders who depend on these ecosystems. This has bred resentment and non-compliance among community members who perceive the rules as impositions rather than collaborative solutions. The failure to provide viable economic

alternatives to destructive practices like sand harvesting or eucalyptus farming has further reduced policy effectiveness.

Monitoring and evaluation mechanisms for past policies have been particularly weak. There exists no comprehensive, up-to-date database tracking the health of riparian ecosystems or the impact of conservation measures over time. Without robust data collection and analysis, policymakers have struggled to identify which approaches work and where adjustments are needed. Budget allocations for environmental programs have also been inconsistent, with conservation often receiving lower priority compared to more immediately visible development projects.

Some limited successes have emerged from partnerships between government agencies and civil society organizations. Collaborative efforts like the establishment of Water Resource Users Associations (WRUAs) have shown promise in some areas by combining regulatory enforcement with community education. However, these initiatives have typically covered small geographic areas and lacked the scale needed to address county-wide degradation.

The cumulative result of these policy shortcomings is evident in the continued deterioration of Bomet County's riparian ecosystems. While the legal framework for protection exists on paper, its translation into on-the-ground conservation has been hampered by implementation gaps, insufficient resources, and lack of sustained political will. This historical performance underscores the need for the proposed Riparian Lands Protection Policy to adopt a more holistic, better-resourced approach that learns from past limitations while introducing innovative solutions tailored to Bomet's specific ecological and socioeconomic context.

1.6. SCOPE AND SEVERITY OF THE PROBLEM

The degradation of riparian lands and wetlands in Bomet County represents a widespread environmental crisis affecting multiple dimensions of ecological health and human wellbeing. The problem's geographic scope encompasses nearly all major water systems across the county, including the iconic Mara River tributaries, the Kipsonoi River system, and numerous critical wetland areas that serve as water sources for domestic, agricultural, and industrial use.

The severity of ecosystem damage manifests through multiple measurable indicators. Recent surveys indicate approximately 60% of the county's riparian zones show significant encroachment, with buffer zones reduced to less than half their recommended width in most locations. Water quality tests reveal alarming pollution levels, with 45% of sampled sites exceeding national standards for turbidity and chemical contaminants. Hydrological studies demonstrate reduced base flows in 70% of monitored streams during dry seasons, directly attributable to upstream wetland degradation and water-intensive land uses.

The temporal progression of degradation shows an accelerating trend. Comparative satellite imagery analysis from 2010 to 2023 reveals a 35% reduction in natural wetland coverage, with conversion rates increasing by approximately 2% annually. This loss correlates directly with measurable declines in aquatic biodiversity, including the local extinction of several native fish species in affected waterways. Climate change impacts compound these issues, with degraded systems showing reduced resilience to both floods and droughts.

The human impacts are equally severe. Over 200,000 residents across the county face increased water insecurity due to degraded catchment areas. Agricultural productivity in riparian-adjacent lands has declined by an estimated 15-20% over the past decade due to falling water tables and increased sedimentation. The economic costs are substantial, with water treatment expenses for municipal supplies increasing by 30% and flood damage repairs costing the county an average of KES 50 million annually.

The problem exhibits distinct spatial patterns of severity. Areas surrounding major urban centers like Bomet town show the most acute degradation, with nearly complete loss of natural riparian vegetation in some stretches. The southwestern sub-counties experience particularly severe water scarcity due to intensive eucalyptus plantations along watercourses. Meanwhile, the northern regions face growing conflicts between farmers and pastoralists over dwindling wetland resources.

The institutional scope of the challenge encompasses multiple sectors and jurisdictions. Over 15 county departments and national agencies share some responsibility for managing affected areas, creating coordination challenges. The problem transcends simple environmental concerns, affecting public health (through waterborne diseases), infrastructure (through flood damage), and food security (through irrigation challenges).

This comprehensive assessment reveals a problem of county-wide significance that demands immediate, coordinated intervention. Without decisive action, current trends predict the complete ecological collapse of several critical wetland systems within 10-15 years, with catastrophic consequences for water security, biodiversity, and local livelihoods. The severity and accelerating nature of the crisis underscore the urgent need for the proposed Riparian Lands Protection Policy to implement effective, science-based solutions at scale

1.7. POLICY RATIONALE

The development of a comprehensive Riparian Lands Protection Policy for Bomet County emerges from an urgent need to address systemic environmental degradation that threatens ecological stability, water security, and socioeconomic development. This policy initiative is grounded in four compelling rationales that justify immediate intervention through a structured regulatory framework.

Ecological Imperative

The scientific evidence demonstrates an accelerating collapse of riparian ecosystems that serve as critical biological corridors and hydrological regulators. These areas function as natural infrastructure providing essential services including water filtration, flood mitigation, and microclimate regulation. Their degradation directly undermines the county's resilience to climate change while causing irreversible biodiversity loss. Current piecemeal conservation approaches fail to address the interconnected nature of watershed systems, necessitating an integrated policy framework that recognizes riparian zones as ecologically functional units requiring holistic management.

Economic Justification

Cost-benefit analysis reveals that unchecked degradation imposes growing burdens on public finances and private livelihoods. The county currently spends substantial resources on water treatment, flood damage repair, and drought relief that could be significantly reduced through proactive ecosystem management. Agricultural losses from depleted water resources and soil degradation increasingly offset short-term gains from riparian encroachment. The policy establishes a sustainable development pathway that aligns economic activities with ecological carrying capacity, protecting the natural capital that underpins key economic sectors including agriculture, tourism, and fisheries.

Legal and Institutional Mandate

While existing national legislation provides broad environmental protections, implementation gaps at the county level demand localized policy instruments with clear enforcement mechanisms. The policy fulfills the county government's constitutional obligation to manage natural resources sustainably while providing much-needed clarity on jurisdictional responsibilities among multiple agencies. It translates national frameworks into actionable local measures with appropriate adaptations to Bomet's specific ecological and socioeconomic context, addressing current ambiguities in enforcement authority and compliance standards.

Social Equity Considerations

The policy responds to growing inequities in resource access and environmental burdens. Unregulated exploitation disproportionately benefits short-term actors while imposing long-term costs on vulnerable communities dependent on ecosystem services. By institutionalizing community participation in riparian management and creating alternative livelihood options, the policy promotes intergenerational justice and inclusive governance. It particularly addresses the needs of women and youth who bear disproportionate impacts of water scarcity yet are frequently excluded from decision-making processes regarding natural resource management.

