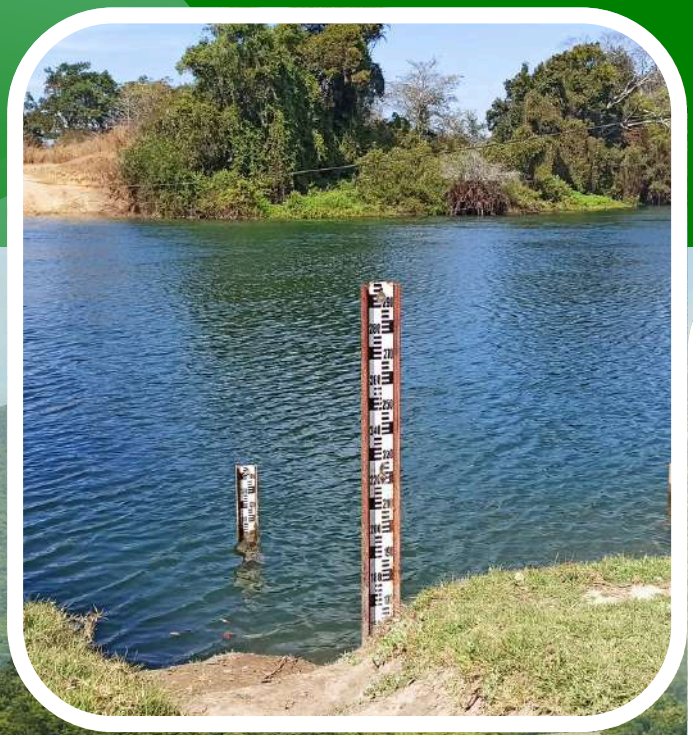
January - March 2025

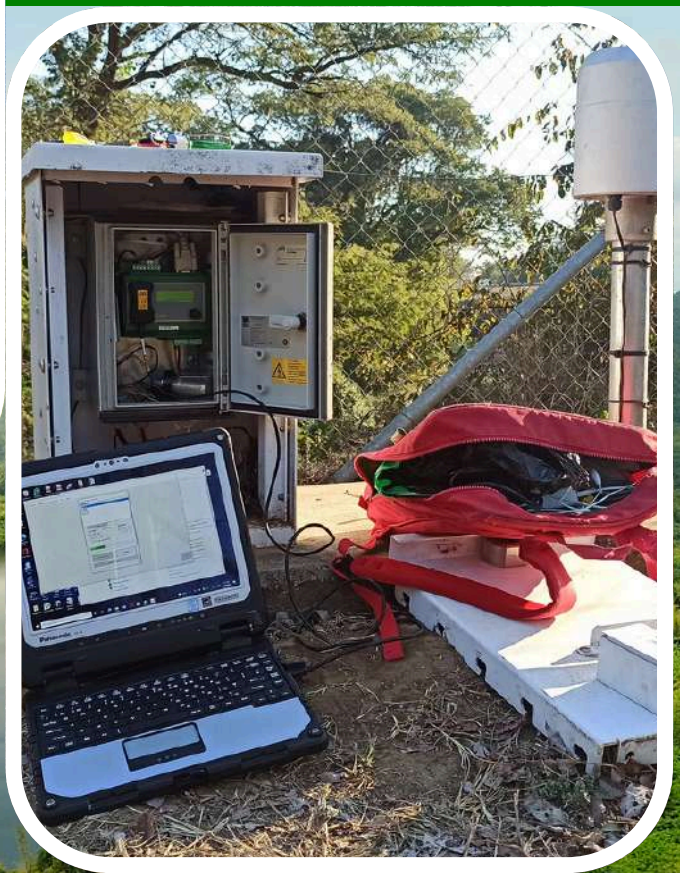
Water Conversations

Water Resources Management Authority

Quarterly Dialogue of Insights and Actions on Zambia's Water Future

A Newsletter by the Water Resources Management Authority (WARMA)





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Water Resources Management Authority

What to Expect in this Issue

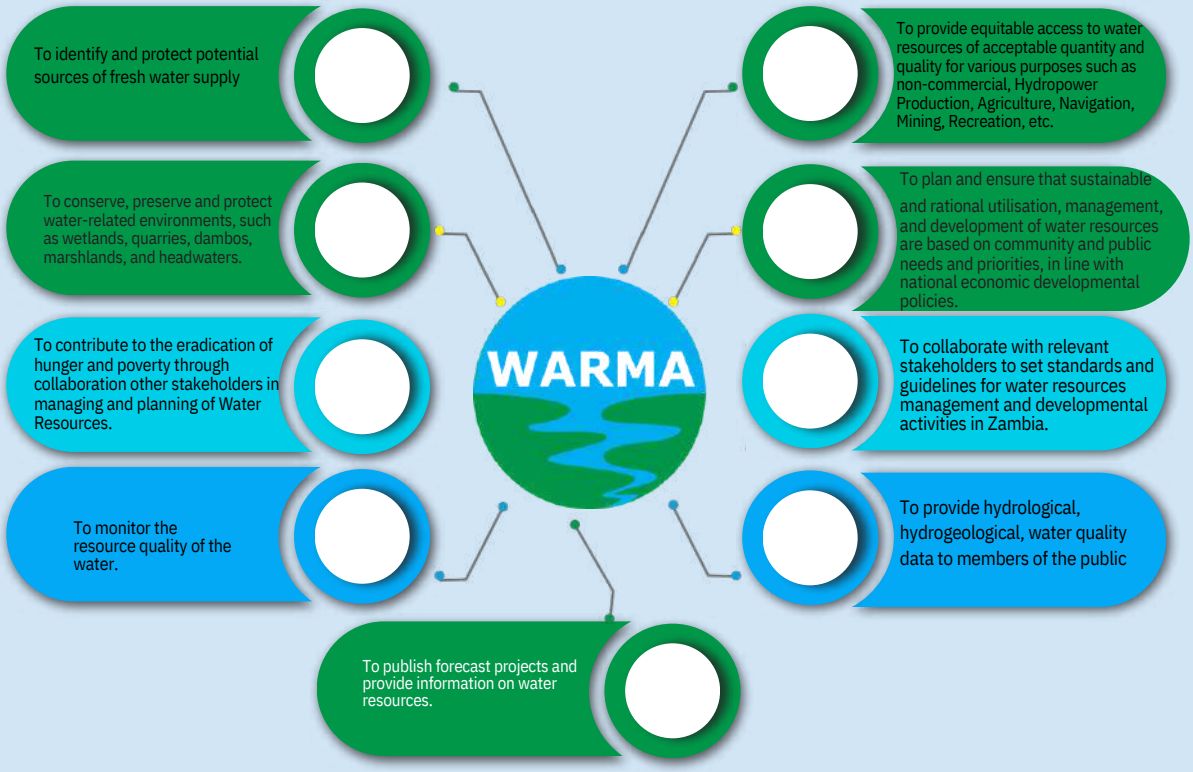
Water Resources Management Authority

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.

Editor's Note

Welcome to this edition of Water Conversations, the quarterly newsletter of the Water Resources Management Authority (WARMA). In this space, we explore how Zambia is managing one of its most essential and life-sustaining resources—water.

As Editor in Chief, I have had the privilege of working closely with our contributors, experts, and partners to shape a publication that goes beyond the headlines. The articles in this issue were carefully selected and thoughtfully crafted to reflect the real, often complex work being carried out by WARMA and the government across the country, from restoring threatened catchments to strengthening legal frameworks and advancing data-driven decision-making in water resource management. Each story represents not just information but intention.

We asked ourselves tough questions: What does resilience look like in practice? How do we balance development with protection? And how do we ensure our policies translate into meaningful change for water users at every level?

I am grateful to everyone who helped bring this issue to life, the WARMA teams in the field and at headquarters, our partners in government and civil society, and the many individuals who shared insights and experiences that helped shape this content.

This newsletter is written with you in mind, whether you are a policymaker, a water permit holder, a researcher, a community leader, or simply someone who understands that water matters.

I hope it informs, challenges, and inspires you to engage more deeply in the stewardship of Zambia's water resources. Your active participation is vital to building a resilient and sustainable future for all.

Thank you for reading.

Warm regards

Smart Kalaluka

Foreword from the Director General

Water resources are the backbone of Zambia's sustainable development and environmental well-being.

