



**Water Resources
Management
Authority**

Water

CONVERSATIONS

A Newsletter by the Water Resources Management Authority

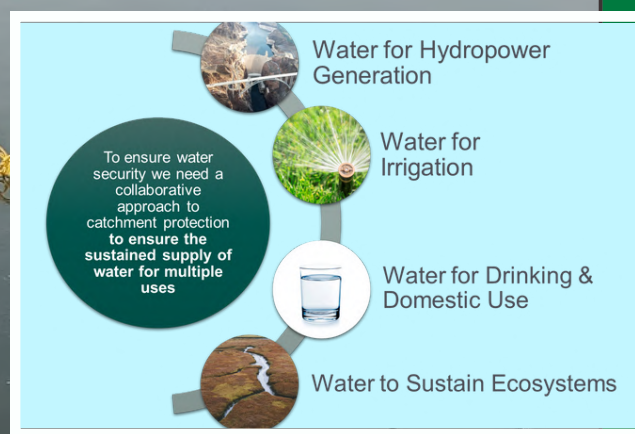
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partnership under AWARE 2.0
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**Government Unveils 6th
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Find out how WARMA is spearheading restoration of the Lower Kafue, safeguarding water, livelihoods, and biodiversity for future generations

**Dive into the Quarterly Dialogue of Insights and Actions on Zambia's Water Future
Second Quarter Newsletter (April to June 2025)**



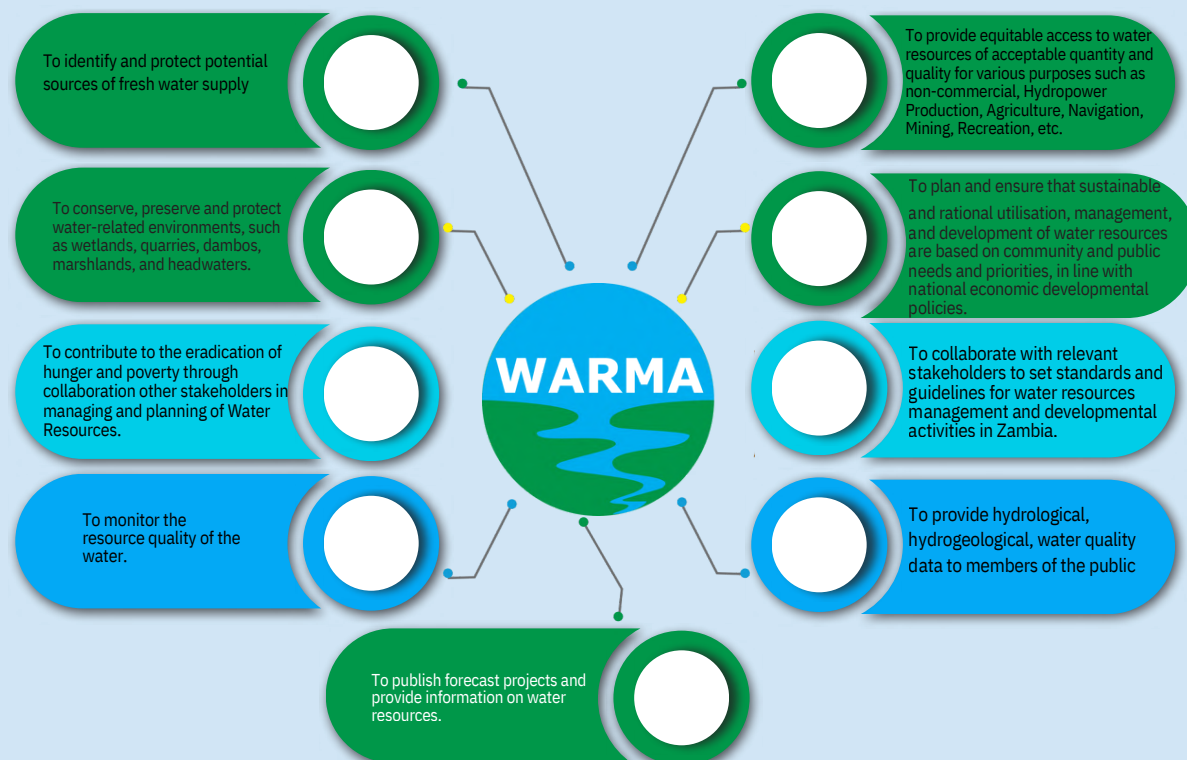
Water Resources
Management
Authority

ZAMBIA's WATER! OUR FUTURE!

WHO ARE WE

The Water Resources Management Authority (WARMA) is a statutory body under the Ministry of Water Development and Sanitation, established by the Water Resources Management Act No. 21 of 2011 and operational since 2014. It is responsible for regulating, managing, and conserving Zambia's water resources. WARMA promotes sustainable and equitable water use, considers gender and climate change in its work, and prioritizes domestic and environmental water needs. Its functions include maintaining a water information system, setting standards, and advising the government on water policy.

OUR MANDATE



OUR SERVICES

Borehole Registration.
Water Permitting for commercial purposes.
Licensing of drilling companies.
Registration of drillers and constructors.

Provision of hydrological, hydrogeological and water quality data and information.
Flood and Drought forecasting for Early Warning.



**By Smart Kalaluka,
Senior Public Relations and Communications Officer**

From the floodplains of Mongu during the historic Kuomboka Ceremony of the Lozi-speaking people, to the discussions at the African Implementation and Partnership Conference on Water (PANAFCON-3) held at Mulungushi International Conference Centre in Lusaka, this quarter has demonstrated how central water is to culture, science, policy, and daily life.

In this edition, you will find stories showcasing WARMA's commitment to safeguarding Zambia's water resources, addressing challenges such as illegal water abstraction and pollution, and promoting sustainable catchment management. Our engagements, at national, regional and continental level, highlight how evidence-based research, stakeholder collaboration, and community involvement are shaping resilient water management strategies.

We also share insights into WARMA's internal strengthening, including workplace policy reviews and capacity-building initiatives, which ensure that the Authority continues to serve as a trusted and effective steward of our water resources.

Each article reflects the opportunities and responsibilities we share in protecting water for present and future generations. We invite you to explore these stories, reflect on the lessons, and join the conversation on sustainable water management in Zambia and beyond.

Enjoy the read.

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WARMA's Mid-Term Review

- 68% Performance Score Achieved
- Progress in Water Management & Stakeholder Engagement
- Challenges Highlight Human Capital and Funding Gaps

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Toxic Streams

- Illegal Mining Choking Zambia's Rivers
- WARMA intensifies enforcement and water resource protection

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WARMA Cracks Down in Chingola

- Two Mineral Processors Penalized
- Illegal Water Abstraction & Effluent Discharge Exposed
- Zero Tolerance for Environmental Violations



We have continued to engage communities on pollution prevention and climate resilience, our efforts are guided by science, evidence, and partnership.

Internally, we have also reinforced our foundation through workplace policy reviews, enhanced financial management skills, and alignment with the 2022–2026 Strategic Plan.

With the leadership of the new Board, we are determined to execute our mandate effectively, ensuring that Zambia's water resources continue to sustain livelihoods, drive economic growth, and build resilience against climate challenges for generations to come.

Misozi Ngulube-Lumpa (Mrs.)
Acting Director General

This second edition of the 2025 Water Conversations captures a period of significant progress and action in managing Zambia's finite water resources. Over the past quarter, WARMA has reinforced its leadership, strengthened institutional systems, and advanced initiatives that safeguard water for communities, the environment, agriculture and industry.

A highlight of this period is the induction of the 6th WARMA Board of Directors, whose expertise spans public health, environmental science, engineering, agriculture, meteorology, legal practice, and traditional leadership. This diverse leadership strengthens WARMA's corporate governance, ensuring accountability, transparency, and strategic oversight. The Board plays a critical role in guiding policies that protect vital water sources, enforce regulations, promote sustainable water use, and balance economic development with environmental conservation.

On the ground, WARMA's work has been extensive. From safeguarding Luangwa Catchment recharge zones, conserving the Upper Luangwa catchment, and managing sustainable water use in the Lower Kafue.



Restoring the Lower Kafue for People and Nature

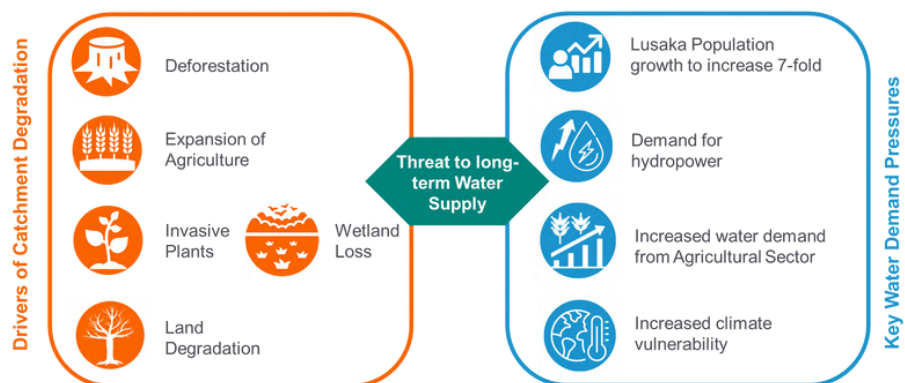
WARMA spearheads restoration of the Lower Kafue, safeguarding water, livelihoods, and biodiversity for future generations

The Lower Kafue Sub-Catchment (LKSC) is one of Zambia's most important water sources, supplying water for agriculture, hydropower, livestock, and wildlife. Over the years, human activities such as agriculture, deforestation, and the spread of invasive plants have put pressure on this vital catchment.