The convergence of these rationales creates a compelling case for policy intervention. Ecological degradation has reached thresholds where market forces and voluntary measures cannot achieve necessary conservation outcomes. Strategic government action through this policy provides the coordinated approach required to reverse damaging trends while balancing developmental needs. The policy's benefit stream – encompassing water security, climate resilience, economic stability, and social welfare – far outweighs the implementation costs, positioning it as a crucial investment in the county's sustainable future.

CHAPTER 2: POLICY FRAMEWORK

2.1. POLICY VISION

Bomet County aspires to establish a sustainable future where its riparian lands and wetlands are fully restored and protected as vital natural assets that underpin ecological balance, water security, and socioeconomic well-being. This vision is rooted in the recognition that healthy riparian ecosystems are not merely environmental features but fundamental infrastructure that supports agriculture, mitigates climate risks, and sustains livelihoods.

The policy envisions a landscape where rivers, streams, and wetlands are safeguarded from degradation, allowing them to function as nature intended—filtering pollutants, regulating water flow, and providing habitats for diverse species. By prioritizing ecosystem-based management, the county seeks to reverse the current trends of encroachment, pollution, and biodiversity loss, ensuring these natural systems remain resilient in the face of climate change.

Central to this vision is the integration of riparian and wetland conservation into the county's broader development agenda. Rather than treating environmental protection as a standalone concern, the policy positions it as a prerequisite for long-term food security, water availability, and disaster risk reduction. It calls for a shift from reactive measures to proactive stewardship, where land-use planning, agricultural practices, and infrastructure development are all aligned with the preservation of these critical ecosystems.

Community empowerment lies at the heart of this vision. The policy recognizes that sustainable conservation cannot be achieved without the active participation of those who depend on these resources daily. By fostering local ownership through education, inclusive decision-making, and livelihood alternatives, the county aims to transform riparian zones from contested spaces into shared assets that benefit all residents.

Looking ahead, Bomet County strives to become a model of integrated water resource management, where restored wetlands and riparian buffers contribute to climate adaptation, economic stability, and intergenerational equity. This vision aligns with Kenya's constitutional right to a clean and healthy environment, as well as global commitments to sustainable development. By 2035, the goal is to see thriving, biodiverse riparian corridors that not only withstand environmental pressures but also enhance the quality of life for every citizen in Bomet County.

2.2. POLICY GOALS

The Riparian Lands and Wetlands Protection Policy for Bomet County establishes five core goals to guide its implementation and measure its success:

1. Restore and Protect Critical Riparian and Wetland Ecosystems

- Rehabilitate degraded riparian buffers and wetlands through targeted restoration programs, including reforestation with native species, erosion control measures, and invasive species management.

- Enforce strict protection of all designated riparian reserves (minimum 30-meter buffer zones for major rivers and 10-meter buffers for smaller streams) to prevent further encroachment and land-use violations.

2. Enhance Water Security and Quality
    - Safeguard water catchment areas to ensure sustainable supply for domestic, agricultural, and industrial use.
    - Reduce pollution from agricultural runoff, waste disposal, and industrial discharges by promoting best practices in watershed management.

3. Promote Climate Resilience and Disaster Risk Reduction
    - Strengthen the natural capacity of wetlands and riparian zones to mitigate floods, droughts, and soil erosion.
    - Integrate ecosystem-based adaptation strategies into county development plans to reduce vulnerability to climate shocks.

4. Support Sustainable Livelihoods and Community Stewardship
    - Develop alternative income-generating activities (e.g., eco-tourism, beekeeping, wetland-friendly farming) to reduce dependency on destructive practices like sand harvesting and eucalyptus farming.
    - Empower local communities, including women and youth, through education, capacity building, and participatory governance in natural resource management.

5. Strengthen Governance and Enforcement
    - Establish clear institutional frameworks for coordinated oversight among county departments, national agencies, and community groups.
    - Enhance monitoring, compliance, and accountability mechanisms to ensure long-term adherence to conservation guidelines.

By achieving these goals, Bomet County will secure the ecological integrity of its water systems, foster climate-resilient development, and improve the well-being of its residents for generations to come.

2.3. STRATEGIC OBJECTIVES (FOR EACH GOAL)

Goal 1: Restore and Protect Critical Riparian and Wetland Ecosystems

1. **Revegetation & Habitat Restoration**
    - Plant 500,000 native trees along degraded riparian corridors by 2030
    - Restore 60% of critically degraded wetlands through natural regeneration techniques
2. **Encroachment Prevention**
    - Demarcate and enforce 100% of statutory riparian buffers by 2027
    - Reduce illegal settlements in wetlands by 80% through regular enforcement operations
3. **Invasive Species Management**
    - Remove eucalyptus plantations from 90% of high-priority riverine areas by 2028
    - Control 100% of identified invasive aquatic weeds in major wetlands.

Goal 2: Enhance Water Security and Quality

1. **Pollution Control**
    - Achieve 50% reduction in agricultural chemical runoff in critical catchments
    - Eliminate 100% of untreated industrial discharges into watercourses
2. **Water Resource Protection**
    - Establish 15 new community-managed water abstraction points by 2026
    - Increase groundwater recharge rates by 30% in stressed aquifers

Goal 3: Promote Climate Resilience and Disaster Risk Reduction

1. **Flood Mitigation**
    - Restore natural floodplains to absorb 40% more peak flood waters
    - Install 25 early warning systems in flood-prone communities
2. **Drought Preparedness**
    - Maintain year-round base flows in 80% of perennial streams
    - Train 200 community climate adaptation champions by 2025

Goal 4: Support Sustainable Livelihoods and Community Stewardship

1. **Alternative Livelihoods**
    - Establish 30 wetland-friendly agribusiness enterprises by 2027
    - Create 500 green jobs in eco-tourism and conservation sectors
2. **Community Empowerment**
    - Train 10,000 households in sustainable resource use techniques
    - Establish 25 community-based natural resource management committees

Goal 5: Strengthen Governance and Enforcement

1. **Policy Implementation**
    - Develop and operationalize 100% of required implementation regulations
    - Conduct biannual multi-agency compliance audits
2. **Capacity Building**

- Train 200 enforcement officers in riparian protection laws
- Establish a county environmental crimes monitoring unit

3. **Stakeholder Coordination**
   - Hold quarterly interdepartmental coordination forums
   - Develop integrated watershed management plans for all sub-catchments

These measurable objectives provide clear targets for tracking progress toward each policy goal, with time-bound outcomes that ensure accountability across all implementing agencies and stakeholders. The objectives are designed to be SMART (Specific, Measurable, Achievable, Relevant, and Time-bound) to facilitate effective monitoring and evaluation.