Effective management of these vital resources is essential to support our agriculture, industry, ecosystems, and the livelihoods of every Zambian. In the face of increasing pressures from climate variability, population growth, and human activities, it is imperative that we deepen our commitment to protecting and sustainably managing our water resources.

This edition of the WARMA newsletter brings together critical updates on our ongoing efforts to strengthen water security across the nation.

From advancing legal frameworks and enhancing monitoring systems to engaging local communities and key stakeholders, these stories reflect the breadth and depth of work required to meet Zambia's water challenges head-on.

Our coverage highlights Zambia's evolving water governance landscape, with a focus on strengthened groundwater and surface water monitoring, the declaration of Water Resources Protection Areas, and the implementation of the National Rainwater Harvesting Strategy.

These initiatives underscore WARMA's commitment to evidence-based regulation, community engagement, and sustainable water resource management.

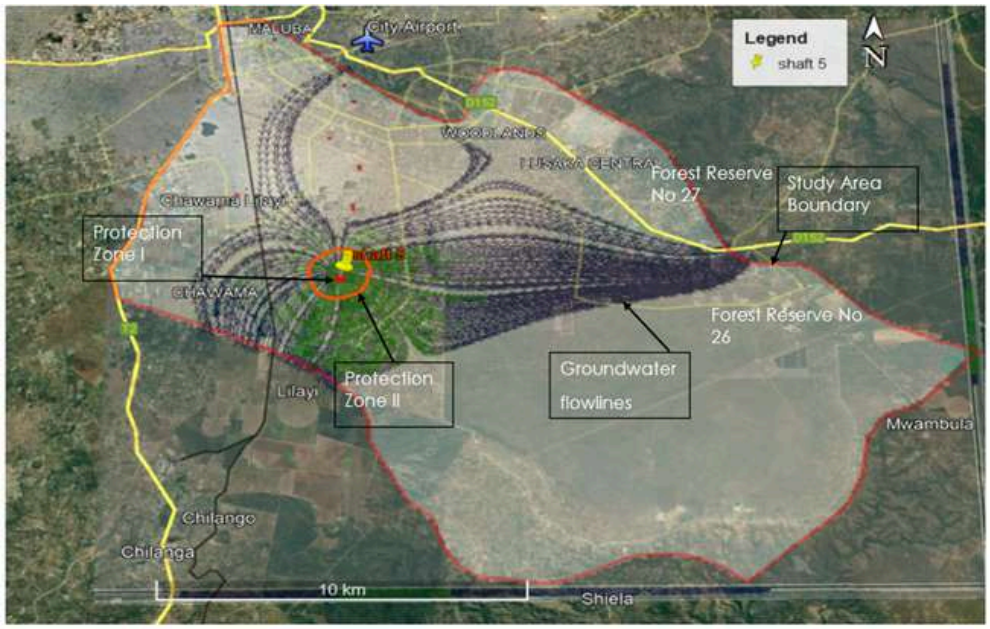
I encourage all readers, government agencies, local communities, permit users, water users at every level, development partners, and private sector actors to actively engage with this newsletter, share knowledge, and join us in safeguarding Zambia's water resources. Together, we can build resilience and ensure these precious resources continue to sustain generations to come.

Let us remember that "The future belongs to those who manage water wisely today." Our collective efforts today will shape the water security and prosperity of Zambia tomorrow.

Misozi Ngulube-Lumpa (Mrs.)
Acting Director General

> **"Water is the backbone of Zambia's development. Its protection is our shared responsibility."**

WARMA takes bold action to secure Zambia's most vulnerable water sources for future generations



Picture shows Total Capture Zone and indicating the groundwater flow direction at Shaft 5 Wellfield

Zambia's water future hinges on decisive action today. In the race against environmental degradation and urban expansion, WARMA is advancing bold measures to shield the nation's most vulnerable water sources and chart a sustainable path for generations to come.

The Water Resources Management Authority (WARMA) is intensifying its protection of Zambia's critical water bodies, aquifers, and other vital sources. Through declaring Water Resources Protection Areas (WRPAs) and strengthening monitoring and enforcement, WARMA is demonstrating a strong commitment to securing the nation's water resources amid growing human pressure and environmental challenges.

Zambia's water resources face mounting stress from human activities. Population growth and rapid urban expansion have dramatically altered natural landscapes, leading to riverbank cultivation, sand mining, deforestation, and the construction of settlements within sensitive riparian and recharge zones.

These practices pose serious threats to critical ecosystems such as headwaters, aquifers, recharge zones, and wellfields.
To proactively address these threats, WARMA continuously conducts nationwide mapping exercises to identify surface and groundwater sources at high risk from encroachment, cultivation, mining, and unregulated development.

We cannot afford to lose even one of our headwaters. These protections today will safeguard our water tomorrow.

Declaring Protected Zones: A Strategic Step Forward

Building on this comprehensive threat assessment, WARMA has identified three high-priority areas for immediate designation as Water Resources Protection Areas:

- **Kabompo River Catchment**
- **Upper Lutembwe River Catchment**
- **Shaft 5 Wellfield in Lusaka**

These areas have been delineated and are undergoing the legal process for formal protection

Kabompo River Catchment: A Hydrological and Ecological Treasure

Located within the Upper Zambezi Basin, the Kabompo River Catchment supports local communities and holds significant hydropower potential. The region includes over 37 forest reserves and the ecologically rich West Lunga National Park but faces pressure from mining activities, with 44 percent of its land covered by mining licenses, some encroaching on headwaters and protected forests.
WARMA has zoned the catchment into two protection levels to prevent irreversible environmental damage:

- Zone I permits only essential water-related activities.
- Zone II allows controlled eco-friendly practices such as conservation farming, beekeeping, and sustainable land use.

These measures aim to preserve water quality while allowing sustainable use of natural resources.

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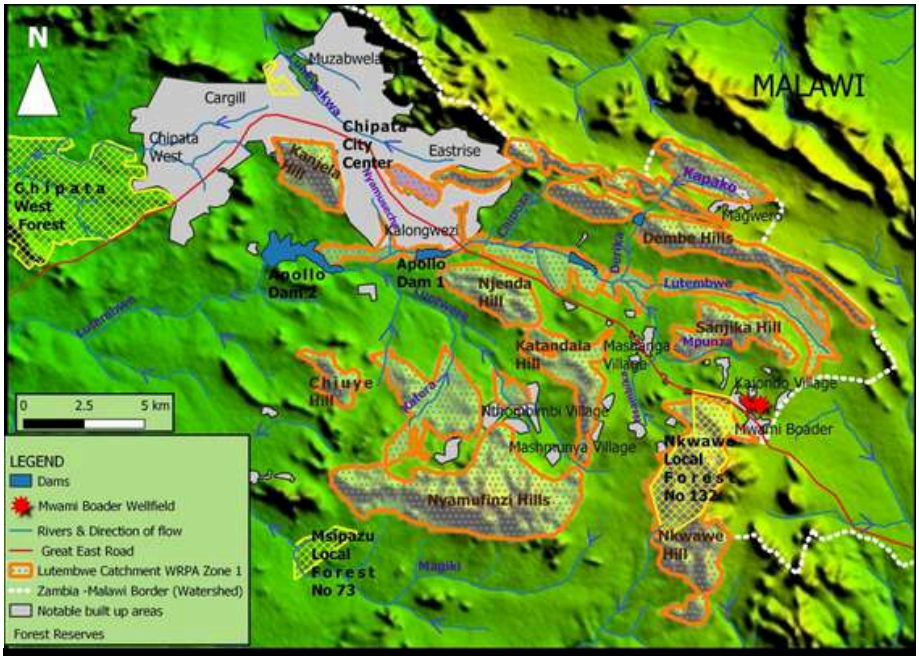
Upper Lutembwe Catchment: Safeguarding Chipata's Water Supply



DEM map showing delineated WRPAs Zones I, for Upper Lutembwe River Catchment

In Eastern Province, the Upper Lutembwe Catchment is the main water source for Chipata city. However, unregulated agriculture, widespread deforestation, and illegal brick-making have degraded dam capacities and water quality. WARMA has established zones to limit harmful activities while collaborating with local authorities to identify suitable development areas away from sensitive water zones.

What Comes Next?