Recognizing the need to protect and restore these water resources, the Water Resources Management Authority (WARMA), with support from the Nature for Water Facility and GIZ, has initiated a project under a Watershed Investment Programme (WIP) to implement Nature-based Solutions (NbS). This long-term initiative is designed to safeguard water and ecosystems for generations to come.



Lower Kafue Sub-Catchment
Under Threat



The Watershed Investment Programme

The LKSC covers approximately 59,000 square kilometers and provides over half of Lusaka's water, 64 percent of national irrigation needs, supports hydropower generation, and sustains livestock, wildlife, and tourism. The catchment is critical for Zambia's economic development and environmental health.

However, land degradation, wetland loss, deforestation, and overgrazing are threatening water availability and ecosystem functionality.

The Watershed Investment Programme aims to set up a sustainable mechanism for collective action, bringing together different water users to invest in ecosystem protection and support upstream communities. The WIP is a long-term programme, typically planned over 30 years, ensuring that the benefits of restored ecosystems and improved water security are lasting.

The project also assesses the feasibility of interventions: determining local capacity to adopt the solutions, social acceptance, costs versus benefits, and identifying the most effective NbS options. The WIP design phase accurately defines the institutional vision, technical objectives, governance, funding, and operational arrangements needed to achieve these goals.

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Nature-based Solutions in Lower Kafue Catchment

What Are Nature-based Solutions?

Nature-based Solutions are practical ways to use nature itself to solve water and land challenges. Instead of relying only on dams or pipes, this approach restores rivers, wetlands, grasslands, and forests so they can naturally provide more water, healthier soils, and stronger support for people, animals, and plants.

Why This Project Matters

If the catchment's ecosystems continue to degrade, water shortages could affect homes, farms, electricity generation, and biodiversity. By restoring the LKSC, WARMA ensures that water remains reliable, safe, and abundant, while supporting local communities, agriculture, hydropower, and wildlife.

WARMA's Role

WARMA is facilitating the implementation of this initiative, fulfilling its mandate to manage and protect Zambia's water resources. The Authority is:

- Bringing together communities, water users, and investors.
- Providing technical support towards scientific assessments to determine the best ways to restore the catchment.
- Contributing towards the design phase of Watershed Investment Programme.
- Ensuring Zambia's water resources remain reliable for the future



Group photo during the stakeholder engagement meeting to present the findings of the feasibility study for establishing the Watershed Investment Programme in the Lower Kafue Sub-Catchment.

How Nature-based Solutions Work in the LKSC

Four main strategies have been identified to improve water availability and ecosystem health:

1. Restoring Grasslands to support livestock and natural habitats
2. Installing Trenches and Bunds to slow water flow and allow it to soak into the ground
3. Restoring Wetlands by removing invasive plants and letting wetlands function naturally
4. Regenerating Forest and Land to improve soil, water retention, and ecosystem health

If fully implemented, these solutions could increase river flows by about 10 percent every year, providing more water for homes, farms, and hydropower, while also protecting wildlife and supporting tourism.

Benefits for People, Nature, and the Economy

A 75 million dollar investment in these solutions over 30 years could generate 327 million dollars in value, nearly four times the original investment, demonstrating that protecting nature makes strong economic sense.

The benefits go beyond financial returns, including more stable electricity from hydropower, greater opportunities and income for farmers and local communities, healthier livestock, and gradual restoration of grasslands that support cleaner air and stronger ecosystems.

The project has since moved into its Design Phase, that is focusing on governance, funding, community engagement, piloting solutions, and monitoring results. Once completed, this will ensure that the benefits of the project are real, lasting, and scalable across the catchment.

This project highlights the importance of collaboration and WARMA's vital role in safeguarding Zambia's water resources. By working with nature, the Authority is securing water for people, farms, and energy, protecting wildlife, and building a resilient and sustainable future for generations to come.

The Urgent Call to Safeguard Kabwe's Main Water Sources: Kalulu and Makululu wellfields

At the 2025 Zambia Water Forum and Exhibition, WARMA Hydrogeologist Mumba Kolala shared important findings about Kabwe's most critical water supply, the Kalulu and Makululu wellfields.

These underground water sources, found in the western side of Kabwe in the Central Province, provide about 60% of the town's municipal water through Lukanga Water and Sewerage Company. The groundwater aquifer also supports large farms, poultry and cattle production, game ranching, and industries such as manganese, zinc, and steel processing. Simply put, this water is the heartbeat of Kabwe's homes and economy.

Where Does the Water Come From?

Groundwater is replenished by rainfall through special areas called recharge zones. For Kabwe, earlier studies showed a recharge zone of about 38.5 square kilometres based on the topography (rain capturing zone). However, the water demand was much higher than what this area could supply.

Kabwe's households, industries, and farms together use about 32.7 million cubic metres of water every year, while the smaller recharge area could only provide about 12.8 million cubic metres. This created a clear risk of overuse.

WARMA's emerging research showed that the actual recharge zone is much larger, about 114 square kilometres. This wider area has now been officially recognised as the key recharge zone for Kabwe's water supply. This groundwater recharge zone area extends to areas such as townships of Makululu, Chililalila, Chakumbila, Kasanda Mine, Mukobeko, (including the Correctional Facility), Luangwa/ Kabwe Golf Club and, Kawama. Other areas, parts of Farming areas west of Kabwe CBD, New Market, western edge of Town area and parts of kalulu Local Forest No 32.

The Hidden Danger: Lead Pollution

The study also found that some parts of the recharge zone overlap with areas containing soils polluted by lead from Kabwe's past mining activities. This means that, there is a real risk of groundwater contamination if protective steps are not taken.

WHAT NEEDS TO BE DONE

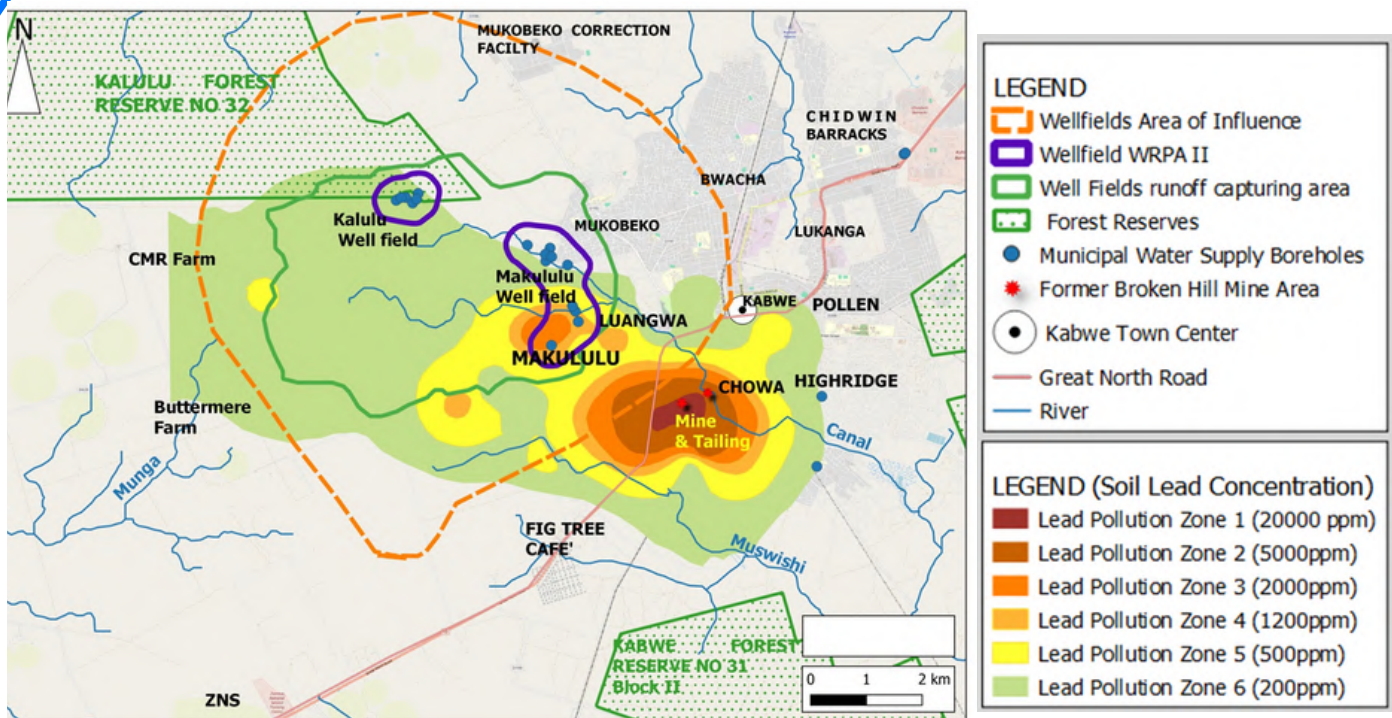
To keep Kabwe's water safe and reliable, the study recommends:

- Restricting harmful land use in the recharge zone.
- Monitoring groundwater regularly to detect contamination or overuse early.
- Investigating areas with potential lead pollution.
- Reviewing and adjusting the recharge zone as water demand grows.