2.4. POLICY DIRECTIONS (INCLUDING POLICY INSTRUMENTS)

To achieve its vision and objectives, the Riparian Lands and Wetlands Protection Policy will pursue the following strategic directions, supported by specific policy instruments:

1. **Regulatory & Enforcement Measures**
   - **Zoning & Demarcation**
     - Establish legally binding riparian buffer zones (30m for major rivers, 10m for streams) through county gazettement
     - Conduct cadastral surveys and physical demarcation using GPS and boundary markers
   - **Compliance Enforcement**
     - Strengthen the County Environment Committee with dedicated riparian protection units
     - Introduce a "Red Card" system for repeat violators with progressive penalties
   - **Land Use Controls**
     - Amend county physical planning laws to incorporate mandatory riparian conservation clauses
     - Implement a moratorium on new eucalyptus plantations in critical water recharge zones

2. **Economic & Market-Based Instruments**
   - **Payment for Ecosystem Services (PES)**
     - Develop a PES scheme compensating upstream landowners for conservation services
     - Pilot a water fund where downstream users finance upstream protection
   - **Green Incentives**
     - Offer 50% rates rebates for properties maintaining natural riparian vegetation
     - Establish preferential procurement for businesses adopting wetland-friendly practices

- **Restoration Bonds**
    - Require developers to post performance bonds for riparian zone rehabilitation.

3. **Community-Based Approaches**
    - **Participatory Management**
        - Formalize community conservancies for high-value wetland areas
        - Introduce riparian adoption programs for schools and religious institutions
    - **Livelihood Alternatives**
        - Establish a County Green Enterprise Fund for wetland-compatible businesses
        - Train 5,000 farmers in paludiculture (wetland agriculture) techniques.

4. **Knowledge & Capacity Development**
    - **Technical Support**
        - Create a County Riparian Technical Secretariat with GIS monitoring capabilities
        - Develop standardized restoration protocols for different wetland types
    - **Education & Awareness**
        - Integrate riparian education into school curricula and vocational training
        - Launch an annual "Healthy Rivers" public awareness campaign.

5. **Institutional Strengthening**
    - **Coordination Mechanisms**
        - Establish a County Riparian Task Force with multi-sectoral representation
        - Develop integrated watershed management plans for all sub-catchments
    - **Monitoring Systems**
        - Implement a real-time riparian health monitoring system using drone technology
        - Publish annual State of Riparian Lands reports with performance indicators.

6. **Climate Adaptation Integration**
    - **Nature-Based Solutions**
        - Designate priority wetlands as natural flood control infrastructure
        - Implement "Room for Rivers" programs in flood-prone areas.
    - **Resilience Planning**

- Incorporate riparian corridors into county climate adaptation strategies.
- Develop drought contingency plans for wetland-dependent communities.

These policy directions combine "carrot and stick" approaches, blending regulatory measures with economic incentives and community empowerment. The instruments are designed to be mutually reinforcing, creating an enabling environment for sustainable riparian management while addressing the root causes of degradation. Implementation will follow a phased approach, prioritizing critical watersheds and demonstrating quick wins to build stakeholder confidence.

The policy mandates biannual review of instrument effectiveness, allowing for adaptive management based on monitoring results and emerging challenges. Special provisions are included for addressing historical injustices in riparian access and ensuring equitable distribution of conservation benefits.

CHAPTER 3: POLICY IMPLEMENTATION

3.1. POLICY IMPLEMENTATION FRAMEWORK/STRATEGY (HIGHER LEVEL IMPLEMENTATION MATRIX)

The successful execution of the Riparian Lands and Wetlands Protection Policy will be guided by a structured implementation framework that clarifies roles, timelines, and accountability mechanisms. This matrix outlines the high-level strategy for operationalizing the policy across five key pillars:

1. Institutional Coordination

Table 1: Institutional coordination

Activity	Lead Agency	Key Partners	Timeline	Output Indicators
Establish County Riparian Task Force	County Executive Committee	NEMA, WRA, KFS, WRUAs	Q1 2025	Task Force inaugurated with TORs adopted
Develop watershed management plans	Water Department	Agriculture, Lands, Environment	Q2 2025-Q4 2026	5 sub-catchment plans approved and implemented

2. Legal & Regulatory Enforcement

Table 2: Legal and regulatory enforcement

Activity	Lead Agency	Key Partners	Timeline	Output Indicators
Gazettement of buffer zones	County Assembly	Survey Department, NEMA	Q3 2025	100% of major rivers legally demarcated
Operationalize "Red Card" system	Environment Department	Police, Judiciary	Q2 2026	Enforcement protocol and case tracking system

3. Ecosystem Restoration

Table 3: Ecosystem restoration

Activity	Lead Agency	Key Partners	Timeline	Output Indicators
Priority wetland rehabilitation	Environment Department	KFS, Community Groups	2025-2027	60% of degraded wetlands under restoration
Eucalyptus replacement program	Agriculture Department	KEFRI, Farmer Cooperatives	2025-2030	500ha converted to native species

4. Community Engagement

Table 4: Community engagement

Activity	Lead Agency	Key Partners	Timeline	Output Indicators

Establish riparian conservancies	Tourism Department	WRUAs, Conservancy Associations	2025-2028	15 community conservancies operational
Green Enterprise Fund launch	Trade & Investment	Microfinance Institutions	Q4 2025	KES 50M capitalized, 30 businesses funded

5. Monitoring & Evaluation

Table 5: Monitoring and evaluation

Activity	Lead Agency	Key Partners	Timeline	Output Indicators
Drone-based monitoring system	ICT Department	Survey, Environment	Q2 2026	Real-time dashboard operational
Annual State of Riparian report	Planning Department	All Departments	Annual from 2026	Published reports informing policy adjustments

Implementation Principles

1. **Phased Approach**: Prioritize critical watersheds (Mara River tributaries) in Phase 1 (2025-2027) before county-wide rollout
2. **Subsidiarity**: Delegate implementation to lowest practical level (ward/community)
3. **Gender Mainstreaming**: Ensure 40% women participation in all decision-making structures
4. **Conflict Sensitivity**: Establish mediation committees for resource-use disputes

Governance Structure

- **Steering Committee**: Chaired by County Governor, meets quarterly
- **Technical Secretariat**: Permanent staff under Environment Department
- **Ward Implementation Teams**: Local oversight with community representation

This framework ensures coordinated action across sectors while allowing adaptive management. Budget allocations will follow the County Integrated Development Plan cycle, with 30% of environment sector funds dedicated to riparian programs. Annual implementation reviews will inform necessary adjustments to maintain policy relevance and effectiveness.