WARMA's roadmap for WRPA implementation includes:

- Submitting detailed maps to the Surveyor General's office
- Drafting legal instruments for formal WRPA declarations by the Minister of Water Development and Sanitation
- Conducting public awareness and sensitization campaigns in affected communities
- Collaborating with local authorities, utilities, and environmental agencies to enforce new regulations

The declaration of these protected areas reflects WARMA's firm commitment to sustainable water resource management. As human and environmental pressures grow, proactive, science-based interventions are vital for today and the future.

Through robust planning, legal safeguards, and multi-stakeholder collaboration, WARMA is leading Zambia's efforts to protect its most valuable natural resource: water.

Shaft 5 Wellfield: Groundwater Protection for Lusaka

Located in Chilanga District, the Shaft 5 Wellfield supplies about 22 percent of Lusaka's municipal water. Urban sprawl, poor waste disposal, and unregulated industrial activities threaten this vital groundwater source.

To protect it, WARMA has created three concentric protection zones:

- Zone I strictly prohibits all human activity.
- Zones II and III enforce strict controls on waste disposal, construction, and hazardous materials use.

These protections help prevent aquifer contamination and ensure long-term water security for the capital city.

Picture showing Groundwater Protection Zones I and II at Shaft 5 Wellfield

Safeguarding Groundwater: WARMA's Oversight Ensures Responsible Dewatering at Shaft 28

When water is pumped out of a mine or construction site, a process known as dewatering, it requires careful planning and regulation to prevent environmental harm. In Zambia, the Water Resources Management Authority (WARMA) plays a central role in overseeing these processes, guided by the Water Resources Management Act No. 21 of 2011. WARMA's regulatory oversight ensures that such activities are conducted in a way that safeguards communities, ecosystems, and the nation's precious water resources.

Currently, WARMA is overseeing a large-scale dewatering operation at CNMC Luanshya Copper Mines, commonly known as Shaft 28, in Luanshya Town, Copperbelt Province. This project, commissioned by President Hakainde Hichilema in early 2024, aims to remove 170 million cubic meters of water from a flooded underground mine over two years. With the water ultimately entering the Kafue River system, WARMA has taken a leading role in ensuring that the dewatering process supports national development without compromising environmental safety.

WARMA's proactive approach includes comprehensive assessments of both surface and groundwater systems, ensuring the discharged water supports ecological integrity while benefiting nearby communities. By closely observing impacts on the Kafue River and its tributaries, WARMA has demonstrated its commitment to science-based decision-making and environmental protection.

One positive outcome WARMA has documented is the revival of the Nkulumashiba Stream, a non-perennial watercourse that now flows continuously due to the dewatering process. This has enhanced local livelihoods, enabling activities like gardening, which were previously limited due to seasonal water scarcity.

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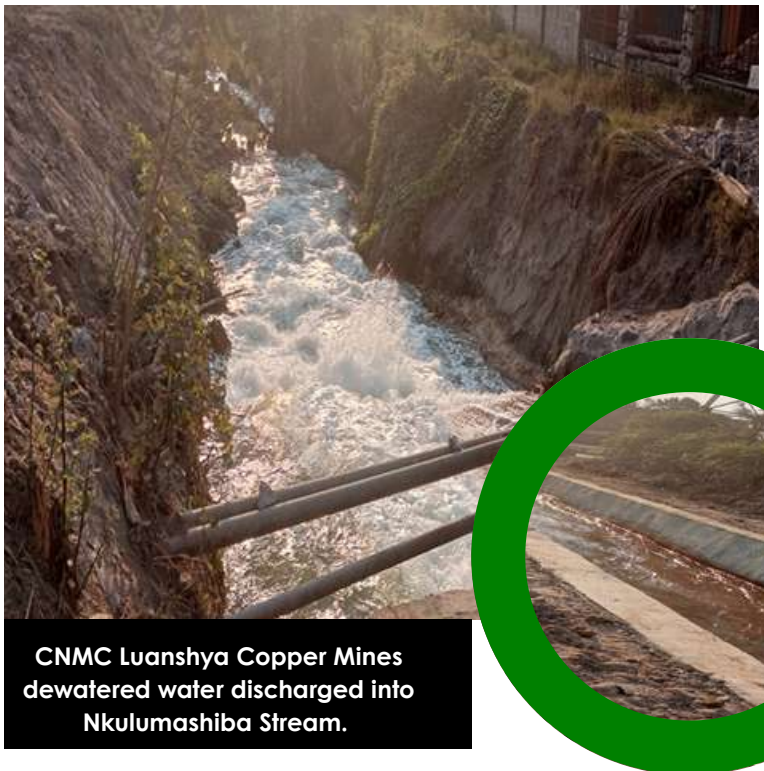


CNMC Luanshya Copper Mines dewatered water discharged into Nkulumashiba Stream.

Although the dewatered water contributes to base flows in the Kafue River, WARMA's monitoring has revealed that much of it is absorbed by downstream wetlands. This level of hydrological analysis reinforces the Authority's focus on long-term ecosystem health and water balance.

To bolster groundwater sustainability, WARMA has mandated the expansion of monitoring infrastructure in collaboration with CNMC Luanshya Copper Mines. With four monitoring boreholes already active, the Authority has directed the development of additional stations to track groundwater levels and ensure the continued availability of clean water for surrounding communities.

In its commitment to transparency and accountability, WARMA requires the mine to submit monthly dewatering reports. These reports detail volumes pumped, groundwater levels, and key water quality indicators such as pH, conductivity, and heavy metals. This data enables WARMA to take timely action, ensuring compliance with Zambian and WHO standards and protecting aquatic life and human health.

Understanding the potential effects on aquifers and community boreholes, WARMA has taken steps to closely monitor groundwater drawdowns, which in some cases reach up to two meters per week. By tracking these shifts, WARMA safeguards water access for communities while allowing industrial operations to proceed responsibly.

This balanced, evidence-based oversight illustrates WARMA's unwavering dedication to managing Zambia's water for people, nature, and development. The Authority's work on the Shaft 28 project exemplifies how strong regulation can harmonize environmental stewardship with national progress.

DEWATERING: CHALLENGES AND OPPORTUNITIES

Negative Impacts Identified and Managed by WARMA:

- Continuous dewatering may reduce local water tables, impacting community wells and shallow boreholes. WARMA is actively monitoring and engaging with communities to mitigate these effects.

- Large-volume pumping could alter groundwater flow directions. WARMA's expanded borehole network is designed to detect and manage such shifts early.

Positive Impacts Supported by WARMA's Oversight:

- Improved employment and economic activity in Luanshya District, driven by renewed mining operations.

Increased water availability has supported year-round gardening, boosting household incomes in nearby communities.

- Rising flows into the Kafue River may indirectly contribute to higher Kariba Dam levels, supporting hydropower generation.

Permit Regulation to Ensure Safe Operations

WARMA, has adjusted the allowable dewatering volumes from 9,000 to 396,000 cubic meters to reflect the scale of the operation. This variation, granted under strict conditions, enables safe, regulated dewatering while ensuring the long-term protection of Zambia's water table and aquatic systems.

Engaging Stakeholders for Enhanced Water Management:

The Ongoing Review of Zambia's Water Resources Management Act No. 21 of 2011

Since its enactment, the Water Resources Management Act No. 21 of 2011 has served as Zambia's foundational legal framework for the regulation, development, and protection of the country's water resources. It established the Water Resources Management Authority (WARMA) and enshrined principles of equity, sustainability, and catchment-based governance in the national water management landscape.

Over thirteen years, the Act has helped transform water governance in Zambia. However, with growing pressures such as climate change, population growth, and emerging policies, the need to modernize and align the law with current realities has become imperative. In response, the Ministry of Water Development and Sanitation, in collaboration with WARMA and partners, has initiated a comprehensive review process to ensure the Act remains responsive, efficient, and inclusive.

Aligning with Contemporary Policies and Strategies

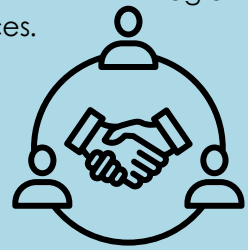
A key objective of the review is to harmonize the Act with the revised 2024 National Water Policy, which emphasizes multi-stakeholder governance, climate-resilient planning, and innovative financing mechanisms. The process will also incorporate Zambia's Rainwater Harvesting Strategy, which promotes decentralized water storage solutions at the catchment level—vital for rural water security.

WARMA is also advocating for a revision to the 60-day water permitting period, aiming to streamline regulatory processes while maintaining rigorous environmental safeguards. The proposed amendment is intended to boost business efficiency, improve investor confidence, and accelerate sustainable development.