WHY THIS MATTERS

Groundwater is finite, therefore without proper care, it can be depleted or polluted. It is worth mentioning that polluted groundwater can be very complicated to clean.

WARMA will continue to ensure that Kabwe's communities, farms, and industries will continue to depend on clean and safe water for generations to come.



Cone of depression VS Soil lead Concretion

Quick Facts: Kalulu and Makululu wellfields:

Main Source

The Kalulu and Makululu wellfields supply about 60% of Kabwe's water through Lukanga Water and Sewerage Company.

The Risk

Some parts of the recharge zone overlap with lead-polluted soils, a legacy of Kabwe's mining past.

Wider Impact

The water also supports farms, poultry, cattle, game ranching, and industries like manganese, zinc, and steel.

The Protection Plan

WARMA recommends land-use restrictions, regular monitoring, and pollution checks to keep Kabwe's water safe.

Recharge Zone

Rainfall refills the aquifer through a special 114 km² recharge area – much bigger than earlier thought.

WARMA Champions Sustainable Water Management in the Upper Luangwa Catchment



The Luangwa River is one of Zambia's last free-flowing rivers, providing essential water for agriculture, households, and local communities while supporting forests, wildlife, and critical ecosystems. However, the river's headwaters are increasingly threatened by tree cutting, farming, and soil erosion. Without intervention, these pressures could compromise water availability, degrade ecosystems, and affect the livelihoods of downstream communities.

As the executing agency for the GEF7 Sustainable Luangwa Project, funded by the Global Environment Facility (GEF), the Water Resources Management Authority (WARMA) is taking the lead in protecting the upper catchment. The project runs from 2022 to 2027, with WARMA formally beginning activities in June 2024. High-level stakeholder engagements commenced in August 2024, and preparations for the second-year financing agreement are underway.

The Urgent Need for Protection

The Upper Luangwa catchment was prioritized because it supports one of Zambia's largest and longest unaltered river systems. The river provides water for irrigation, agriculture, and household use downstream. Its forests, National Parks, Game Management Areas, and National Forest Reserves host globally significant biodiversity.

Land and forest degradation from agriculture and deforestation in the headwaters threaten water quality and river flows. Erosion and sedimentation are altering riverbeds, affecting aquatic life, and increasing vulnerability to floods and droughts. Protecting the river is essential for clean water, healthy soils, biodiversity, and the socio-economic well-being of communities.

Practical Actions by WARMA

WARMA is actively protecting the Upper Luangwa River through community engagement, scientific monitoring, and practical restoration measures.

The Authority works closely with traditional leaders, district authorities, and local communities in Mafinga District to promote sustainable water and land management. Meetings with Chief Mwenechifungwe, Chief Mweniwisi, and Chief Muyombe, alongside workshops and radio campaigns, raise awareness and encourage conservation-friendly practices.

Acting WARMA Director General, Mrs. Misozi Ngulube - Lumpa, emphasized during her visit to Mafinga, "Protecting the Luangwa's headwaters requires everyone to work together. We are helping communities find a balance between farming and conservation."

Technical teams conduct detailed studies of river flows, water quality, and sediment transport. Findings show steep, sparsely vegetated slopes in the Mafinga Hills, riverbeds with large boulders and minimal sand, and tributaries such as the Chilera and Mulungwizi Rivers contributing most sediment during the rainy season. Farming and tree cutting near the river exacerbate soil erosion and weaken riverbanks.

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More on ----

WARMA Champions Sustainable Water Management in the Upper Luangwa Catchment

Monitoring and Community-Led Restoration

To monitor these changes, WARMA has installed five hydrometric stations across Mafinga District, including the Luangwa River at Kampumpu Road Bridge and Nakapanga Village, Kaunga River, Ntonga River, and Msipizi River at Mweniwisi Road Bridge. These stations provide continuous data on water quality, flows, and sediment, supporting evidence-based interventions.

Community participation is central to the project. In mid-2025, WARMA and WWF trained 50 local Citizen Scientists at 10 sites to monitor water quality, testing for nitrates, phosphates, and turbidity. Participants received testing kits, protective gear, and guidance for digital data reporting. On the ground, tree planting along riverbanks, controlled farming near watercourses, soil retention structures, and climate-smart agricultural practices are being implemented to reduce erosion, improve water quality, and restore ecosystems.

Challenges and Next Steps

The project faces challenges such as difficult access to remote sites during the rainy season and the need for upgraded monitoring tools and protective gear. WARMA, in partnership with WWF, is addressing these issues while maintaining active community engagement.

Data collected will inform a technical paper to support the creation of a Statutory Instrument officially declaring the Upper Luangwa as a Water Resource Protection Area. Community-based monitoring will continue, with local farmers encouraged to adopt climate-smart practices.



Confluence of Chilera and Luangwa rivers



Luangwa river course at the bottom of the Mafinga hills with a lot of large boulders

Impact and Long-Term Benefits

The GEF7 Sustainable Luangwa Project demonstrates that combining science, practical interventions, and community participation can safeguard vital water resources. WARMA, local communities, and partners are ensuring that the Upper Luangwa River continues to provide clean water, sustain forests and wildlife, and deliver socio-economic and environmental benefits for generations to come.



Technical team expedition to the source of the Luangwa on the Mafinga hills



WARMA'S Strategic Mid-Term Review:

Progress, Challenges, and the Path Ahead



The Monitoring and Evaluation (M&E) Unit with facilitation from the Management Development Division (MDD), recently concluded a comprehensive mid-term review of the Authority's 2022–2026 Strategic Plan. The primary objective of the review was to assess WARMA's performance at the halfway mark of the strategic cycle, identify key challenges and operational gaps, and realign activities that may have deviated from the Authority's core priorities.

The review highlighted notable progress across the eight strategic objectives, particularly in areas of water resources management, institutional development, visibility and stakeholder engagement and financial sustainability.

In delivering on its core mandate, the Authority intensified efforts in water source protection and expanded public awareness initiatives. WARMA also positioned itself to attract investment through the development of catchment management plans.

Supporting these core efforts, WARMA increased its visibility through strategic use of print, digital, and mass media platforms and strengthened engagement with key stakeholders to foster collaboration in the sustainable management of Zambia's water resources.

Internally, the Authority enhanced several operational policies to improve working conditions, elevate the quality of staff output, and improve procedural efficiency. Financially, WARMA recorded a cumulative income growth of 12%, with further potential anticipated from an expanded base of permitted clients.

“WARMA has achieved a 68% performance score at the midpoint of its 2022–2026 Strategic Plan, reflecting significant progress in water resource management, institutional development, and stakeholder engagement—despite notable challenges.”

Despite these gains, the Authority encountered several challenges. These included a shortage of human capital, revenue shortfalls due to a waiver on borehole fees, policy shifts beyond operational capacity, the impacts of the 2023/2024 hydrological drought, and ongoing issues with overlapping mandates in environmentally sensitive areas. These factors constrained the Authority's ability to achieve optimal mid-term performance.

Nevertheless, WARMA achieved a commendable overall performance score of 68%—an improvement, when compared with mid-point of the previous strategic cycle. The findings underscore the need for renewed focus, coordination, and commitment as the Authority enters the second half of the strategic period.

The review reaffirmed WARMA's commitment to its vision of sustainable water resource management for Zambia's development.

Strengthening Water Security

Zambia's National Rainwater Harvesting Strategy and WARMA's Role

Water scarcity and climate change are no longer distant threats for Zambia, they are obtaining realities reshaping how communities manage their most precious resource. In response, Zambia has launched its first-ever National Rainwater Harvesting Strategy and Implementation Plan, aiming to boost water security, enhance agricultural productivity, and build resilience against climate shocks. Developed by the Ministry of Water Development and Sanitation with support from the European Union's Green Nexus Programme, this comprehensive strategy places the Water Resources Management Authority (WARMA) at the heart of its execution and oversight. This strategy compliments the Water Resources Management (Water harvesting and storage) Regulation 2024 that are anchored on the Water Resources Management Act.

The strategy targets three critical areas:

Development of Rainwater Harvesting Infrastructure:

Building and rehabilitating dams, boreholes, and water storage facilities to increase water availability.

Enhancement of Ecosystems and Water-Dependent Services:

Restoring degraded ecosystems and promoting nature-based solutions to improve both water quality and quantity.

Strengthening Policy and Institutional Frameworks:

Creating an enabling environment for sustainable water management through policy reforms and capacity building.

WARMA's Role in Driving the Strategy

WARMA is spearheading efforts through regulatory oversight, ensuring all rainwater harvesting activities align with the Water Resources Management Act and the Water harvesting and storage regulations. The authority also builds capacity by training local communities and stakeholders to adopt sustainable water management practices. Furthermore, WARMA works closely with local authorities, international agencies, and communities to guarantee effective implementation.