3.2. INTEGRATION WITH COUNTY MEDIUM TERM PLANNING

The **Riparian Lands and Wetlands Protection Policy** will be fully embedded into Bomet County's **2025–2028 County Integrated Development Plan (CIDP)** and sectoral plans to ensure alignment with broader development priorities and resource allocation. The integration strategy will focus on **four key dimensions**:

1. Alignment with CIDP Strategic Priorities

The policy will be mainstreamed into the following CIDP pillars:

- **Water, Sanitation, and Environmental Conservation**
  - Riparian restoration as a flagship project under climate resilience
  - 30% of the environment budget allocated to wetland rehabilitation

- **Agriculture and Food Security**
  - Promotion of wetland-friendly farming in the **Agricultural Sector Development Plan**
  - Irrigation schemes designed with mandatory riparian buffers
- **Tourism and Natural Resources**
  - Eco-tourism development in restored wetlands
  - Riparian corridors incorporated into the **County Tourism Master Plan**

2. Budgetary Integration

- **Medium-Term Expenditure Framework (MTEF)** will include:
  - **Capital Investments**: Demarcation, restoration, and monitoring infrastructure
  - **Recurrent Costs**: Enforcement personnel, community training, and awareness
- **Funding Sources**:
  - **County Allocation** (15% of environment sector budget)
  - **National Government** (via Kenya Climate-Smart Agriculture Project)
  - **Development Partners** (World Bank, UNDP, conservation NGOs)

2. Sectoral Plan Harmonization

The policy will be operationalized through:

- **County Spatial Plan** – Designate riparian zones as **Protected Natural Assets**
- **County Climate Change Action Plan** – Wetlands as **critical carbon sinks & flood buffers**
- **County Water Master Plan** – Riparian protection integrated into **water abstraction licensing**

3. Performance Tracking & Reporting

- **County Annual Development Plans (ADPs)** will include:
  - Annual riparian restoration targets (km of buffers rehabilitated)
  - Compliance enforcement indicators (cases resolved, fines collected)
- **County Fiscal Strategy Paper** will track:
  - Cost-effectiveness of restoration vs. flood/drought response costs
  - Economic returns from eco-tourism and sustainable agriculture

4. Institutional Coordination Mechanism

Table 6: Institutional Coordination mechanism

Planning Instrument	Policy Integration Action	Responsible Agency
CIDP (2025–2028)	Include riparian KPIs in environmental sector targets	County Executive Committee
Annual Budget Review	Ring-fence riparian protection funds	County Treasury
Sector Working Groups	Ensure wetland policies align with agriculture/water	Sector Departments
County Monitoring & Evaluation	Track policy impact via CIDP indicators	Planning & Monitoring Unit

Expected Outcomes of Integration

By 2028, this structured mainstreaming will ensure:

- **Policy sustainability** beyond political cycles
- **Efficient resource use** by avoiding duplication with other programs
- **Holistic impact** where riparian protection supports water, food, and climate goals

This systematic integration ensures the policy moves from paper to practice, delivering measurable ecological and socioeconomic benefits across Bomet County

1. POLICY MONITORING (MONITORING SYSTEM)

To ensure effective implementation of the **Riparian Lands and Wetlands Protection Policy**, Bomet County will establish a **robust monitoring and evaluation (M&E) framework** that tracks progress, measures impact, and enables adaptive management.

1. Monitoring Framework Structure

A. Institutional Arrangement

- **County Riparian Monitoring Unit (RMU)**
  - Housed under the **Department of Environment & Natural Resources**
  - Composed of GIS specialists, environmental officers, and community representatives
  - Reports quarterly to the **County Executive Committee (CEC)**
- **Ward-Level Monitoring Committees**
  - Comprising **WRUAs, Nyumba Kumi, and local administrators**
  - Conduct monthly ground-truthing of restoration sites

B. Data Collection Methods

Table 7: Data collection mechanism

Indicator Type	Data Source	Frequency	Responsible Entity
Ecological Health	Satellite imagery, drone surveys, water quality tests	Biannual	RMU + KFS
Compliance Rates	Enforcement reports, case tracking system	Quarterly	County Enforcement Unit
Livelihood Impacts	Household surveys, enterprise audits	Annual	Planning Department
Budget Utilization	County financial reports	Quarterly	Treasury

2. Key Performance Indicators (KPIs)

A. Ecological Restoration

- **Km of riparian buffers restored** (Target: 100km by 2027)
- **% reduction in invasive species coverage** (Target: 50% by 2026)
- **Water Quality Index (WQI) improvement** in priority catchments

B. Policy Compliance

- **% of illegal encroachments resolved** (Target: 80% annual clearance rate)
- **Number of permits issued for sustainable wetland use**

C. Socioeconomic Benefits

- **Jobs created in green enterprises** (Target: 500 by 2028)
- **Household income increase for wetland-dependent communities**

3. Technology Integration

- **GIS Dashboard**: Real-time tracking of restoration sites and violations
- **Citizen Reporting App**: Public can submit geotagged encroachment alerts
- **Automated Compliance Checks**: AI analysis of satellite images to detect deforestation

4. Reporting & Accountability

- **Quarterly Implementation Reports** (RMU to CEC)
- **Annual "State of Riparian Lands" Public Forum**
- **Biannual Independent Audits** by **National Environment Tribunal**

5. Adaptive Management Triggers

Table 8: Adaptive management triggers

Trigger	Corrective Action
<50% restoration target met	Redeploy resources to high-priority zones
Rising violation recurrence	Strengthen mobile enforcement units
Declining community participation	Revise awareness campaigns & incentive schemes

This **end-to-end monitoring system** ensures transparency, enables evidence-based decision-making, and guarantees that the policy delivers **measurable ecological and social returns**.

Implementation Timeline:

- **M&E System Operationalization**: Q1 2025
- **First Baseline Assessment Report**: Q3 2025
- **Full System Review & Upgrade**: Q4 2027

2. INSTITUTIONAL DESIGN FOR POLICY IMPLEMENTATION

To ensure effective execution of the Riparian Lands and Wetlands Protection Policy, Bomet County will establish new structures and reorganize existing institutions under the following framework:

1. New Institutional Structures

A. County Riparian Governance Council (CRGC)

- *Composition*:

  - Chair: County Executive Committee Member (Environment)
  - Members: Directors of Water, Agriculture, Lands, and Tourism; 2 WRUA representatives; 1 NGO representative; 1 research institution delegate
- *Functions*:
  - Oversee policy implementation
  - Approve annual work plans and budgets
  - Resolve inter-sectoral disputes
- *Reporting*: Quarterly to County Assembly Environment Committee

B. Riparian Technical Secretariat (RTS)

- *Structure*:
  - 5 technical officers (hydrology, ecology, GIS, law enforcement, community engagement)
  - 3 field coordinators (covering all sub-counties)
- *Mandate*:
  - Coordinate day-to-day implementation
  - Maintain riparian database
  - Provide technical backstopping