"To promote business efficiency and support development, WARMA is advocating to reduce the current sixty-day permitting period while preserving essential environmental safeguards."

Strengthening Compliance and Enforcement

Another priority is to enhance enforcement provisions within the Act. WARMA has proposed clearer compliance protocols and stiffer penalties for pollution and illegal water abstraction, which will empower the Authority to better safeguard water quality and uphold ecosystem health. Additionally, the review seeks to ensure the Act reflects Zambia's commitments under international water agreements, promoting greater alignment with regional cooperation frameworks and global best practices.



Stakeholder Engagement at the Core

Central to this process are a series of stakeholder engagements that bring together line ministries, development agencies, conservancy institutions, civil-society organizations, cooperating partners, media representatives and members of the public.

These forums offer a platform for evidence-based submissions, allowing participants to share challenges, propose solutions, and shape the amendment bill from the ground up.

Insights from the Ground: Stakeholder Proposals

Several key proposals have emerged from consultations:

- Use of technology such as remote sensing and GIS for real-time monitoring of water abstraction
- Decentralized governance, empowering communities through Water User Associations (WUAs)
- Increased investment in rainwater harvesting and climate-smart irrigation technologies
- Agile board structures to enhance WARMA's responsiveness
- Expansion of the Water Development Trust Fund mandate to support both water management and sanitation infrastructure

These inputs are being synthesized to inform the drafting of a modernized legal framework that ensures efficiency, accountability, and adaptability in water governance.

A Progressive Legal Framework for the Future

The review of the Act is currently in its stakeholder engagement phase, gathering inputs from all corners of the sector. Once finalized, the proposed amendments will support Zambia's journey toward:

- Integrated water governance
- Climate resilience
- Universal access to safe water and sanitation by 2030

WARMA remains committed to facilitating this transformation, ensuring that Zambia's water laws are fit for purpose in an era of change, complexity, and opportunity.

Ministry of Water Development and Sanitation Permanent Secretary, Eng. Romas Kamanga officiating at a Stakeholders Engagement Meeting in Lusaka at Taj Pamodzi Hotel on 13th February, 2025 as part of the on-going process to review the Water Resources Management Act No. 21 of 2011.
The engagements are being held to enable various stakeholders present their submissions.

Turning the Tide:
WARMA and Government's Response to the Copperbelt Water Pollution Crisis

On 18th February 2025, a catastrophic failure occurred at a tailings storage facility operated by Sino Metals Leach Zambia Limited in Chambishi township of Kalulushi District. This incident released approximately 50,000 cubic meters of acidic effluent into the Chambishi River, a tributary of the Mwambashi River, which in turn feeds into the Kafue River. The spill led to widespread environmental damage and posed significant risks to public health and livelihoods across Zambia's Copperbelt and Central Provinces.

In response, the Zambian government, through the Ministry of Water Development and Sanitation and the Water Resources Management Authority (WARMA), initiated a series of immediate and long-term interventions to mitigate the disaster's impact. WARMA conducted extensive water quality assessments at more than 20 strategic sites along the affected rivers.

These assessments measured parameters such as pH, electrical conductivity, total dissolved solids, turbidity, sulfates, and heavy metals. Notably, pH levels at certain locations dropped as low as 1.91, indicating extreme acidity. Concentrations of heavy metals like manganese, copper, lead, cobalt, and zinc exceeded both the Zambian Ambient and Drinking Water Quality Standards, making the water unsafe for both human consumption and aquatic life.

To neutralize the acidic conditions, the Zambia Air Force, in collaboration with other agencies, deployed aerial and ground operations to apply lime along a stretch of more than 100 kilometers of the Kafue River. This intervention successfully stabilized pH levels within the acceptable range of 6.0 to 9.0.

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In addition, WARMA mandated Sino Metals to install real-time water quality monitoring systems to ensure continuous assessment and early detection of potential pollutants.

Recognizing the need for comprehensive remediation, WARMA directed Sino Metals to engage independent consultants to conduct thorough environmental impact assessments and implement appropriate mitigation measures. These assessments aim to evaluate the extent of contamination and guide cleanup efforts, including the removal of residual pollutants from riverbeds and the restoration of affected ecosystems. Furthermore, WARMA has intensified regulatory enforcement by issuing directives to the polluter in accordance with the Water Resources Management Act No. 21 of 2011. This is intended to ensure compliance and prevent future incidents.

Beyond immediate response measures, the government is advocating for the adoption of the "Polluter Pays" principle. This proposed legal framework would hold polluting entities financially and legally accountable for environmental damages. The approach aligns with Zambia's commitment to sustainable resource management and corporate responsibility.

To strengthen preventive action, the Ministry of Water Development and Sanitation, in partnership with WARMA, the Zambia Environmental Management Agency (ZEMA), and the Mine Safety Department, is conducting audits of all tailings facilities in the Copperbelt and Northwestern Provinces. These audits aim to assess structural integrity and enforce stricter compliance with environmental regulations.

The government is also prioritizing community engagement and support. Efforts include public awareness campaigns to educate local populations on water safety, the establishment of emergency response teams to address future environmental crises, and directives for responsible companies to compensate affected households and restock fish in contaminated rivers to help restore aquatic biodiversity.

This incident underscores the critical importance of robust environmental oversight and proactive measures to protect Zambia's vital water resources. Through coordinated action and strengthened regulatory frameworks, the government is working to prevent similar disasters and ensure the long-term health and sustainability of the nation's ecosystems and communities.

Hon. Eng. Collins Nzovu, MP

Kitwe Indaba Demands Urgent Action as Copperbelt Faces Mining-Induced Water Pollution Crisis

The Ministry of Water Development and Sanitation, in collaboration with the Water Resources Management Authority (WARMA) and other stakeholders, convened a high-level Water Pollution Indaba on 11th March 2025 in Kitwe, Copperbelt Province. The forum brought together regulators, mining companies, environmental specialists, civil society, and local communities to urgently address the escalating water crisis linked to mining-related pollution in the region.

The focus of the Indaba was the contamination of the Kafue River and other key water bodies following the failure of tailings containment facilities at Sino Metals and Rongxing mines. The crisis has triggered widespread concern over public health, ecosystem degradation, and long-term water security.

Government Leads Call to Action

In a strong statement, Minister of Water Development and Sanitation, Hon. Eng. Collins Nzovu, condemned the environmental lapses and reaffirmed the government's commitment to holding polluters accountable.

He was joined by Minister of Mines and Minerals Development, Hon. Paul Kabuswe, and Copperbelt Province Minister Elisha Matambo, who echoed the urgency of the situation and pledged coordinated intervention.

WARMA's Role as Regulator and Technical Partner

As the regulatory body mandated to manage Zambia's water resources, WARMA is at the forefront of the response efforts. Acting Director General, Mrs. Misozi Ngulube-Lumpa, emphasized WARMA's continued role in monitoring and enforcement:

KEY RESOLUTIONS OF THE INDABA:

1 Formation of a Technical Task Force

An expert team will conduct structural integrity assessments of mining tailings dams across the Copperbelt and North Western Provinces

2. Accountability and Transparency

Regulatory mechanisms will be tightened to ensure that polluters are held accountable.

3. Stronger Environmental Policies

Emphasis on revising laws to empower enforcement agencies and prevent future environmental lapses.

4. Community Engagement and Compensation

Affected communities will be involved in recovery efforts and fairly compensated for the damage endured.

5. Long-Term Ecosystem Restoration

Restoration of degraded ecosystems and the implementation of clean-up operations were agreed as non-negotiable priorities.

6. Sustainable Mining Advocacy

Mining firms were urged to adopt practices that align with Zambia's broader environmental and water conservation goals.

Hon. Nzovu concluded with a resounding call for sustained collaboration:

"The time for action is now. We must all take responsibility for protecting our water resources—not just for today, but for generations to come."

WARMA's Continued Commitment

As Zambia's water regulator and custodian of the nation's water resources, WARMA remains committed to enforcing standards, monitoring water quality, and working with stakeholders to protect and preserve our water bodies.