A recent example illustrates this impact. In rural districts, WARMA facilitated training sessions that enabled farmers to install and maintain rainwater harvesting systems, which improved crop yields despite irregular rainfall patterns. This hands-on support highlights how WARMA bridges policy and practice.

Legal Framework Supporting Rainwater Harvesting

Supporting the strategy is the Water Resources Management (Water Harvesting and Storage) Regulations, 2024. These regulations establish standards and guidelines to ensure water harvesting structures are safe and efficient, streamline permitting processes to facilitate project approvals and encourage compliance, and require regular monitoring and reporting to uphold environmental and safety standards.

These measures empower WARMA to enforce compliance and provide technical guidance, fostering sustainable water harvesting infrastructure across Zambia.

You can continue reading this article on the next page



Addressing Challenges Head-On

The National Rainwater Harvesting Strategy faces some hurdles, but WARMA is actively tackling them. WARMA supports reviewing the Water Resources Management Act to simplify permitting and introduce for storage incentives, making it easier to adopt rainwater harvesting. To overcome resource constraints, WARMA trains communities and partners with stakeholders to mobilize resources and provide technical support, particularly in rural areas. Additionally, enhanced climate and water monitoring, in partnership with the Meteorological Department, enables timely forecasts that help communities adapt to unpredictable rainfall.

Despite these challenges, the strategy offers a strong framework to combat water scarcity and strengthen resilience to climate change.

A collaborative path forward

Through this National Rainwater Harvesting Strategy, backed by clear regulations and active stewardship from WARMA, Zambia is adopting a forward-thinking, comprehensive approach to water security.

Continued collaboration among stakeholders remains vital to ensuring sustainable, equitable access to water, bolstering climate resilience and driving socio-economic growth for all Zambians.



Newly appointed WARMA Board Members and Acting Director-General, Mrs. Misozi Ngulube-Lumpa, pose for a group photo with the Minister of Water Development and Sanitation, Honourable Eng. Collins Nzovu (centre), and Permanent Secretary, Eng. Romas Kamanga, at the WARMA Headquarters in Lusaka.

Government Ushers in 6th WARMA Board To Strengthen Water Governance and Secure Zambia's Water Future

The Government, through the Ministry of Water Development and Sanitation, has ushered in new leadership at the apex of the Water Resources Management Authority (WARMA). This follows the official unveiling of WARMA's sixth Board of Directors, whose three-year mandate became effective on 28th April 2025. Announcing the new WARMA Board, Minister of Water Development and Sanitation, Hon. Eng. Collins Nzovu, MP, reaffirmed the Government's commitment to enhancing water security through strengthened governance, accountability, and sustainable resource management.

“

"Water is fundamental to Zambia's development. This Board is appointed at a pivotal moment when the nation needs visionary, accountable, and action-oriented leadership," said Hon. Nzovu.

”

Speaking at the unveiling event, WARMA Board Chairperson Dr. Kunda emphasized the urgent need for increased investment in rainwater harvesting, water storage infrastructure, and groundwater recharge initiatives. He further pledged that the Authority would streamline water permit processing through digital systems and enhance overall service delivery to improve water management efficiency across the country.

“

"Water must contribute meaningfully to national growth and improved livelihoods. We are committed to inclusive development, integrity, and results-driven leadership," Dr. Kunda stated.

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Key Priorities for the New Board

The Minister outlined five main focus areas:

1 Curbing Pollution

- Tackling water contamination from mining, agriculture, and industrial activities, particularly on the Copperbelt.

2 Enforcement

- Strengthening penalties and ensuring full compliance with the Water Resources Management Act.

3 Protection of Critical Water Sources

- Fast-tracking the declaration of Water Resources Protection Areas and enforcing statutory safeguards.

4 Permit Reform

- Reducing water permit processing time from 60 to 30 days.

5 Water Harvesting and Storage

- Implementing statutory requirements aligned with Vision 2030 and SDG 6.

With strong leadership and a clear mandate, the sixth WARMA Board is poised to safeguard Zambia's water resources, ensure sustainable management, and support communities, agriculture, and the environment for generations to come.

Meet the 6th WARMA Board

www.warma.org.zm

Appointed under Section 11 of the Water Resources Management Act No. 21 of 2011, the new WARMA Board comprises experts from diverse sectors, reflecting a broad spectrum of knowledge and experience. The members bring expertise in environmental management, engineering, meteorology, law, agriculture, and traditional governance.



Dr. John Eudes Lengwe Kunda
Board Chairperson

Dr. Kunda is a distinguished scholar and corporate leader with expertise spanning public health, communications, and sustainable development. He has held senior positions in both the public and private sectors, including ZESCO Limited, the Millennium Project Completion Agency Zambia, and PEPFAR Zambia. Currently Chief Corporate Affairs Officer at Konkola Copper Mines Plc, he brings strong experience in corporate governance, policy, and stakeholder engagement.

As Board Chairperson, Dr. Kunda provides strategic leadership to strengthen WARMA's institutional visibility, policy oversight, and partnership development for sustainable water resource management.



**Mrs. Chilekwa Christabel
Mibenge- Musonda**
Board Vice Chairperson

Mrs. Musonda is an accomplished Environmental and Public Health Scientist with over 20 years of experience in water, sanitation, chemical management, and environmental policy. She holds two master's degrees in Environmental Science and Chemical Management, and currently serves as Climate and Health Adviser at the Commonwealth Secretariat.

Her extensive experience with UNEP, ZEMA, and other international organizations enhances WARMA's capacity in climate resilience, environmental health, and sustainable water governance. As Vice Chairperson, she provides strategic and technical leadership in policy formulation and environmental monitoring.



Mr. Joseph Jimu Daka
Board Member

Mr. Daka is an experienced agribusiness professional and founder of Damust Farms Limited, one of Zambia's prominent commercial farms. With expertise in both crop and livestock production, he has served in governance roles with the Food Reserve Agency and Nkumbi International College. Representing the Zambia National Farmers' Union, he brings practical knowledge of irrigation, water efficiency, and sustainable agriculture to the WARMA Board. His contributions help align regulatory frameworks with the needs of the farming community and national food security goals.



Ms. Antonina Chisanga
Board Member

Ms. Chisanga is a legal practitioner and legislative drafter with experience in governance, public law, and regulatory compliance. She holds an LL.M in Taxation and Investments and a Postgraduate Diploma in Legislative Drafting. Currently Legal Counsel at the Ministry of Transport and Logistics, she provides strategic legal oversight to WARMA, ensuring policy alignment with national legislation and international standards. Her expertise supports transparency, accountability, and sound governance within the Authority.



Dr. Alex Lushikanda Kabwe
Board Member

Dr. Kabwe is a hydraulic and irrigation engineering expert with extensive experience in irrigation system design, water management, and agricultural infrastructure. He holds a PhD in Irrigation and Water Resources Engineering and two master's degrees in related fields. Currently serving as Principal Irrigation Engineer at the Ministry of Agriculture, he supports sustainable farming and food security initiatives.

On the WARMA Board, Dr. Kabwe provides technical insight to ensure equitable water distribution and promotes climate-resilient irrigation practices.



Mr. Edson Nkonde
Board Member

Mr. Nkonde is Director of the Zambia Meteorological Department and an expert in climate science, hydrological forecasting, and risk assessment. Holding a Master's degree from the University of Reading, he has over 15 years of experience in climate services and strategic leadership.

As the Board's Climate and Meteorology Specialist, he guides the integration of climate data into water management policies, supporting early warning systems and climate-adaptive water resource planning.



HRH Chieftainess Muwezwa I
(Rhoda Kapami Ila)
Board Member

Her Royal Highness Chieftainess Muwezwa I of Iteszhi-Tezhi is a respected traditional leader and former educator with qualifications in Traditional Leadership, Corporate Governance, and Education. She champions community participation, gender equality, and sustainable resource use.

On the Board, she ensures that customary values and community perspectives are integrated into national water governance, fostering inclusive and culturally sensitive water management across rural areas.



Eng. Wesley Lwiindi
Board Member

Eng. Lwiindi is a Mechanical Engineer with over 35 years of experience in hydropower project development, management, and operations. He has led several major national energy infrastructure projects, including Kafue Gorge Lower, Batoka Gorge, and Kariba North Bank Extension.

His expertise ensures that hydropower development aligns with sustainable water allocation and national energy goals. On the Board, he provides technical guidance on the water-energy nexus, strengthening regulatory oversight for efficient and sustainable resource use.

Photo gallery from the unveiling of the WARMA Board by Hon. Eng. Collins Nzovu, Minister of Water Development and Sanitation, held on 16 June 2025 at WARMA Headquarters in Lusaka.



WARMA is investing in its people and systems to make sure the Authority remains strong, efficient, and ready to deliver on its mandate. In the second quarter of 2025, two major milestones were achieved: a review of key workplace policies and a financial skills training for the Finance Department.

Policy Review for a Better Workplace

From 23–27 June 2025, WARMA staff and management met in Lusaka to review important workplace policies. These include transport use, staff wellness and safety, ICT usage, training and development, and performance management.