C. Ward Riparian Committees (WRCs)

- *Composition*:
  - Ward Administrator (Chair)
  - 2 WRUA reps
  - 1 youth rep
  - 1 women's group rep
  - 1 religious leader
- *Roles*:
  - Monitor local compliance
  - Receive and verify violation reports
  - Mobilize community action

2. Reorganization of Existing Institutions

A. Enhanced County Environment Committee

- *New Composition*:
  - Adds dedicated Riparian Protection Sub-committee
  - Includes 2 co-opted wetland ecologists
- *Expanded Mandate*:
  - Integrates riparian concerns into all environmental decisions
  - Oversees Environmental Impact Assessments for riparian projects

B. Water Resources Authority (WRA) County Office

- *Restructured Functions*:
  - New Riparian Protection Unit (3 officers)
  - Joint enforcement teams with county inspectors

- *New Reporting Lines*:
    - Dual reporting to national WRA and CRGC

C. County Enforcement Apparatus

- *Reorganization*:
    - Creates 5 Riparian Rapid Response Units (RRUs)
    - Trains 20 existing enforcement officers as riparian specialists
- *New Protocols*:
    - Standard operating procedures for riparian violations
    - Integrated case management system

3. Coordination Mechanism

A. Inter-Agency Framework

- Monthly technical working group (RTS chairs)
- Quarterly coordination forum (CRGC chairs)
- Shared GIS platform for real-time data

B. Community Engagement Structure

- WRUA clusters aligned to watersheds
- Riparian watchers program (trained volunteers)
- Traditional leadership advisory council

4. Capacity Building Plan

A. Staff Competencies

- Annual technical training (hydrology, conflict resolution)
- Certification program for enforcement officers
- Exchange programs with model counties

B. Institutional Strengthening

- Dedicated riparian budget lines in all relevant departments
- Performance contracts with riparian KPIs
- Modern equipment (drones, water testing kits)

5. Transition Arrangements

Phase 1 (0-6 months)

- Legal establishment of CRGC and RTS
- Recruitment and training of core staff
- Development of operational manuals

Phase 2 (6-18 months)

- Full operationalization of WRCs
- Enforcement systems rollout
- Baseline assessments completed

Phase 3 (18-36 months)

- Full system maturity
- Independent performance review
- Policy refinement based on lessons

This institutional design creates clear accountability lines while leveraging existing structures, ensuring efficient policy execution without unnecessary bureaucracy. The structure emphasizes technical expertise at implementation levels while maintaining political oversight at strategic levels. Regular reviews will ensure the framework adapts to emerging challenges

3. INSTITUTIONAL COORDINATION AND MANAGEMENT

To ensure effective implementation of the **Riparian Lands and Wetlands Protection Policy**, Bomet County will establish a **multi-level governance framework** that enhances coordination between county and national agencies, local communities, and other stakeholders.

1. County-Level Coordination

A. County Riparian Steering Committee (CRSC)

- **Chair**: County Executive Committee Member (Environment)
- **Members**:
  - Directors of Water, Agriculture, Lands, Tourism, and Planning
  - County Commissioner (National Government Representative)
  - Representatives from WRUAs, NGOs, and research institutions
- **Functions**:
  - Oversee policy implementation and resolve interdepartmental conflicts
  - Approve annual work plans and budgets for riparian protection
  - Monitor compliance with national and county environmental laws

B. Riparian Technical Unit (RTU)

- **Hosted under the Department of Environment**
- **Roles**:
  - Provide technical expertise on wetland restoration and enforcement
  - Maintain a **GIS-based monitoring system** for tracking degradation and restoration progress
  - Train enforcement officers and community monitors

C. Ward Riparian Management Committees (WRMCs)

- **Composition**:
  - Ward Administrators (Chair)
  - WRUA representatives, community elders, youth and women representatives
- **Responsibilities**:
  - Conduct monthly inspections of riparian zones
  - Report violations to enforcement agencies
  - Mobilize community participation in restoration efforts

2. Collaboration with National Government

A. Joint Implementation with National Agencies

Table 9: Joint implementation with national agencies

Agency	Role in Policy Implementation	Coordination Mechanism

National Environment Management Authority (NEMA)	Regulatory oversight, EIA approvals	Quarterly compliance review meetings
Water Resources Authority (WRA)	Water abstraction permits, hydrological monitoring	Shared database on river health
Kenya Forest Service (KFS)	Reforestation programs in riparian zones	Joint afforestation plans
Ministry of Agriculture	Promotion of wetland-friendly farming	Integrated watershed management programs

B. National-County Task Forces

- **Riparian Enforcement Joint Unit** (County + NEMA + WRA)
  - Conducts crackdowns on illegal sand harvesting and encroachment
- **Climate Resilience Working Group** (County + NDMA + KMD)
  - Integrates riparian protection into drought and flood mitigation strategies

3. Multi-Stakeholder Engagement

A. Public-Private Partnerships

- **Adopt-a-River Program** – Businesses sponsor restoration of designated stretches
- **Green Bonds** – County collaborates with financial institutions to fund wetland rehabilitation

B. Community & Civil Society Involvement

- **Riparian Watchers Program** – Trained volunteers monitor and report violations
- **Wetland Conservation Agreements** – Communities commit to protection in exchange for livelihood support

C. Research & Academia Collaboration

- **Bomet Riparian Research Consortium** (Universities + KEFRI + KWS)
  - Conducts studies on wetland biodiversity and restoration techniques
  - Provides policy recommendations based on scientific evidence

4. Conflict Resolution Mechanisms

A. Riparian Dispute Resolution Panel

- **Composition**: County legal officer, elders, technical experts
- **Jurisdiction**: Mediates conflicts between landowners, developers, and conservationists

B. National Environment Tribunal (NET) Liaison

- Ensures county enforcement actions align with national legal standards
- Fast-tracks appeals related to riparian violations

5. Performance Accountability Framework

Table 10: Performance accountability framework

Mechanism	Frequency	Responsible Body
Quarterly Implementation Reviews	Every 3 months	CRSC

Biannual Stakeholder Forums	Twice yearly	County Government
Annual Independent Audit	Yearly	Office of the Auditor-General

This **integrated coordination model** ensures seamless policy execution across all levels of government while fostering meaningful participation from communities and private stakeholders. Regular reviews and adaptive management will maintain policy relevance and effectiveness

4. LEGAL FRAMEWORK (DEVELOPMENT AND REVIEW)

To ensure the **Riparian Lands and Wetlands Protection Policy** is enforceable and legally sound, Bomet County will establish a **robust legal framework** that aligns with national laws while addressing local governance gaps.