> **"WARMA will continue to monitor the situation and work with all relevant stakeholders to ensure that the necessary actions are taken to protect our water bodies."**

WARMA Unveils Web-Based Water Quality Monitoring System to Strengthen Public Health and Environmental Protection

The Water Resources Management Authority (WARMA) has unveiled a new web-based Water Quality Management Information System (WQMIS)—a powerful platform designed to monitor, analyze, and respond to water quality challenges across Zambia. This system will support data-driven decision-making to safeguard public health, protect aquatic ecosystems, and improve regulatory oversight of both surface and groundwater resources.

Speaking at the launch and staff training session held at WARMA Headquarters in Lusaka later last year, Acting Director General Misozi Ngulube-Lumpa emphasized that the WQMIS is a major milestone in WARMA's commitment to enhancing access to water quality data for national institutions, stakeholders, and the public.

"The WQMIS will provide real-time insights that are essential for timely and informed interventions in water quality management," she said.

The system facilitates early detection of pollution from mining, agriculture, and industrial sources, allowing regulators to take preventive action before contamination escalates. This proactive approach reduces the risk of waterborne diseases and improves treatment efficiency, especially for commercial utilities.

Beyond public health, the WQMIS plays a key role in environmental protection. With its ability to track pollution sources and long-term water quality trends, the system will support restoration strategies for degraded ecosystems and contribute to sustainable catchment management.

Developed in partnership with Aquaquest Ltd and Corelink Consulting Ltd, the WQMIS is being deployed across all WARMA catchment offices. Its web-based design ensures nationwide accessibility, positioning Zambia at the forefront of technology-driven water governance in the region.

As Zambia continues to face growing environmental and climate pressures, this system reaffirms WARMA's commitment to regulatory innovation, transparency, and effective service delivery for the benefit of all water users.

WARMA Acting Director General Mrs. Misozi Ngulube-Lumpa poses with district officials in Luangwa during a tour to engage farmers and local leaders in selected SCRALA districts. The visit was part of WARMA's efforts to support rural communities in adapting to climate stressors and enhancing preparedness amid growing climate challenges.

WARMA Advances Climate Resilience through Data and Capacity Building

As climate change intensifies in Zambia, with prolonged droughts and erratic rainfall disrupting agriculture and livelihoods, the need for timely, accurate, and accessible climate and water data has never been more urgent. The Water Resources Management Authority (WARMA), in partnership with the Ministry of Agriculture and the Zambia Meteorological Department (ZMD), is playing a critical role in strengthening the country's resilience through information dissemination, capacity building, and strategic investments in water monitoring systems.

WARMA is a key implementing partner in the Strengthening Climate Resilience of Agricultural Livelihoods in Agro-Ecological Regions I and II (SCRALA) Project. The project targets 16 climate-vulnerable districts across Lusaka, Eastern, Southern, Muchinga, and Western Provinces.

Empowering Communities through Data

At the heart of WARMA's role in SCRALA is the generation, analysis, and dissemination of climate and hydrological information to support informed decision-making. This data empowers small-scale farmers and local authorities to better prepare for and respond to climate-related risks such as droughts and floods.

To this end, WARMA is enhancing water monitoring systems across the project's target districts. This includes:

- 32 groundwater monitoring boreholes equipped with data loggers to measure groundwater quality and levels
- 10 surface water monitoring stations featuring telemetry for real-time data transmission
- 5 gauging weirs strategically located to support accurate water flow measurements

These tools enable real-time monitoring and forecasting, which is critical for planning agricultural activities, managing water usage, and minimizing climate-related risks.

Building Capacity for Sustainable Water Management

In addition to infrastructure investments, WARMA is leading extensive capacity-building efforts. Farmers, extension officers, and water users are being trained on how to interpret and apply climate and water data to guide farming and irrigation decisions.

Local government officials and policymakers are also being trained to incorporate scientific data into district and national planning processes. This approach ensures that climate information is not only collected but used effectively across all levels of decision-making.

During the 2024–2025 planting season, WARMA engaged stakeholders across several of the 16 targeted climate-vulnerable districts, including Luangwa, Mambwe, Chama, Mafinga, Chirundu, Namwala, Kazungula, Sioma, and Senanga. These sessions focused on disseminating seasonal climate and water forecasts to help communities prepare effectively for upcoming weather events and adapt their agricultural practices accordingly.

Improving Resilience through Informed Action

The SCRALA Project aims to improve food security, increase agricultural productivity, and support income generation by equipping communities with the knowledge and tools to adapt to changing climatic conditions.
By strengthening water data systems and supporting local stakeholders with relevant information and skills, WARMA is enabling proactive, community-driven responses to climate challenges. The focus on real-time data sharing, informed planning, and capacity building makes the initiative a model for climate resilience in Zambia.

WARMA Develops Flood Forecasting Early Warning System to Improve Flood Preparedness

When discussing climate change, floods are often overshadowed by droughts, yet they remain one of its deadliest and most overlooked impacts. While heavy rains may offer relief for dry spells and agricultural challenges, they also cause severe damage on the ground.

In recent years, floods have devastated communities by destroying crops, damaging infrastructure, and disrupting livelihoods. These far-reaching impacts demand urgent attention. Ignoring flood risks leaves communities vulnerable and undermines national efforts to build resilience against climate-induced disasters.

Flood forecasting and risk mapping are crucial components of water resources management. Timely and reliable flood information enhances preparedness and helps manage the humanitarian impacts of flooding. This information supports key actors such as the Disaster Management and Mitigation Unit (DMMU) and the Zambia Red Cross Society (ZRCS) in their response efforts. As a key member of the national flood preparedness taskforce, WARMA plays a critical role in detecting, monitoring, forecasting water-related hazards, and sharing timely information with its partners.

Against this backdrop, the Water Resources Management Authority (WARMA), with support from the International Water Management Institute (IWMI), developed a Flood Forecasting Early Warning System (FFEWS) for the Zambezi basin in Zambia.

This system strengthens WARMA's capacity to provide climate information services more effectively.

Officially handed over by IWMI on 23rd July 2024 at WARMA's Head Office in Lusaka, the Zambezi FFEWS is a vital tool that enhances Zambia's ability to monitor and forecast floods. Unlike relying solely on global models, this localized early warning system enables WARMA to provide accurate and timely information for decision-making.

Commenting on this milestone, WARMA Acting Director General Mrs. Misozi Ngulube Lumpa emphasized that climate change is a permanent reality, requiring preparedness and proactive action. She highlighted WARMA's longstanding need for a localized flood awareness system. As the authority responsible for water resources management, WARMA must confront the effects of climate change, with floods and droughts among the most significant challenges. Managing these risks is essential for safeguarding Zambia's water resources.

Once fully operational, the FFEWS will generate and disseminate timely riverine flood advisories to protect the public and infrastructure such as dams, bridges, and homes. This capability allows WARMA to issue early alerts, enabling communities to prepare and evacuate when necessary, thereby saving lives and property. Furthermore, the system supports economic resilience by reducing flood impacts on agriculture and minimizing economic losses.

As the institution mandated to provide nationwide riverine flood forecasting and improve flood preparedness, WARMA welcomes this system as a major enhancement to its mandate of managing, developing, and protecting water resources.

Smart Science for Safe Water: WARMA and SASSCAL Forge Strategic Partnership

In a bold step towards enhancing Zambia's water resilience and climate readiness, the Water Resources Management Authority (WARMA) signed a landmark Memorandum of Understanding (MoU) with the Southern African Science Service Centre for Climate Change and Adaptive Land Management (SASSCAL). This strategic alliance, signed on 4th March 2025, lays the foundation for robust collaboration in scientific research, data sharing, and capacity development, transforming how Zambia manages its water resources in the face of climate change.

The agreement, signed by WARMA Acting Director General Mrs. Misozi Ngulube-Lumpa and SASSCAL Executive Director Dr. Budzanani Tacheba, reflects a shared commitment to long-term cooperation in climate and water security. With the impacts of climate variability increasingly threatening livelihoods and ecosystems, this partnership comes at a pivotal time for the country and the wider region.

A Partnership Rooted in Shared Vision

At the heart of the MoU is a clear mission: to align the scientific and technical expertise of both institutions in support of sustainable water resources management. WARMA will work closely with SASSCAL to pursue research-based and technology-driven solutions. These efforts will be especially focused on enhancing water security, promoting adaptive land management, and responding to climate change.

The collaboration is founded on mutual benefit, with each institution contributing its unique strengths. WARMA will lead in data provision and identifying key priority areas in Zambia's water sector, while SASSCAL will provide scientific services, research collaborations, and knowledge products that support decision-making and policy formulation.