Acting Director General Mrs. Misozi Ngulube-Lumpa explained why this matters: “These policies guide our work, protect staff well-being, and ensure that WARMA remains efficient and sustainable.” The review also ensured that the Authority’s internal systems are aligned with the 2022–2026 Strategic Plan.

Building Skills in Finance

At the same time, WARMA’s Finance Department attended a week-long Financial Modelling Workshop. The training focused on advanced Excel, financial forecasting, and reporting skills.

Mrs. Ngulube-Lumpa noted that strong financial skills are crucial for WARMA’s future:

“As a public institution entrusted with managing public funds, the need for highly skilled accountants cannot be overstated.”

The training also prepared WARMA staff for the upcoming move to International Public Sector Accounting Standards (IPSAS), a government requirement for 2025.

Key Highlights

- ✓ Policy review covered transport, ICT, wellness, training, and performance
- ✓ Finance staff gained new skills in financial modelling and advanced Excel
- ✓ Preparations underway for transition to IPSAS
- ✓ Both activities linked to WARMA’s 2022–2026 Strategic Plan



Investing in People, Securing the Future

By improving policies and building staff capacity, WARMA is not only strengthening its internal systems but also ensuring that the Authority is better placed to manage Zambia’s water resources sustainably.

Toxic Streams Confronting the Water Crisis from Mining in Zambia

Zambia's rivers and streams are vital for domestic use, agriculture, energy, industry, fishing, and livestock. Mining activities, both regulated and unregulated, have increasingly affected these waters through sedimentation and chemical contamination, threatening ecosystems, livelihoods, and national development.

To safeguard these resources, the Water Resources Management Authority (WARMA) is intensifying monitoring, regulation, and awareness efforts. Working with traditional leaders, local authorities, communities, and other stakeholders, WARMA promotes responsible water use, enforces compliance, and restores affected catchments. These actions reflect the Authority's commitment to sustainable water management and the hope that Zambia's rivers will continue to support livelihoods and economic growth for generations to come.

Hotspots of pollution across Zambia

Key areas of concern include:

- **Chambishi and Kitwe (Copperbelt Province):** Acidic runoff from illegal copper mining and a tailings incident at a licensed mine challenged local water treatment systems.
- **Rufunsa (Lusaka Province):** Small-scale gold mining has affected surrounding ecosystems, including water sources.
- **Kasempa (Northwestern Province):** Runoff from gold panners has increased sediment in the Dengwe and Lufupa Rivers, highlighting the need for ongoing monitoring.
- **Mwinilunga and Solwezi (Northwestern Province):** Informal operations along the Mudanyama and Kafungulwa streams have raised turbidity levels.
- **Mufumbwe (Northwestern Province):** Large-scale illegal gold mining in Kikonge and Kakawa areas led to environmental stress. Authorities have already dispersed over 25,000 miners and begun formalization efforts through cooperative licensing.
- **Mpika (Muchinga Province):** Gold washing in Chitamba, Kanchibiya, and Kanyebele has prompted enhanced inspections and monitoring.
- **Mkushi and Chisamba (Central Province):** Rivers such as Changwena, Musofu, Chibefwe, and Momboshi are being closely monitored to manage water quality for downstream users and farmers.

Insights from Kanchibiya

A detailed WARMA Environmental and Water Quality study conducted in June 2025 examined the impact of illegal gold mining in Kanchibiya District. The findings confirmed degradation in the Kanyebele Stream and Kanchibiya River, both vital water sources for local communities. Water clarity measurements showed elevated sediment levels, highlighting the need for continued monitoring and targeted interventions.

Most heavy metals remained within acceptable limits, though slight variations in pH and sediment accumulation suggest areas for proactive management. Local communities have observed changes in fish populations and water availability. The study also identified opportunities for habitat restoration and sustainable land-use practices to support ecosystem recovery.



Above: Kanchibiya River at kasama-Mpika road bridge
Below: Kanyebele stream at one of the mining communities.





These ongoing actions support the directive of His Excellency, the Republican President, Mr. Hakainde Hichilema, who has emphasized that illegal mining threatens national security and public health. The President has instructed security agencies, law enforcement, and relevant government departments to take decisive, coordinated action against illegal mining and water pollution nationwide.



Provincial Joint Task Force inspects mining sites in Kanchibiya

WARMA's Ongoing Interventions

WARMA is actively implementing strategies to combat water pollution and restore ecosystems affected by illegal and poorly regulated mining. These measures include:

Enhanced Monitoring: Increasing water quality surveillance in mining zones, including new hotspots such as Mufumbwe and Kanchibiya.

Compliance and Enforcement: Issuing stop orders, applying penalties, and conducting joint operations with ZEMA, police, and local authorities, including the dispersal of illegal miners.

Hotspot Mapping: Prioritizing high-risk catchments for protection and ongoing monitoring.

Legal Review: Reviewing the Water Resources Management Act of 2011 to introduce stronger controls and penalties.

Stakeholder Engagement: Collaborating with government ministries, traditional leaders, communities, and mining cooperatives to develop locally driven solutions.

Awareness Campaigns: Promoting water stewardship, pollution prevention, and encouraging the public to report illegal mining activities

Shared Responsibility for Water Security

Protecting Zambia's water resources is a shared national responsibility that requires collaboration across all sectors. To sustain these efforts:

- Government institutions should continue reinforcing enforcement and strengthening policy frameworks to deter illegal mining and pollution.
- Traditional leaders should guide their communities in adopting sustainable land and water-use practices.
- Civil society and the media should keep promoting awareness, spotlight violations, and advocate for responsible water management.
- Citizens should practice water-friendly habits, avoid encroachment, and report illegal mining and pollution incidents.
- The private sector should invest in pollution control measures and adopt environmentally responsible technologies.

WARMA and GIZ Formalise Partnership Under AWARE 2.0 Initiative

The Water Resources Management Authority (WARMA) and GIZ have officially signed a Memorandum of Understanding (MoU) under the Accelerate Water and Agricultural Resources Efficiency (AWARE) 2.0 Project. This partnership aims to strengthen integrated catchment management, focusing on landscape protection, restoration, and sustainable water governance across Zambia.

Signed in April 2025, the MoU provides a framework for collaboration to improve water resource management, safeguard ecosystems, and resolve water-related disputes. While the agreement is not legally binding, it clearly defines roles, responsibilities, and collaborative arrangements for effective water governance and catchment protection.



WARMA Acting Director-General, Mrs. Misozi Ngulube-Lumpa (right), and GIZ AWARE Project Manager, Mr. Christian Henschel (left), during the signing ceremony of the Memorandum of Understanding held on 28th April 2025 at the WARMA Headquarters in Lusaka.

Key features of the MoU

Scope of Collaboration: Joint activities include water policy and governance, hydrological forecasting, environmental-flow assessments, catchment management planning, water allocation frameworks, conflict resolution, and climate-resilient water management.

- **Capacity Building:**

Both parties will support training in water management, remote sensing, GIS and drone technology, water quality forecasting, and sustainable agricultural water use.

- **Responsibilities:**

WARMA will lead implementation, provide legal guidance, and share water-related data. GIZ AWARE 2.0 will provide technical and financial support.

- **Confidentiality and Governance:**

All shared information will be treated as confidential, with agreed procedures for dispute resolution, reporting, and activity review.

- **Duration:**

The MoU is valid for three years, with the option for extension upon mutual agreement.

Focus on the Lower Kafue Sub-Catchment

The partnership will prioritise the Lower Kafue Sub-Catchment (LKSC), which supports over six million people, contributes more than 50% of Zambia's hydropower generation, and sustains agriculture, industry, and fisheries. The LKSC faces challenges including water scarcity, catchment degradation, and competing demands, which have intensified water-related disputes.

Through the MoU, WARMA and GIZ aim to restore degraded eco-sensitive areas, improve water availability, and strengthen self-organized water governance structures. This includes developing catchment management plans, water allocation frameworks, and dispute resolution guidelines.

Find out more on this on the next page

Project Goals and Expected Outcomes

Goal: Enhance water resource protection and reduce water-related disputes in the LKSC, with a target of restoring 40% of degraded eco-sensitive areas and reducing water disputes by 50% by 2027.

Key Outcomes:

- Comprehensive assessment of water availability and deficits.
- Protection of 15,000 hectares of eco-sensitive areas.
- Capacity building for self-organized governance structures.
- Improved water dispute management in critical areas.
- Documentation of lessons and best practices for replication and policy support.

Beneficiaries

The project will directly benefit:

- **Water Governance Structures:**
Access to data and training to manage disputes effectively.
- **Traditional Leaders:**
Support for sustainable water allocation and decision-making.
- **Water Users:**
Farmers and industries will experience improved water availability and reduced conflicts.
- **Communities:**
Inclusive engagement for small-scale farmers and vulnerable groups.
- **WARMA and Ministry of Water Development and Sanitation:**
Strengthened institutional capacity and enhanced data-driven decision-making.

Ensuring Sustainability

To guarantee long-term impact, the project will:

- Build capacity for water governance structures and local leadership.
- Develop sustainable catchment management plans and water allocation frameworks.
- Formally designate eco-sensitive areas and Water Resource Protection Areas (WRPAs) to safeguard critical water sources.