1. Legal Development & Harmonization

A. County-Level Legal Instruments

1. **Bomet County Riparian Protection Bill (2025)**
   - Defines **protected riparian zones** (minimum 30m for major rivers, 10m for streams)
   - Establishes **permitting systems** for wetland resource use
   - Sets **penalties** for violations (fines, restoration orders, imprisonment)
2. **Revised County Environmental Regulations**
   - Incorporates **wetland conservation clauses** into land-use bylaws
   - Mandates **Environmental Impact Assessments (EIAs)** for projects near water bodies
3. **Wetland Easement Policy**
   - Allows **compensation for landowners** who conserve riparian zones
   - Enables **conservation covenants** on private land titles

B. Alignment with National Laws

Table 11: Alignment with national laws

National Law	County Implementation Mechanism
Environmental Management & Coordination Act (EMCA, 1999)	Adopt NEMA standards for wetland delineation
Water Act (2016)	Enforce WRA guidelines on water abstraction
Forest Conservation & Management Act (2016)	Partner with KFS on riparian reforestation
Climate Change Act (2016)	Integrate wetlands into county climate plans

5. Legal Review & Reform Process

A. Biennial Legislative Audit

- **Led by**: County Attorney + Legal Committee
- **Focus Areas**:
  - Gaps in enforcement (e.g., overlapping jurisdictions)
  - Emerging threats (e.g., climate change impacts)
  - Community feedback on regulatory burdens

B. Stakeholder Consultation Framework

1. **Public Participation**
    - Annual town halls on riparian law effectiveness
    - Online portal for violation reporting & policy feedback
2. **Technical Review Panel**
    - Includes hydrologists, ecologists, and land economists
    - Recommends updates to buffer zone requirements
3. **Judicial Capacity Building**
    - Train magistrates on riparian case adjudication
    - Develop **specialized environmental court circuits**

3. Enforcement Legal Tools

Table 12: Enforcement legal tools

Tool	Application	Responsible Agency
Restoration Orders	Mandate violators to rehabilitate damage	County Environment Officer
Stop Work Notices	Halt illegal construction/drainage	NEMA + County Inspectors
Community Prosecution	Fast-track minor violations via WRMCs	Ward Tribunals
Title Deed Restrictions	Annotate parcels with conservation terms	Lands Department

4. Legal Transition Provisions

1. **Grandfathering Clause**
    - Existing lawful users (e.g., registered farms) get 3-year compliance window
2. **Dispute Resolution**
    - Mediation first via **County Environment Committee**
    - Appeals to **National Environment Tribunal**
3. **Sunset Reviews**
    - Automatic expiry of temporary permits after 2 years
    - 5-year comprehensive policy reassessment

This **adaptive legal framework** balances enforcement rigor with participatory governance, ensuring laws remain **practical to implement** while meeting ecological objectives. Regular reviews will incorporate new scientific data and community needs.

Next Steps:

- County Assembly adoption of foundational laws by Q2 2025
- Legal awareness campaigns for stakeholders in 2026
- First comprehensive review scheduled for 2028

3.7. LINKAGES WITH OTHER POLICIES AND PLANS

The **Riparian Lands and Wetlands Protection Policy** is designed to align with and reinforce **national, county, and sectoral development frameworks**, ensuring a harmonized approach to environmental conservation and sustainable development.

1. Alignment with National Policies & Plans

A. Kenya Vision 2030

- **Economic Pillar**: Supports **green economy** initiatives by promoting sustainable wetland-based enterprises (eco-tourism, aquaculture).
- **Social Pillar**: Enhances **water security** and **public health** by protecting water sources from pollution and degradation.
- **Political Pillar**: Strengthens **devolved environmental governance** by empowering county institutions in riparian management.

B. National Climate Change Action Plan (NCCAP 2023-2027)

- **Adaptation**: Wetlands as **natural flood and drought buffers** in line with NCCAP's water sector resilience goals.
- **Mitigation**: Carbon sequestration through **wetland restoration**, contributing to Kenya's NDCs (Nationally Determined Contributions).

C. National Water Policy (2021)

- **Integrated Water Resource Management (IWRM)**: Riparian protection ensures **sustainable water flows** and **reduced siltation**, supporting national water security.
- **Water Harvesting & Storage**: Wetlands as **natural water reservoirs**, reducing need for expensive infrastructure.

2. Integration with County-Level Plans

A. Bomet County Integrated Development Plan (CIDP 2023-2027)

- **Water & Environment Sector**: Riparian restoration is a **flagship project** under climate resilience.
- **Agriculture Sector**: Promotes **wetland-friendly farming** to reduce chemical runoff.
- **Tourism Sector**: Designates **protected wetlands as eco-tourism hubs**.

B. County Spatial Plan (2024)

- **Zoning Regulations**: Designates **riparian corridors** as **non-developable land** in urban and rural plans.
- **Land Use Mapping**: GIS-based demarcation of **protected buffers** in all planning approvals.

C. County Climate Change Action Plan (CCCAP)

- **Nature-Based Solutions (NBS)**: Wetlands as **key assets** for flood control and drought mitigation.
- **Community Adaptation**: Training on **climate-smart riparian practices** (e.g., agroforestry, paludiculture).

3. Linkages with Sectoral Policies

Table 13: linkages with sectoral policies

Sector	Policy Linkage	Synergy
Agriculture	Agricultural Policy (2020)	Promotes riparian-compatible crops (e.g., arrowroots, water-tolerant grasses)

Forestry	Kenya Forest Policy (2021)	Bans eucalyptus in wetlands, promotes indigenous tree planting
Tourism	National Tourism Blueprint (2022)	Develops wetland eco-tourism circuits
Disaster Management	National Disaster Risk Management Policy	Uses wetlands for flood attenuation

4. International Commitments

- **UN Sustainable Development Goals (SDGs)**
  - **SDG 6 (Clean Water)**: Protects freshwater ecosystems.
  - **SDG 13 (Climate Action)**: Enhances resilience via wetlands.
  - **SDG 15 (Life on Land)**: Halts biodiversity loss in riparian zones.
- **Ramsar Convention on Wetlands**
  - Implements **wise use principles** for wetland conservation.
- **AU Agenda 2063**
  - Aligns with **environmental sustainability** goals for resilient ecosystems.

3. Implementation Synergies

A. Joint Programming

- **National-County Projects**: e.g., **Kenya Climate-Smart Agriculture Project (KCSAP)** funds riparian-friendly farming.
- **Donor-Funded Initiatives**: e.g., **UNDP-GEF Wetlands Program** supports community restoration.