Innovation, Data and Shared Knowledge

One of the most powerful outcomes expected from this collaboration is enhanced institutional capacity that will result in the development of relevant products that enhance the institutions' operations and decision-making processes. Further the collaboration will also facilitate enhanced stakeholder engagement and data sharing within the water sector, academia and beyond.

The MoU outlines a joint approach to:

- Initiating and supporting research-based activities tailored to Zambia's needs;
- Developing innovative services from shared research;
- Conducting joint knowledge-sharing activities. wo;
- Advancing technology and knowledge uptake at all stakeholder levels;
- Supporting capacity development through education and training.

A Platform for Regional Impact

The WARMA-SASSCAL partnership extends beyond Zambia's borders. By promoting regional cooperation, the MoU positions Zambia as a leader in sustainable water resources management within the SADC region. The two institutions will explore studies on shared groundwater resources, establish regional centres of excellence, and support research initiatives that address both national and regional priorities.

To steer this partnership, a Joint Committee with equal representation from both institutions has been established. This body will coordinate activities, monitor progress, and ensure that objectives are achieved with transparency and accountability.

Empowering the Future Through Science and Policy

By combining their mandates and strengths, WARMA and SASSCAL aim to develop forward-looking policies, services, and technologies that protect Zambia's water resources for future generations. Both institutions are committed to implementing joint activities that strengthen water resources management and institutional capacity, thereby jointly bridging the gap between research and practical application.

Looking Ahead

The MoU, which will remain in effect for an initial five-year period, marks the beginning of a dynamic collaboration that will evolve alongside Zambia's water and climate landscape. It demonstrates WARMA's commitment to innovation, partnerships, and leadership in integrated water resources management.

As Zambia prepares for an increasingly unpredictable climate, partnerships like this offer not only solutions but also hope. Together, WARMA and SASSCAL are not just managing resources. They are building the foundation for a water-secure and climate-resilient future.

WARMA Shuts Down Illegal Boreholes Linked to Kabwe Cholera Outbreak

In a decisive move to protect public health and uphold groundwater safety standards, the Water Resources Management Authority (WARMA) has taken firm regulatory action against Zambezi Drilling and Exploration Limited for illegally drilling a borehole in close proximity to a sewer line—an act that has been linked to a cholera outbreak at David Ramushu Secondary School in Kabwe.

Urgent Response to Public Health Emergency

The outbreak, which led to the hospitalization of over 60 pupils and 30 community members, prompted an emergency response from the Office of the Vice President through the Disaster Management and Mitigation Unit (DMMU). WARMA worked in close collaboration with DMMU, Lukanga Water and Sanitation Company, and the Ministry of Health to investigate the source of contamination.

The inspection revealed serious breaches of borehole siting regulations. The borehole, illegally drilled in September 2024, was discovered only six meters from a sewer inspection chamber. This violates Regulation 4 of the Water Resources Management (Groundwater and Boreholes) Regulations, Statutory Instrument No. 20 of 2018, which mandates a minimum 30 meter distance between boreholes and sources of contamination.

Further evidence of contamination was observed;

- Fecal matter was visible at the sewer inspection chamber
- Effluent was seen bubbling when the borehole pump was activated
- A cracked underground concrete reservoir was identified as an additional contamination source.

These conditions clearly indicated a hazardous mixing of groundwater and sewage.

Effluent at the inspection chamber

Regulatory Action and Penalties

In response to these findings, WARMA ordered the immediate plugging, casing, and sealing of both the contaminated borehole and another nearby non-compliant borehole. These steps were critical in protecting the health and safety of pupils, staff, and local residents dependent on groundwater.

Under Section 98 of the Water Resources Management Act No. 21 of 2011 and Regulation 9 of the Groundwater and Boreholes Regulations, WARMA has imposed a statutory fine on Zambezi Drilling and Exploration Limited. The company has been given 21 days to comply. Failure to do so will result in prosecution and possible imprisonment.

MESSAGE TO THE PUBLIC

To prevent similar public health risks, WARMA urges all Zambians to;

✅ Engage only WARMA licensed drillers

✅ Obtain drilling permits before commencing groundwater works

✅ Report unsafe or suspicious drilling activities to the nearest WARMA office

Water safety is not optional. The cost of neglect is too high when lives are at stake.

Officers from lukanga water & Sanitation Company desludging and disinfecting the place

WARMA'S MESSAGE ON PUBLIC HEALTH AND COMPLIANCE

This is a stark reminder that groundwater development must never bypass established safety protocols. The reckless actions of Zambezi Drilling and Exploration Limited endangered lives and violated national water laws. WARMA will not hesitate to revoke licenses or pursue legal action against violators.

WARMA reiterates its zero tolerance stance on unsafe groundwater practices and has intensified compliance monitoring, especially in schools, health facilities, and public institutions.

Unlocking the Potential of Momboshi Dam for Irrigated Maize Production and Aquaculture

Downstream face of Mwomboshi dam and spillway

Water is a vital asset for Zambia's agricultural and economic growth, and bold steps are needed to harness its full potential. As climate change intensifies the threat to food security, the Government is exploring strategic options to enhance irrigated crop production and aquaculture. One such initiative involves maximizing the use of the Mwomboshi dam in Chisamba district and Kafulafuta Dams in Chisamba District.

In line with a Cabinet directive, the Ministry of Water Development and Sanitation (MWDS), in partnership with the Ministries of Agriculture and Fisheries and Livestock, initiated a technical assessment to evaluate the feasibility of expanding irrigated maize production and fish farming. The Water Resources Management Authority (WARMA), through its Luangwa Catchment technical team, conducted a comprehensive assessment focused on optimizing the Mwomboshi Dam while ensuring sustainable water resource use and economic development.

The Mwomboshi Dam plays a pivotal role in supporting water supply for both agriculture and fish farming. Given the increasing risks posed by prolonged droughts and climate variability, the Government through WARMA aims to enhance water efficiency and resilience by promoting irrigation and aquaculture as drivers of sustainable growth.

As part of this initiative, WARMA provided technical expertise to assess the dam's capacity, availability, and long-term sustainability for expanded use.

The assessment revealed a positive water balance for Mwomboshi Dam. The dam receives an average annual runoff of 105.2 million cubic meters (Mm^3), exceeding total yearly losses and usage 83.6 Mm^3 by 21.6 Mm^3. This indicates that the dam is currently operating with a surplus even after accounting for its dead storage volume of 2 Mm^3.

While the surplus presents an opportunity for increased utilization, WARMA has cautioned that water allocations must be carefully managed. Seepage, climate variability, and evaporation could alter the dam's balance, potentially affecting its sustainability.

To ensure long-term viability and support national food and economic security, the following key measures were proposed:

Key Recommendations

1. *Strict Monitoring and Adherence to Abstraction Limits*
Ongoing oversight is essential to prevent overuse and protect the dam's sustainability.

2. *Maximize Utilization of Existing Water Permits*
Some permits remain underutilized. Optimizing current allocations should precede any issuance of *new permits.*

3. *Enhance Water Management Practices*
Modern irrigation methods such as drip systems should be adopted to reduce waste and improve maize production efficiency.

4. *Implement Climate Adaptation Strategies*
Afforestation in catchment areas and investment in water conservation technologies will help mitigate climate risks.

The Mwomboshi Dam holds immense potential to advance Zambia's ambitions in agriculture and aquaculture. However, this potential can only be fully realized through sustainable management. By striking a balance between resource use and conservation, the dam can continue to fuel food security, economic growth, and climate resilience for generations to come.

TALE OF A VANISHING RIVER

The sun hung low in the sky as Banda and Mulenga sat quietly by the banks of the once mighty Menda River. The water, now reduced to a trickle, shimmered faintly in the evening light. Banda, troubled by the river's sorry state, turned to his elder friend.

"Mulenga, I remember when this river was full of life. The fish were plenty, and we could even fetch clean water from here. What happened?" he asked, concern heavy in his voice.

Mulenga sighed deeply and shook his head. "My friend, what you see now is the result of encroachment. People have settled too close to the river, building homes and farming on land that should be protected. Trees have been cleared, wetlands drained, and the water redirected for personal use. That is why the Menda River is dying."

Banda frowned. "But how does that cause the river to dry up? Aren't we just making use of the land? Everyone wants land near the river."

Mulenga picked up a handful of soil and let it slip slowly through his fingers.