“

“This MoU provides a formal platform for collaboration to sustainably manage water resources, restore landscapes, and resolve water disputes across Zambia.”

WARMA Acting Director-General Mrs. Misozi Ngulube-Lumpa stated

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“

“Through capacity building and stakeholder engagement, this partnership ensures Zambia is better prepared for current and future water challenges.”

GIZ AWARE Project Manager
Mr. Christian Henschel added

”



WARMA Flags Illegal Effluent Discharges in Chingola, Penalizes two Mineral Processing Firms

The Water Resources Management Authority (WARMA) has moved decisively against environmental violations in Chingola, penalizing two mineral processing companies for illegally abstracting water and discharging untreated effluent into the Chingola Stream. The enforcement followed routine monitoring on 16th April 2025 under the Upper Kafue Sub-Catchment.

The companies, Furui Investment Limited and Eastern Golden Wheel Zambia Limited, were found in breach of the Water Resources Management Act No. 21 of 2011, which regulates water use and protects aquatic ecosystems.

What the Inspection Found

- Water was abstracted without valid permits.
- Water pumps were being used for mineral processing.
- Industrial effluent was discharged directly into the stream.

WARMA noted that these activities posed immediate risks to aquatic life and downstream users. The Authority has acted swiftly to enforce penalties in line with the law.

Enforcement Action

- Penalties were issued for illegal water abstraction.
- Penalties were issued for unauthorized effluent discharge.

WARMA has intensified routine inspections, especially in mining-heavy areas such as the Copperbelt and North-Western Provinces, and strengthen compliance outreach to ensure industries understand their obligations.



WARMA Efforts in Protecting the Kaleya Sub-Catchment



WARMA spearheads rehabilitation of the Kaleya Sub-Catchment, ensuring reliable water supply, environmental protection, and equitable access for farmers and communities

Poorly maintained weirs and structures have created small depressions along the river that absorb water, further reducing the flow downstream. While some water seeps into the ground, it is not enough to fully recharge underground sources. Geological studies also confirmed that certain rock formations along the river do not significantly store water, meaning most losses affect the river's surface flow.

The assessment also identified serious environmental pressures. Upstream farming and settlements have encroached on 89 percent of the river's headwater areas.

The Kaleya Sub-Catchment, located in Southern Province covering Chikankata and Monze Districts, is a vital source of water for farming, livestock, and local communities. Over the years, reduced rainfall, higher temperatures, and human activities such as riverbank cultivation, settlements, and poorly constructed hydraulic structures have affected the flow and quality of the Kaleya River. To address these challenges, the Water Resources Management Authority conducted a detailed assessment of water use, river flows, dams, and areas critical for water protection.

The assessment revealed that the Kaleya River is largely seasonal and depends heavily on inflows from the upper catchment. Kirby Dam in the upper zone holds enough water to irrigate about 133 hectares, while Kaleya Dam in the lower zone can support 646 hectares. Monitoring at WARMA's Water Valley Bridge station over five years showed that excess water from the upper catchment is naturally passed downstream, but inefficiencies in the middle part of the river reduce the amount of water reaching Kaleya Dam.



High Turbidity due to sediments

Riparian vegetation and wetland plants, which are crucial for preventing soil erosion and supporting biodiversity, are scarce. Sedimentation from erosion and human activities reduces dam storage and water quality. During the rainy season, the river experiences high turbidity, carrying soil and debris downstream.

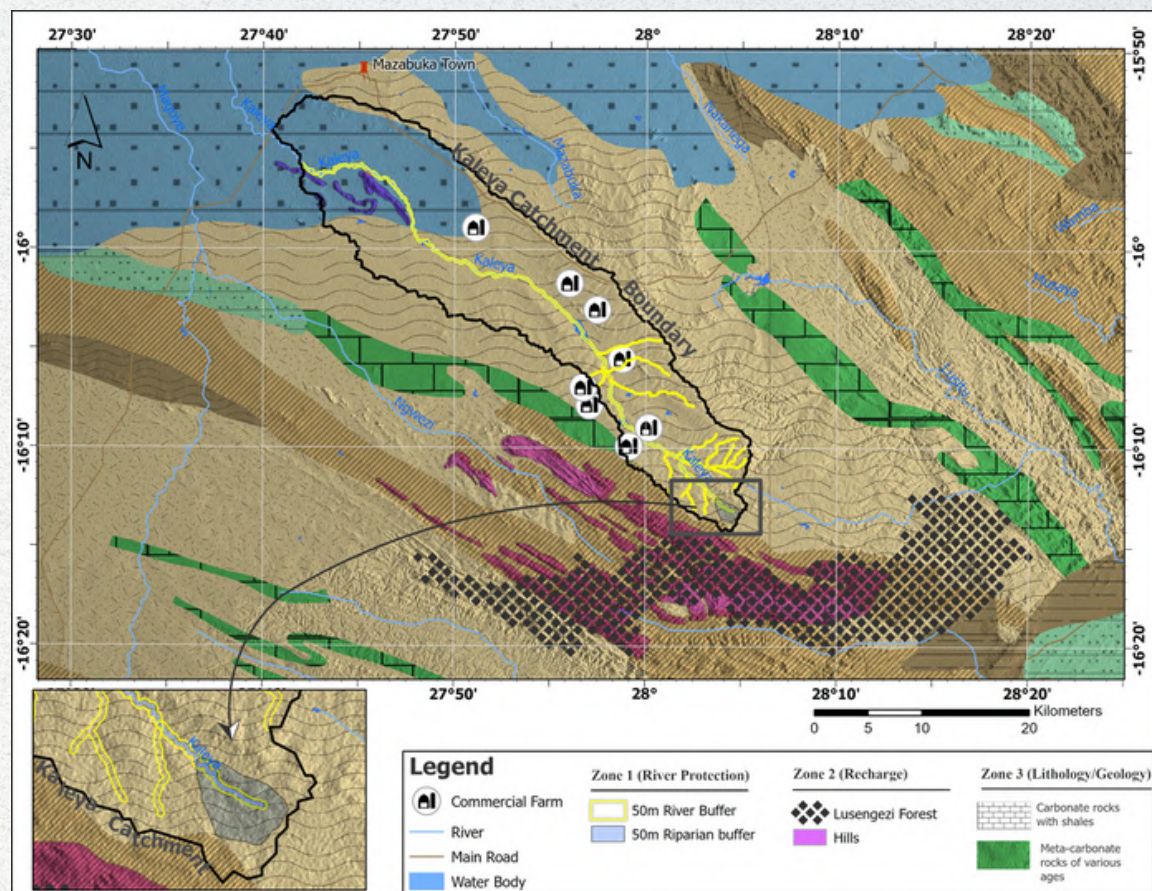
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Despite these challenges, the assessment showed that there is sufficient water in the catchment if properly managed. WARMA is taking practical steps to resolve these issues and ensure water allocation is fair, sustainable, and supports communities, agriculture, and ecosystems. These efforts include:

- Restoring degraded riverbanks and riparian zones through reforestation, planting of native wetland species, and stabilizing river edges to reduce erosion and sedimentation.
- Repairing and upgrading hydraulic infrastructure, including weirs and diversion structures, to improve water flow and minimize losses in the middle reach of the river.
- Improving irrigation efficiency by advising farmers on water-saving practices and encouraging the use of modern irrigation systems that reduce wastage.
- Monitoring and reporting of water use, with WARMA stations like Water Valley Bridge ensuring accurate tracking of abstraction and flow to enforce permits and support equitable allocation.
- Mapping and protection of Water Resources Protection Areas (WRPAs), guiding targeted interventions to safeguard headwaters, recharge zones, and critical ecological areas.
- Community engagement and awareness campaigns to encourage cooperation with water permits, conservation practices, and shared responsibility for sustainable water use.
- Integrated surface and groundwater management to maintain river flows during dry periods and support long-term water security for agriculture and communities.

Based on these findings, WARMA continues to oversee the restoration of riverbanks and riparian zones, improving irrigation infrastructure, implementing stricter monitoring of water use, and fostering collaboration with local communities.

Through these practical actions, WARMA is ensuring that the Kaleya Sub-Catchment remains a reliable source of water for livelihoods, food security, and the environment, demonstrating the Authority's ongoing commitment to sustainable water management in Southern Province.



Water Resources Protection Areas - Kaleya River

Water: A resource we can no longer take for granted

If gold were lying loose on our streets, would we ignore it? Would we let it slip through our fingers or watch it wash away without concern?

Unlikely. Gold, like copper or gemstones, commands respect. We guard it, measure it, and protect it. We assign it great economic value and go to extraordinary lengths to extract and preserve it.

And yet, we do not treat water, which is even more essential, in the same way. For instance, as one walks through the bustling streets of Lusaka or witnesses the quiet struggles of rural communities, a striking contrast becomes evident. People take great care in managing money, fuel, and food, yet water, perhaps the most vital of all, is often treated with indifference.

It seems we have grown too accustomed to its availability, forgetting just how finite and precious it is. This is particularly troubling as Zambia grapples with the harsh realities of climate change, such as one of the worst droughts in Central and Southern Provinces and flooding in the Northern Province (Lake Tanganyika) in the 2023 – 2024 season.