B. Shared Monitoring Systems

- **County & National Databases**: Integrated reporting on **water quality, encroachment cases, and restoration progress**.
- **National Environment Tribunal (NET)**: Handles **cross-county disputes** on riparian violations.

6. Policy Coherence, Challenges and Solutions

Table 14: policy coherence, challenges and solutions

Challenge	Solution
Conflicting land-use priorities (e.g., agriculture vs. conservation)	**Zoning laws** with clear **riparian protection clauses**
Weak enforcement between national/county agencies	**Joint task forces** (County + NEMA + WRA)
Limited funding for wetland restoration	**Green bonds** + **Payment for Ecosystem Services (PES)** schemes

3.8. RESOURCES FOR POLICY IMPLEMENTATION

To ensure effective execution of the **Riparian Lands and Wetlands Protection Policy**, Bomet County will mobilize **financial, human, and technical resources** through a structured funding and capacity-building strategy.

1. Financial Resources

A. Budgetary Allocations

Table 15: Budgetary allocation

Source	Funding Purpose	Estimated Amount (KES)	Timeline
County Government	Demarcation, enforcement, and community awareness	10M annually	2025–2028
National Government	Matching grants for wetland restoration (via National Environment Trust Fund)	10M	2025–2027
Development Partners	UNDP, World Bank (climate resilience and biodiversity projects)	20M	2026–2030
Private Sector	Corporate Social Responsibility (CSR) partnerships for "Adopt-a-River" initiatives	5M	Ongoing
Green Bonds	Large-scale wetland rehabilitation and eco-tourism infrastructure	30M	2027–2030

B. Funding Mechanisms

- **County Environment Fund**: Ring-fenced for riparian enforcement and restoration.
- **Payment for Ecosystem Services (PES)**: Compensate landowners for conservation.
- **Climate Finance**: Access **Green Climate Fund (GCF)** for wetland carbon projects.

2. Human Resources

A. Institutional Staffing

Table 16: Institutional staffing

Role	Number	Deployment	Key Responsibilities
Riparian Enforcement Officers	20	County-wide (4 per sub-county)	Monitor violations, issue restoration orders
Ecologists / Hydrologists	5	Technical Secretariat	Guide restoration, conduct impact assessments
Community Liaison Officers	10	Ward-level	Train WRUAs, resolve conflicts
GIS & Data Analysts	3	Riparian Monitoring Unit	Maintain real-time degradation maps

B. Capacity Development

- **Training Programs**:
  - **Enforcement officers**: Legal compliance, conflict resolution (annual workshops).
  - **Farmers**: Wetland-friendly agriculture (5,000 trained by 2027).
  - **WRUAs**: Citizen science monitoring (500 community volunteers).
- **University Partnerships**: Internships for environmental science students.

3. Technical & Infrastructure Resources

A. Equipment & Tools

- **Drones & Satellite Imaging**: For encroachment detection (shared with KFS).
- **Water Testing Kits**: Distributed to WRUAs for pollution monitoring.
- **Nurseries**: County-run for indigenous tree seedlings (target: 200K annually).

B. Digital Systems

- **Riparian GIS Dashboard**: Tracks violations, restoration progress.
- **Public Reporting App**: Citizens upload geotagged violation evidence.

4. Resource Mobilization Strategy

A. Short-Term (2025–2026)

- Leverage **county budget** for urgent demarcation and enforcement.
- Secure **quick-disbursing grants** (UNDP, WWF) for community programs.

B. Medium-Term (2027–2028)

- Scale up **PES schemes** and **eco-tourism revenues**.
- Issue **county green bonds** for large infrastructure (boardwalks, observation centers).

C. Long-Term (2029–2035)

- **Endowment Fund**: Sustains maintenance via wetland user fees.
- **Carbon Credits**: Monetize restored wetlands under global markets.

5. Accountability Measures

Table 17: Accountability measures

Resource Type	Monitoring Mechanism	Audit Frequency
Financial	County Public Accounts Committee reviews	Biannual
Human	Performance contracts (linked to riparian KPIs)	Annual
Technical	Independent evaluations of equipment utilization	Quarterly

CHAPTER 4: POLICY EVALUATION

1. SYSTEMATIC POLICY EVALUATION

To ensure the **Riparian Lands and Wetlands Protection Policy** remains effective, adaptive, and accountable, Bomet County will implement a **rigorous evaluation system** combining periodic assessments, stakeholder feedback, and data-driven reviews.

1. Evaluation Framework

A. Key Evaluation Criteria

Table 18: Key evaluation criteria

Criterion	Metrics	Data Sources
Ecological Impact	% increase in wetland biodiversity, water quality trends	KWS surveys, lab tests, satellite imagery
Policy Compliance	Number of violations resolved, permits issued	Enforcement records, NEMA audits
Socioeconomic	Jobs created, household income changes near wetlands	County surveys, enterprise reports
Institutional	Budget utilization, inter-agency coordination effectiveness	Financial reports, meeting minutes
Community Equity	% women/youth in decision-making, benefit distribution	Focus groups, participation records

B. Evaluation Levels

1. **Annual Quick Reviews**
    - Desk analysis of enforcement data and budget spending
    - 1-day stakeholder workshops to identify urgent adjustments
2. **Mid-Term Evaluation (2027)**
    - Independent expert assessment of ecological recovery
    - Cost-benefit analysis of restoration projects
3. **End-of-Term Evaluation (2030)**
    - Comprehensive policy impact study
    - Recommendations for next-phase policy design

2. Evaluation Methodology

A. Mixed-Methods Approach

- **Quantitative**:
    - Statistical analysis of water quality/quantity indicators
    - GIS mapping of vegetation recovery in buffer zones
- **Qualitative**:
    - Focus group discussions with WRUAs and farmers
    - Case studies of successful/failed restoration sites

B. Tools & Standards

- **Wetland Health Index (WHI)**: Adapted from Ramsar Convention guidelines
- **Beneficiary Assessment Scorecards**: Community-rated policy effectiveness

- **County Peer Reviews**: Benchmark against Kericho's wetland policies

3. Evaluation Actors & Roles

Table 19: Evaluation actors and roles

Actor	Responsibility	Reporting Line
County Evaluation Unit	Coordinates all assessments	County Planning Director
Technical Consortium	Conducts scientific impact studies	CRGC
Community Monitors	Provides ground-truthing feedback	Ward Committees
National Partners	Validates findings (WRA, NEMA)	Intergovernmental Forum

4. Evaluation Timeline

Table 20: Evaluation timeline

Activity	Year 1	Year 3	Year 5	Year 7
Annual Performance Reviews	✓	✓	✓	✓
Mid-Term External Evaluation		✓		
Full Policy Impact Assessment				✓
Community Satisfaction Surveys	✓	✓	✓	✓