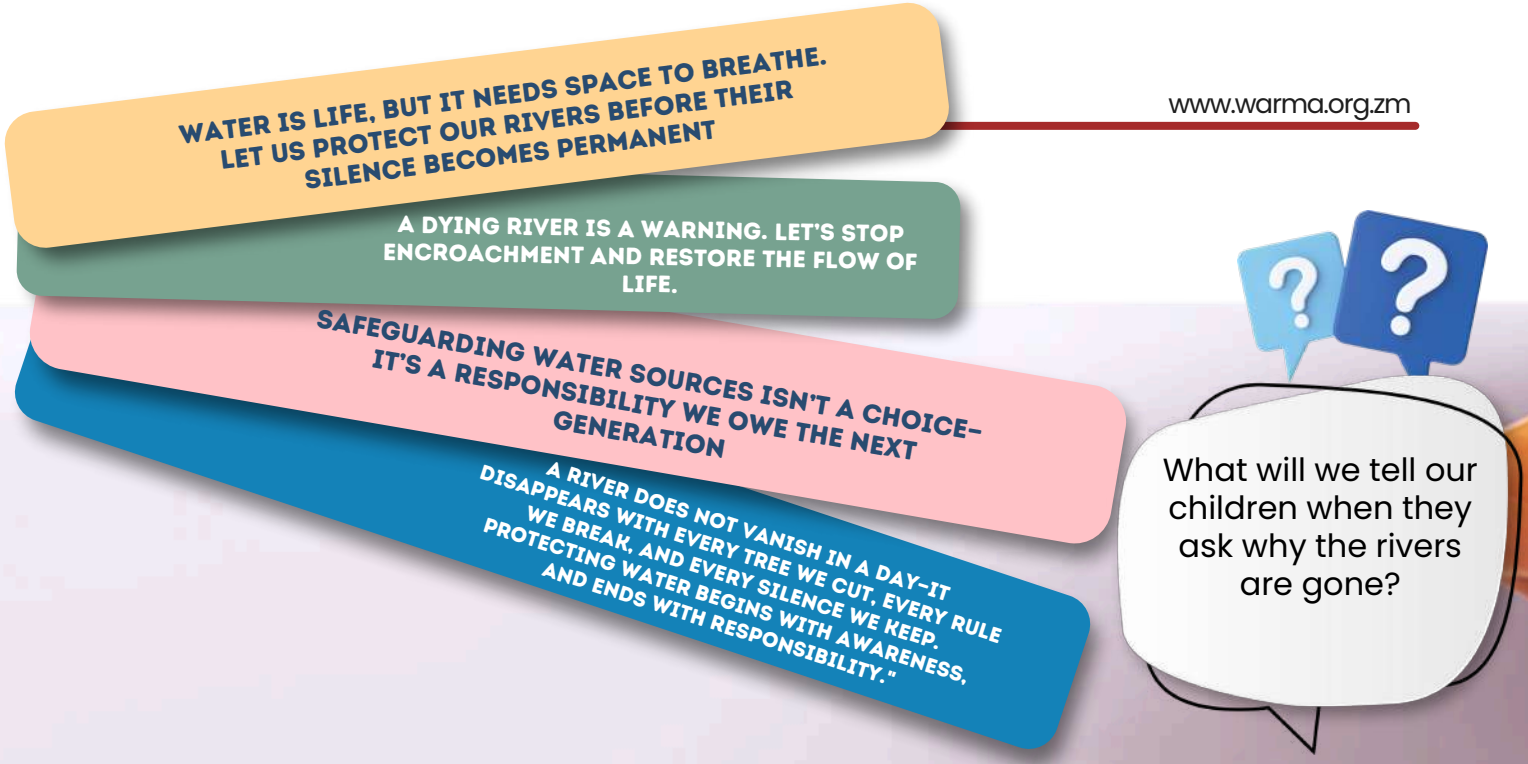
"You see, Banda, rivers and lakes need space. The trees and plants around them help hold the soil together and balance the water cycle. When we cut down trees and build too close to the water, we destroy that natural protection. Rainwater then washes soil into the river, making it shallow and dirty. Eventually, the river dries up."

"So is that why the floods have become worse during the rainy season?" asked Banda.

"Yes," Mulenga nodded. "With no trees to absorb excess rainwater, floods become more destructive. And during the dry season, the sources that feed the river, such as springs and wetlands, are gone. This affects farming, fishing, and even our drinking water."

Banda sighed. "This is terrible. Is nothing being done to stop it?"

The tale continues on the next page.....



"There is hope," Mulenga said with a gentle smile. "The Water Resources Management Authority (WARMA), is working hard to stop encroachment. They are identifying illegal settlements near water bodies and making sure people do not build too close to rivers and lakes. They are also educating communities about the importance of protecting water sources and enforcing the law to prevent further destruction."

He paused, then added, "In fact, WARMA has already identified 127 critical areas that are vital to water supply for all 11 Commercial Utility companies across the country. More than 300 additional areas are currently being mapped for protection. In 2024 alone, WARMA issued 208 penalties, 490 compliance orders, and 280 stop orders to curb encroachment and safeguard water resources."

Banda nodded thoughtfully. "That is good to hear. But what can we, as ordinary people, do?"

"We can start by spreading awareness," Mulenga said. "Tell others not to build too close to rivers and lakes as well as reporting illegal settlements to WARMA. We should plant more trees and use water responsibly. If we all do our part, we can restore Menda River and many others like it."

Banda looked at the dying river, then back at Mulenga. "I understand now. We must protect our water sources before it is too late."

"Yes, Banda. Water is life, and it is our duty to safeguard it," Mulenga replied.

Zambia's water resources are under increasing pressure. Rapid population growth and expanding settlements have led to harmful land use practices such as riverbank cultivation, sand mining, deforestation, and even the construction of houses within protected riparian buffer zones. These activities threaten the health of headwaters, recharge zones, aquifers, and wellfields that millions depend on.

In a bold move to protect the country's most vulnerable water bodies, WARMA has intensified efforts to identify, map, and designate Water Resources Protection Areas (WRPAs). These strategic efforts are critical in preserving national water security amid mounting threats from human activity, development, and climate change.

As the sun dipped below the horizon, Banda and Mulenga sat in reflective silence, the evening breeze whispering across the fragile water. The lesson was clear. The battle to save Zambia's rivers must begin with awareness, action, and responsibility.

You too can join WARMA in safeguarding our water resources. Avoid and report activities such as encroachments, river bank cultivation, and deforestation near water sources. Together, we can protect the lifeline of our nation.

Empowering Communities through Decentralized Water Resources Management

The Water Resources Management Authority (WARMA) is intensifying its commitment to promoting sustainable and equitable water stewardship across Zambia through the decentralization of water governance. Guided by the Water Resources Management Act No. 21 of 2011, WARMA is engaging communities across the country to raise awareness on the formation of Water User Associations (WUAs). These engagements are designed to empower local populations to take ownership of their water resources and actively participate in water management decision-making processes.

This initiative forms part of the Strengthening Climate Resilience of Agricultural Livelihoods in Agro-Ecological Regions I and II (SCRALA) project, which aims to enhance the resilience of smallholder farmers in 16 districts. The SCRALA project is funded by the Green Climate Fund, with the Ministry of Agriculture serving as the main implementing partner. In collaboration with the Zambia Meteorological Department (ZMD), WARMA has disseminated Water User Association guidelines and conducted community engagement activities in Chongwe, Rufunsa, Luangwa, Nyimba, Mambwe, Chama, Chirundu, Kazungula, Siavonga, Namwala, and Senanga districts.

During these sessions, communities were sensitized on the regulatory framework for water resource management and were introduced to the Water User Association Handbook developed by WARMA. This handbook provides clear guidance on how to establish and operate WUAs, enabling community members to take a proactive role in the governance of local water resources.

COMMUNITY REFLECTIONS

Community members across the districts expressed enthusiasm and optimism about the initiative.

In Rufunsa, a local farmer shared, "For the first time, we feel involved in decisions that affect our access to water. WARMA has made us feel like partners, not just users."

In Kazungula, a youth group representative remarked, "We now understand our role in protecting water sources. The idea of a local association gives us a voice."

Similar sentiments were echoed in Luangwa, where a women's cooperative stated, "With proper training and support, we can manage water fairly among ourselves, especially during dry months."

These reflections underscore the growing sense of ownership and awareness among community members, who now view water not only as a shared resource but also as a shared responsibility.