Water is far more than a basic necessity. It nourishes our agriculture, powers our industries, sustains energy production, and supports human life. And yet, we regularly fail to recognise its true value. When water is scarce, entire systems falter, load shedding occurs, fields dry up, businesses stall, and households suffer. In a country so heavily dependent on hydropower, this scarcity does not just affect rural life; it slows the engine of national progress.

At the Water Resources Management Authority, we see these challenges every day, not as distant crises but as urgent realities. The rivers are receding, boreholes are running dry, and communities are raising alarms. These are not isolated incidents; they are signs of a broader issue that calls for a national shift in mindset.

So, how do we begin to change the way we see water?

First, we must acknowledge its true worth. Water may have once seemed abundant, but those days are over. Recognising its economic, social, and environmental value is the first step towards managing it responsibly. We must begin to treat water as a limited and strategic resource.

Second, we need a more sustainable approach to water management. This involves investing in modern infrastructure, embracing efficient technologies, and putting in place fair and enforceable regulations. It means ensuring that those who use the most water are also responsible stewards of it.

Third, we must educate and engage. Water is everyone's concern, not just that of engineers or policymakers. From households to schools, farms to factories, we need to build a culture that values water. A well-informed public is a powerful force for conservation.

Other countries offer us lessons. Australia, for example, has adopted water-saving technologies on a national scale. Israel has turned to innovation such as precision irrigation and water recycling to make every drop count. Zambia can learn from these examples, adapting them to our unique environment.

But more than anything, we must act.

Water is not just something we use. It is a thread that runs through everything: our health, our food systems, our energy supply, and our economy. As a nation, we must shift from taking water for granted to actively protecting and valuing it. This includes conserving water in our homes, fixing leaks, supporting policies that prioritise water security, and holding each other accountable for responsible use. Because water is not just a commodity. It is life.

WARMA at Kuomboka 2025 Celebrating Culture and Water Awareness

In the first week of April 2025, WARMA participated in the annual Kuomboka Ceremony in Western Province, a cultural event that celebrates the Lozi people's heritage and the movement of the Litunga to higher ground during seasonal floods.

WARMA used this platform to engage communities on the importance of water management and the protection of rivers and wetlands. The Authority highlighted the impact of human activities on water quality, emphasizing the need to prevent pollution and protect critical water sources.

Through interactive exhibitions and educational outreach, WARMA shared practical tips on sustainable water use, riverbank protection, and compliance with water permits. Community members were encouraged to report illegal water abstraction, pollution, and encroachments along riverbanks, reinforcing a shared responsibility for water resource conservation.

By participating in Kuomboka, WARMA combined cultural celebration with public education, showing that protecting water is an essential part of preserving Zambia's traditions and ensuring sustainable livelihoods.





WARMA at World Environment Day 2025

Ending Plastic Pollution

WARMA joined the 2025 World Environment Day celebrations in Kabwe, Central Province, held under the iconic Mukuyu Tree. The event focused on the global theme "Ending Plastic Pollution."

As a key guardian of Zambia's water resources, WARMA highlighted the growing threat plastic waste poses to rivers, wetlands, and drainage systems. The Authority emphasized that plastic pollution not only harms aquatic life but also reduces water quality and increases flooding risks.

Through community engagement, WARMA educated attendees on the importance of responsible waste disposal and the consequences of polluting water sources. The Authority encouraged businesses, schools, and households to reduce reliance on single-use plastics, especially near rivers and wetlands.

During the event, WARMA recognized the collaborative efforts of the Ministry of Green Economy and Environment, provincial administrations, and local communities, including school pupils whose creative performances promoted environmental awareness.

WARMA's message was clear: clean water and a plastic-free Zambia begin with each individual's commitment to change. Protecting rivers, lakes, and wetlands ensures a sustainable environment for current and future generations.



Advancing Inclusive Water Security in Africa

WARMA at PANAFCON-3

In May 2025, Zambia hosted the Third Pan-African Implementation and Partnership Conference on Water (PANAFCON-3), bringing together governments, development partners, civil society, academia, and the private sector to discuss Africa's water and sanitation challenges. Under the theme "Assuring inclusive and climate-resilient water security and sanitation for the Africa We Want," the conference emphasized sustainable water solutions for communities across the continent.

WARMA participated actively, sharing insights on water management and highlighting Zambia's experiences.

The Authority engaged in sessions on youth and gender inclusion, empowering young people to monitor rivers, report encroachments, and prevent pollution, while advocating for equitable water access for women and marginalized groups.



Transboundary water management was another key discussion area. WARMA showcased the Kariba Dam as a model for shared water resources, promoting collaboration among countries to ensure sustainable and peaceful management.

Challenges such as water scarcity, rising irrigation demand, weak institutions, low investment, and environmental degradation were addressed. Solutions proposed included enhancing institutional capacity, accelerating basin investments, integrating technology, and promoting research-based planning.

Technical contributions also informed Africa Water Vision Post-2025, including sustainable water availability, sanitation, hygiene, and waste management. In addition, WARMA highlighted the role of the private sector through Environmental, Social, and Governance (ESG) practices to strengthen water security.

Through PANAFCON-3, WARMA reinforced its commitment to inclusive, sustainable, and evidence-based water management in Zambia and across Africa, ensuring communities have access to clean and reliable water resources.



WARMA at ZAWAFE 2025

Walking the Talk on Water Security

From 10th to 12th June 2025, the Mulungushi International Conference Centre hosted the 13th Zambia Water Forum and Exhibition (ZAWAFE). The event brought together water experts, policymakers, private companies, and community leaders under the theme "Integrating Solutions for Sustainable Development: Exploring the Water-Energy-Food and Ecological Nexus."

WARMA's presence went beyond an exhibition. The Authority's booth featured interactive maps, multimedia displays, and live demonstrations showing how WARMA monitors water use, issues permits, tracks pollution, and engages communities.

A key highlight was WARMA's dedicated technical session titled "Water Resources Management: Securing Zambia's Waters." The session featured a series of presentations from WARMA experts addressing different aspects of Zambia's water security. Eng. Levy Museteka opened with the Groundwater Outlook Post-Drought Year, underscoring the urgent need for sustainable groundwater management, particularly in southern regions experiencing severe declines.

Ms. Chisanga Kapacha followed with insights on the Lower Kafue Sub-Catchment Watershed Investment Programme, showing how investments can strengthen catchment protection and community resilience.

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Mr. Chalwe Chibwe addressed the mining sector with his paper on Sustainable Water Resources Management in the Mining Industry: Balancing Resource Use and Environmental Protection, highlighting the delicate balance between economic activity and ecosystem preservation.

This was complemented by Mr. Julius Singogo's Integrated Water Balance Assessment of the Mwomboshi River Catchment, which illustrated how land use and climate patterns influence water availability.

Expanding the groundwater focus, Mr. George Ndhlovu presented an Assessment of Groundwater Dynamics Under Drought Scenario in the Basement Aquifers of Kalumbila District, providing evidence on how aquifers respond under stress conditions. Pollution challenges also came to the fore, with Mr. Goodfellow Mphande's presentation on Water Pollution in the Upper Luangwa Catchment, which proposed declaring the area a Water Resource Protection Area (WRPA) to safeguard water quality.

Rounding off the session, Mr. Kolala Mumba shared findings from the Determination of the Extent of the Recharge Zone for Kabwe's Critical Water Source (Kalulu & Makululu Wellfields), emphasizing the need to protect critical recharge zones that supply water to urban populations.

These presentations not only highlighted WARMA's scientific leadership but also its practical commitment to safeguarding Zambia's water resources. Through evidence-based regulation, awareness creation, and community engagement, the Authority reaffirmed that water management is everyone's responsibility and continues to take bold steps in ensuring water security for generations to come.



WARMA marks Labour Day, Women's Day & Africa Public Service Day

www.warma.org.zm

In the second quarter, the Water Resources Management Authority (WARMA) joined the nation in commemorating Labour Day, International Women's Day and Africa Public Service Day. These observances reaffirmed WARMA's dedication to employee welfare, gender inclusion and institutional excellence in the management of Zambia's water resources.

On Labour Day, the Authority honoured its workforce for their hard work and resilience in advancing sustainable water regulation. During International Women's Day, WARMA celebrated the achievements of women across the institution and the water sector, emphasizing inclusion in leadership, technical and community roles. Africa Public Service Day provided an opportunity to reflect on the importance of competence, integrity and agility in public institutions, while recognizing staff who exemplify WARMA's core values of accountability, service and responsiveness.



These commemorations reinforced key lessons: the workforce is central to WARMA's mission, women's leadership enhances institutional performance, and strong public service ethics are essential to national development and sustainable water management.

As the Authority moves forward, it remains committed to promoting employee growth, gender equality and institutional transformation to ensure that water governance continues to serve both people and the environment effectively.

PHOTO GALLERY

www.warma.org.zm



2025 REGISTERED DRILLING COMPANIES

www.warma.org.zm

Only licensed drilling companies are permitted to conduct any drilling activities. Check the official WARMA list to ensure compliance, protect our water resources, and avoid being swindled out of your hard-earned money.