5. Utilization of Evaluation Results

A. Adaptive Management Triggers

Table 21: Adaptive management triggers

Finding	Policy Adjustment
<50% restoration target achieved	Increase enforcement staff; revise community incentives
Rising pollution in specific zones	Targeted EIA enforcement for nearby industries
Low women participation (<30%)	Mandate gender quotas in ward committees

B. Knowledge Management

- **County Policy Briefs**: Disseminate lessons to other devolved units
- **National Learning Forums**: Present results to Senate Environment Committee

6. Transparency Mechanisms

- **Public Evaluation Dashboard**: Real-time access to monitoring data
- **Citizen Validation Meetings**: Community verification of reported impacts
- **Ombudsman Oversight**: Independent review of evaluation integrity

2. EVALUATION SYSTEM

1. System Overview

The evaluation system is designed as a **cyclical, multi-tiered framework** that combines:

- **Performance monitoring** (ongoing)
- **Impact evaluation** (periodic)
- **Adaptive learning** (continuous)

2. Core Components

A. Data Collection Infrastructure

- *Automated Monitoring*:
  - IoT water quality sensors at 25 strategic points
  - Satellite imagery (5m resolution) updated monthly
  - Drone surveillance of high-risk zones (bi-weekly)
- *Community Reporting*:
  - USSD-based violation alerts (#400*23#)
  - 50 trained community para-ecologists collecting field data

B. Analytical Framework

- *Composite Wetland Health Index*:
  - Hydrological (40% weight)
  - Ecological (35%)
  - Socioeconomic (25%)
- *Policy Effectiveness Matrix*:
  - Input efficiency (funds/staff utilization)
  - Output quality (restoration standards met)
  - Outcome impact (biodiversity/water improvements)

3. Institutional Architecture

Table 22: Institutional architecture

Tier	Body	Frequency	Tools
Operational	Ward Monitoring Committees	Weekly	Field survey forms, Photo logs
Tactical	County Technical Unit	Monthly	GIS dashboard, Compliance tracker
Strategic	Independent Review Panel	Annual	Scorecard (0-100 rating system)

4. Evaluation Cycles

A. Rapid Assessments

- Conducted quarterly using:
  - 10% sample of restored sites
  - 15-minute community feedback sessions
  - Automated sensor data trends

B. Comprehensive Evaluations

- Biannual process featuring:
  - Ground-truthing of 30% of sites
  - Water mass balance calculations
  - Livelihood impact interviews (200+ households)

5. Quality Assurance Mechanisms

- **Triangulation Protocol**:
  - All findings require 3 evidence sources (e.g., satellite + sensor + community report)
- **Blind Verification**:
  - 10% of evaluations re-done by different team
- **Open Data Policy**:

- All raw datasets published on county portal

6. Decision Triggers

Table 23: Decision triggers

Indicator Threshold	Management Response
WHI score <40 for 2 quarters	Immediate restoration task force activation
>3 violations/km²	Mobile enforcement unit deployment
<60% budget utilization	Finance department review

7. Feedback Integration

- **Stakeholder Forums**:
  - Biannual workshops to validate findings
  - Priority-setting for corrective actions
- **Policy Adjustment Window**:
  - Annual 45-day period for regulation amendments

8. Capacity Building

- **Certification Program**:
  - 2-week intensive training for evaluators
  - Annual refresher courses
- **Toolkit Standardization**:
  - Unified data collection formats
  - Calibrated measurement equipment

9. Reporting Protocol

- **Public Reports**:
  - Simplified citizen version (graphics-focused)
  - Technical version for specialists
- **Mandatory Disclosure**:
  - All reports tabled in County Assembly within 30 days of completion

10. Continuous Improvement

- **After-Action Reviews**:
  - Post-evaluation debriefs identifying system gaps
- **Benchmarking**:
  - Annual comparison with 5 peer counties

This evaluation system creates **closed-loop governance** where every finding directly informs management actions while maintaining transparency. Its **modular design** allows scaling up as restoration efforts expand across Bomet County. The integration of **traditional knowledge** with **modern technology** ensures culturally appropriate yet scientifically rigorous assessments.

3. BROAD POLICY OUTCOMES

The **Riparian Lands and Wetlands Protection Policy** is designed to achieve transformative, long-term impacts across **ecological, socioeconomic, and governance** dimensions. Below are the **expected broad outcomes** by 2030, aligned with Kenya's sustainable development goals.

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1. Ecological Outcomes

✓ **Restored Wetland & Riparian Ecosystems**

- **30% increase** in native vegetation cover along rivers and wetlands
- **50% reduction** in invasive species (e.g., eucalyptus, water hyacinth)
- **Improved water quality** (WQI score increase from 45 to 70+) in major catchments

✓ **Enhanced Biodiversity**

- **Reintroduction** of 5 locally extinct aquatic species
- **20% increase** in bird and fish populations in restored zones

✓ **Climate Resilience**

- **40% reduction** in flood damage due to restored natural buffers
- **Stabilized dry-season water flows** in 80% of perennial rivers

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2. Socioeconomic Outcomes

✓ **Sustainable Livelihoods**

- **500+ green jobs** created in eco-tourism, beekeeping, and wetland farming
- **30% income boost** for households engaged in conservation enterprises

✓ **Water & Food Security**

- **Reliable year-round water access** for 200,000+ residents
- **Increased crop yields** due to reduced siltation and better irrigation

✓ **Reduced Poverty & Inequality**

- **Pro-poor benefit-sharing** (40% of conservation revenues to women/youth groups)
- **Lower household costs** (less spending on flood recovery and water treatment)

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3. Governance & Institutional Outcomes

✓ **Strengthened Enforcement**

- **90% compliance rate** with riparian zoning laws

- **Near-zero illegal sand harvesting** due to drone surveillance

✅ **Community Empowerment**

- **50+ WRUAs** actively managing local wetlands
- **Citizen-led monitoring** covering 70% of high-risk zones

✅ **Policy Influence Beyond Bomet**

- **Model framework** adopted by 3+ neighboring counties
- **National recognition** as a wetland conservation benchmark

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4. Long-Term Systemic Impacts

🔼 **Cultural Shift**

- **Traditional ecological knowledge** integrated into county planning
- **Wetland conservation** becomes a shared social norm

🔼 **Economic Transformation**

- **Nature-based enterprises** contribute 15% of county tourism revenue
- **Reduced dependency** on destructive land uses (e.g., sand harvesting)

🔼 **Intergenerational Equity**

- **Legally protected** wetlands for future generations
- **Youth environmental leadership** pipeline established