Role and Impact of Water User Associations

Water User Associations are community-based groups tasked with managing and safeguarding water resources in designated areas, typically ranging from 100 to 200 square kilometers or based on population density. Their responsibilities include preparing and implementing local water management plans, monitoring water allocation and use, protecting catchments, and resolving water disputes.

By decentralizing water governance, WUAs ensure that decisions are made closer to the people affected, leading to more responsive and sustainable management practices.

This initiative demonstrates WARMA's strategic leadership in promoting integrated and participatory water resource management. It ensures that water allocation is not only efficient but also equitable, reflecting local realities and priorities.

Empowering the Future Through Science and Policy

By promoting the formation of WUAs, WARMA is building resilient communities equipped to manage their own resources in the face of climate change and increasing water demand. The decentralization process is fostering transparency, accountability, and local innovation, thereby strengthening the water governance framework in Zambia.

WARMA's proactive regulatory approach continues to ensure that Zambia's water resources are protected, equitably shared, and sustainably managed for the benefit of present and future generations.

WARMA Observes 2025 World Water Day with Renewed Commitment to Water Resources Protection

On 22nd March 2025, the Water Resources Management Authority (WARMA) joined the global community in commemorating World Water Day under Zambia's localized theme: "Water Source Protection Amidst Climate Change and Pollution."

This theme reflects the urgent global and national call to safeguard critical water sources under increasing pressure from environmental changes and human activity.

WARMA's Acting Director General, Mrs. Misozi Ngulube-Lumpa, led a team from both the Head Office and Zambezi Catchment Office to the national commemorative event held in Cuundwe Area, Chief Sipatunyana, Mapatizya Constituency, Zimba District.

Officiated by the Honourable Minister of Water Development and Sanitation, Eng. Collins Nzovu, the event emphasized the critical need to protect Zambia's freshwater ecosystems.

A major highlight was the commissioning of the newly constructed Cuundwe Earth Dam; an essential infrastructure project designed to enhance water security for households, irrigation, and livestock.

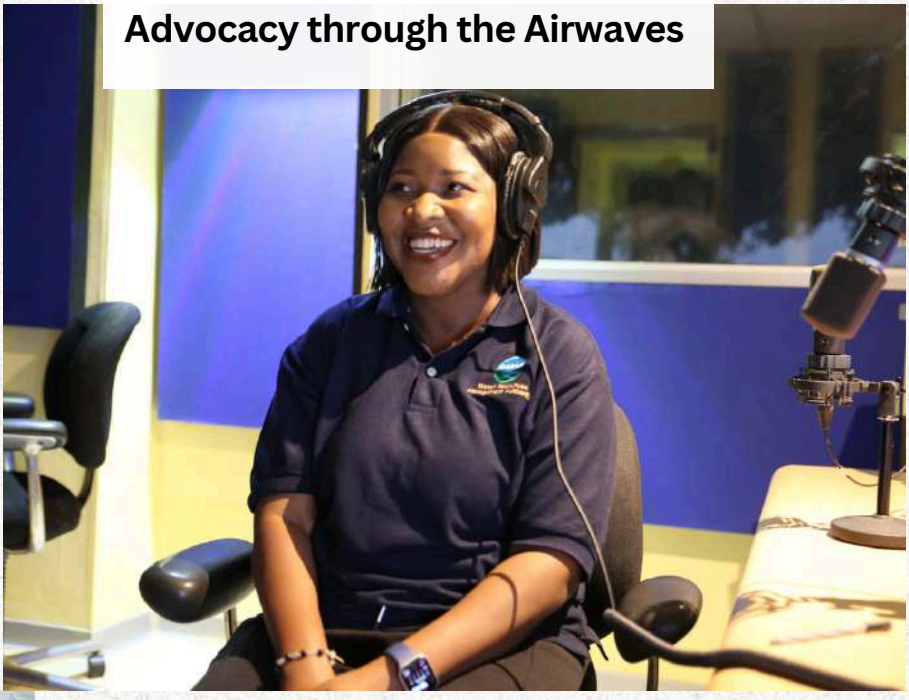
At the event, WARMA showcased its regulatory and technical capabilities through an interactive exhibition. The stand featured advanced tools such as the Acoustic Doppler Current Profiler (ADCP) and Multiparameter Water Quality Meters, alongside educational materials for the public

Advocacy through the Airwaves

As part of World Water Week, Mrs. Ngulube-Lumpa appeared on Radio Mosi-O-Tunya in Livingstone, where she urged communities to refrain from harmful environmental practices such as riverbank cultivation, sand mining, and water source encroachments.

"Protecting water sources is not just WARMA's job—it's a shared national responsibility," she said.

Her message emphasized the need for public vigilance and partnership in safeguarding Zambia's precious water assets.



A Future of Shared Responsibility

The 2025 World Water Day observance reaffirmed WARMA's unwavering commitment to protecting Zambia's water resources through strong regulation, cutting-edge innovation, and active public engagement. As climate and development pressures intensify, WARMA continues to lead the way in building a water-secure Zambia—where every drop is valued, every source is protected, and every citizen is a steward.

Building Bridges: WARMA Deepens Media Partnership to Advance Water Stewardship in Zambia

In a decisive step toward strengthening public engagement and environmental accountability, the Water Resources Management Authority (WARMA) hosted a high-impact media engagement workshop on 27 February 2025 at Lusaka's Legacy Resort. The session brought together journalists and communicators from across the country to deepen collaboration and elevate public discourse on Zambia's water resources.

This initiative reflects WARMA's unwavering commitment to inclusive, transparent, and participatory water governance. By equipping media practitioners with accurate, science-based insights, the Authority aims to promote informed reporting that inspires responsible water use and fosters national conservation efforts.

WARMA Acting Director General, Mrs. Misozi Ngulube-Lumpa, emphasized the importance of the media in advancing the Authority's mandate:

"The media plays a vital role in shaping public understanding. Through ethical and fact-based storytelling, journalists become key partners in our mission to protect Zambia's water resources," she said.

Participants discussed the urgent threats posed by unsustainable practices such as deforestation, riverbank cultivation, illegal abstraction, and sand mining—activities that continue to undermine catchment health and water security. The workshop served as a platform to educate media stakeholders about WARMA's regulatory functions, including permitting, monitoring, catchment protection, and enforcement.

Crucially, the engagement emphasized ethical reporting in a sector where the stakes are high—from public health to economic development. WARMA reaffirmed its role as a proactive and responsive regulator committed to stakeholder dialogue, sustainable development, and safeguarding Zambia's water heritage.

As part of its broader strategy, WARMA will continue to engage the media as a critical partner in building a water-aware society. These partnerships not only expand the reach of water conservation messages but also reinforce WARMA's leadership in advancing integrated and sustainable water resource management in Zambia.

2025 REGISTERED DRILLING COMPANIES

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 NUM	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

2025 REGISTERED DRILLING COMPANIES

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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	777777209	Lusaka	Lusaka
44	Gnkan Engineering and Construction Limited	D	979046200	Lusaka	Lusaka

2025 REGISTERED DRILLING COMPANIES

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	DRILLERS NAME	CLASS	CONTACT NUM	TOWN	PROVINCE
45	Tigala Nagi Reddy Drilling and Construction Lt	B	975889999	Lusaka	Lusaka
46	Kamu Creditor Limited	D	977474122	Kalabo	Western
47	Mboomuyunda Three Business Ventures Ltd	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		
55	Atlas Drilling & Construction Limited	B	972111222	Lusaka	Lusaka
56	Sana Drilling Limited	B	771111116	Lusaka	Lusaka
57	Star Waterwell Drilling & Exploration Litd	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 NUI	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 Ligistics 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 Corparation 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

PHOTO GALLERY

WARMA'S CONTRIBUTION TO ECONOMIC DEVELOPMENT

Through sustainable water regulation, protection, and allocation, the Water Resources Management Authority (WARMA) plays a vital role in driving Zambia's economic growth by supporting agriculture, industry, energy production, and community livelihoods.

AGRICULTURE

CONSTRUCTION

HYDROPOWER

MINING AND INDUSTRY

Water Resources Management Authority

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Chambeshi Catchment
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Mansa Office
Department of Water Development
Along Catherdral Road
P.O Box 710032
Cell: +260 978- 258008
Mansa, 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

@WARMA Zambia on all social media platforms