NO	DRILLERS NAME	CLASS	CONTACT NUMBER	TOWN	PROVINCE
1	Baba Drilling and Exploration Company Ltd	A	979510534	Lusaka	Lusaka
2	Jalapriya Drilling and Exploration Limited	B	971013244	Lusaka	Lusaka
3	Mukuba Boreholes Limited	B	772632333	Kitwe	Copperbelt
4	EKY Drilling & Exploration Limited	B	950292929	Kitwe	Copperbelt
5	Greenland Water Drilling Zambia Limited	B	776959999	Lusaka	Lusaka
6	Shiva Sai Boreholes Zambia Limited	B	976915333	Lusaka	Lusaka
7	Renuka Yellama Drilling and Construction Ltd	B	776728888	Lusaka	Lusaka
8	SAI Drilling & Explorations Limited	B	973240011	Lusaka	Lusaka
9	Sai Tirumala Drilling & Exploration (Z) Limited	B	975871377	Lusaka	Lusaka
10	Zamtech Borehole Drilling	B	777728899	Lusaka	Lusaka
11	Jagan Drilling Zambia Company Limited	B	772661234	Lusaka	Lusaka
12	Nova Drilling Company Limited	B	971717158	Lusaka	Lusaka
13	Shiva Ganesh Boreholes Limited	B	971131111	Lusaka	Lusaka
14	Simplex Drilling and Construction Limited	B	977556789	Lusaka	Lusaka
15	Srujala Tech Limited	B	977223255	Lusaka	Lusaka
16	Himalaya Drill Tech Limited	B	976444555	Lusaka	Lusaka
17	EF Drilling and Exploration Limited	C	777829718	Lusaka	Lusaka
18	Lusitu Drilling & Exploration Limited	C	974041247	Lusaka	Lusaka
19	Luckydrops Boreholes Zambia Limited	B	978126999	Lusaka	Lusaka
20	STS Drilling & Exploration Limited	B	971630052	Lusaka	Lusaka
21	Victoria Drilling & Exploration Limited	B	971630052	Lusaka	Lusaka

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22	Aquatech Drilling	B	977871691	Lusaka	Lusaka
23	MLR Drilling & Exploration Limited	B	972139999	Lusaka	Lusaka
24	Litch Boreholes & Construction Limited	B	971433333	Lusaka	Lusaka
25	Finecop Zambia Limited	B	979641181	Lusaka	Lusaka
26	Premium Drilling and Construction Limited	B	976111222	Lusaka	Lusaka
27	Zamking Drilling Limited	B	776333333	Lusaka	Lusaka
28	Simbi Water Wells Limited	D	977826144	Mongu	Western
29	Malsam Construction & Supplies Company Ltd	D	979665009	Monze	Southern
30	Nada Well drillers Limited	D	979468882	Mongu	Western
31	Sioma Drilling Company Limited	D	973222549	Sioma	Western
32	Stechi hydro wells & General Dealers Ltd	D	962767281	Mongu	Western
33	RR Drilltech Limited	B	979869999	Lusaka	Lusaka
34	Hydrotech drilling & Exploration Limited	B	971978552	Lusaka	Lusaka
35	Mugodi Drillers	C	979272508	Lusaka	Lusaka
36	Lion Drilling Company Limited	B	954416999	Lusaka	Lusaka
37	United Drilling and Exploration Company Ltd	B	973321222	Lusaka	Lusaka
38	Laxmi Srinivasia Drilling and Exploration Ltd	B	974538008	Lusaka	Lusaka
39	VSV Drilling and Exploration Company Limited	B	974787362	Lusaka	Lusaka
40	Cashmo Contractors and General Dealers Ltd	C	975230397	Mazabuka	Southern
41	Muchingo Water Wells and Construction Ltd	D	771183732	Mongu	Western
42	JC Drilling and Exploration Limited	B	973555666	Lusaka	Lusaka
43	Sri Tirumala Drilling and Exploration Limited	B	77777209	Lusaka	Lusaka
44	Gnkan Engineering and Construction Limited	D	979046200	Lusaka	Lusaka

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NO	DRILLERS NAME	CLASS	CONTACT NUM	TOWN	PROVINCE
45	Tigala Nagi Reddy Drilling and Construction	B	975889999	Lusaka	Lusaka
46	Kamu Creditor Limited	D	977474122	Kalabo	Western
47	Mboomuyunda Three Business Ventures Lt	D	977977375	Mongu	Western
48	Heptagon Engineering Limited	D	978826988	Lusaka	Lusaka
49	Smuz Business Ventures	D	973565850	Limulunga	Western
50	Taru General Dealers	D	976191153	Mongu	Western
51	Barocon General Dealers	D	976187526	Limulunga	Western
52	Vacuum Drilling & Construction Limited	B	972667788	Lusaka	Lusaka
53	Prime Drill Tech (Z) Limited	B	973577277	Lusaka	Lusaka
54	Golden Drill Tech Limited	B	777956666	Lusaka	Lusaka
55	Atlas Drilling & Construction Limited	B	972111222	Lusaka	Lusaka
56	Sana Drilling Limited	B	771111116	Lusaka	Lusaka
57	Star Waterwell Drilling & Exploration Ltd	B	977209999	Lusaka	Lusaka
58	Global Samaritans	B	965893365	Livingstone	Southern
59	Blue Desert	D	966502304	Lusaka	Lusaka
60	Gallant Drilling and Exploration	B	977803964	Lusaka	Lusaka
61	Gift Aquasolutions	C	977859323	Lusaka	Lusaka
62	Inafrica Drilling and Exploration Limited	A	966907474	Kitwe	Copperbelt
63	Rainbow Drilling and Exploration Limited	B	977496133	Lusaka	Lusaka
64	Sahara Drilling and Exploration Limited	B	779555999	Lusaka	Lusaka

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NO	DRILLERS NAME	CLASS	CONTACT NUM	TOWN	PROVINCE
65	Sathya	B	776111666	Lusaka	Lusaka
66	Seven Hills Drilling and Exploration Limited	B	977951885	Lusaka	Lusaka
67	SRR water Wells	B	976112255	Lusaka	Lusaka
68	Sunshine Boreholes (Z) Limited	B	974567788	Lusaka	Lusaka
69	Apa Njeke Hardware Limited	D	955746311	Mongu	Western
70	Asbuilt Construction and General Dealers	D	965318634	Sioma	Western
71	CTR Drilling	B	776283637	Kasama	Northern
72	Datta Drilling Limited	B	977850153	Kasama	Northern
73	Nakasinde General Dealers	D	977241160	Mongu	Western
74	sustainable Water Solutions	D	977996984	Monze	Southern
75	Vignesh Drilling and Exploration Limited	B	973153888	Lusaka	Lusaka
76	Mafisa Community Transformation Trust Ltd	C	977773171	Lusaka	Lusaka
77	Munasiwange General Dealers	D	954639071	Sikongo	Western
78	SMR Construction	B	977521122	Choma	Southern
79	Bakwetu Engineering and General Dealers Ltd	D	760724475	Lwampa	Western
80	Sinda Construction and Logistics Limited	D	970517174	Luanshya	Copperbelt
81	Zambezi Drilling and Exploration Limited	A	975818229	Lusaka	Lusaka
82	Sun Water Well Drilling Limited	B	972334455	Lusaka	Lusaka
83	Soni Boreholes Limited	B	978335577	Lusaka	Lusaka
84	China Gansu Engineering Corporation Zambia I	A	977355632	Lusaka	Lusaka
85	Laxmi Nrusimha Boreholes	B	776929999	Lusaka	Lusaka
86	KR Drilling and Exploration Limited	B	972939999	Lusaka	Lusaka
87	Davisbet Enterprise Limited	D	978320684	Mazabuka	Southern

Contact us

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P.O Box 51059
Tell : +260 211 251 934 Email:
info@warma.org.zm w

Kafue Catchment

Lusaka Office
Block 30, Annex, Mulungushi
House P. O. Box 51059
Tel: +260 211-251 934
Lusaka

Kafue Catchment

Ndola Office
Plot No 8291, Chimbotele
Close Cell: +260 965 920
269 Town Centre,
Ndola., Zambia

Kafue Catchment

Solwezi Office
Department of Water
Resources Development
Along Independence Avenue
Solwezi
Cell: +260976932999

Chambeshi Catchment

Kasama Office
Plot No 1486 Mukulumpe Rd,
Central Town Cell: +260
977405352/ +260 212 277 030
Kasama, Zambia

Mansa Office

Department of Water Resources
Development
Along Cathedral Road
P.O Box 710032
Cell: +260 978- 258008
Mansa, Zambia

Zambezi Catchment Livingstone Office

Plot No 28 John Hunt Way
Cell: +260 954 643271/
0972742695 Livingstone,
Zambia

Luangwa Catchment Chipata

Department of Water
Resources Development
Along Umodzi Highway
Adjacent to Old National
Brewery Opposite Living
Water Poster
Cell: +260 976-600868
Chipata, Zambia

Luangwa Catchment

Kabwe Office
Plot No 2005/6
Dambo Road
Cell: +260 974 878 698
Kabwe, Zambia



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