



**Water Resources  
Management  
Authority**

Issue No.  
01/22

# Newsletter

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# A WORD FROM THE **Director General**

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Dear Reader,

Let me take the pleasure of thanking you for taking your time to read our first quarter edition of the Water Resources Management Authority Newsletter. The Newsletter which is published every quarter carries with it various milestones and interventions of the Authority in discharging its mandate.



In this edition, the Water Resources Management Authority (WARMA) proudly announces the installation of its Board of Directors to steer the institution towards the attainment of its vision. The 4th WARMA Board was dissolved on the 4th of October, 2021 and appointed on 6th January, 2022. In this edition, we also bring out initiative efforts being put in place to enhance our stakeholder engagement for cordial and concerted management of water resources. The tenets of Integrated Water Resources Management do dictate the ultimate inclusion of various interest groups in the management of water resources, in order to achieve satisfaction in equitable water resources distribution. We, therefore, bring out the many interventions that the Authority undertook in the first quarter to enhance constructive relationship building with key water sector players.

As experts in various technical and non-technical fields, we have a deliberate policy of informing the public on various matters through detailed feature articles that set the agenda for decision-makers, researchers, and learners in the water sector

I, therefore, wish you good reading.

**Kenneth Nyundu**

Director General

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WARMA  
NEWSLETTER

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1ST QUARTER 2022



# EDITORIAL TEAM

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editorial

# WISE USE AND MANAGEMENT OF ZAMBIA'S WATER RESOURCES-HH

His Excellency President Hakainde Hichilema has called on wise use and management of water resources if Zambia is to attain meaningful national development in all sectors of the economy. The President said prudent management of water resources will address poverty and unemployment stating that water globally has been identified to play a critical role in boosting and bringing positive economic as well as socio-cultural development.



**"We have water resources dotted around Zambia which if all stakeholders work together would greatly bring about economic and positive national development in all sectors".observed the President.**

**"My government will therefore see to it that water sector is given needed attention it needs with the view to attain meaningful national agricultural development and in all areas of Zambia's economy" he said.**

Speaking during the 2022 Agritech Expo in Chisamba, His Excellency President Hakainde Hichilema said the New Dawn Government fully recognize the importance of working in partnership with the view to promote agricultural production countrywide. He said his government will be in a hurry to work with all other stakeholders, through an instrument of public private partnership dialogue in agriculture investment

The President further stated that his government is committed to promoting the agricultural sector to a higher level while increasing production for food security and creating employment for Zambians.

And Zambia National Farmers Union President Mr. Jabes Zimba said there is urgent need for Zambia to seriously take advantage of its available water

resources if it is to take up the position of regional agriculture producer feeding its neighbouring countries like Congo among others, he said that Zambia has good position to supply its products to countries like Congo and other neighbouring countries hence the need for a positive step towards local investments in Agricultural projects and of the water sector. Mr Zimba has also called on government to support farmers by putting in place sound agricultural policies that will be able to support and take agriculture to another level across the country, "Mr. President farmers in Zambia have all what it takes to promote agriculture to higher levels but the hindrance has always been the unfavourable policies and conditions to support their works," Mr Zimba said.



## THE WATER RESOURCES MANAGEMENT AUTHORITY BOARD OF DIRECTORS UNVEILED

The Hon. Minister of Water Development and Sanitation Hon. Mike E. Mposha reconstructed the the 5th WARMA Board on 6th January, 2022. On 20th January, 2020, the Board was unveiled at Taj Pamodzi Hotel. Prior to this, the Board had been appointed in April, 2020 and dissolved on 4th October, 2021. The Board was in Operation for a period of about 1 year 6 months preceding the previous Board, WARMA had operated without a Board for about 2 years. The situation posed many operational challenges in that many decisions could however not be approved. The Authority latter was given the Dr. John Kunda-led Board on 20th November 2021. The Authority's 14-member Board of Directors which is drawn from various professions with competent specialization and knowledge to contribute to the development of the water sector was optimistic and ready to exert tangible development to the water sector in Zambia. the Hon. Minister should be commended for reconstructing the Board within a short period of time.

Speaking during the unveiling of both the WARMA and National Water and Sanitation Company (NWASCO) Board at Taj Pamodzi Hotel, Minister of Water Development and Sanitation Hon. Mr. Mike E. Mposha MP said the unveiling of the board follows the completion of the constitution of the new board of directors in line with Water Resources Management Act No. 21 of 2011. The Minister stressed the importance that WARMA plays in contributing to his Ministry's mandate on water resources development and management to contribute to the vision 2030 and the sustainable development goals (SDG). He disclosed that government recognizes the critical role water plays in stimulating socio-economic development in Zambia. He further stated that the government has since prioritized water as a catalyst to economic transformation.



**"The government attaches great importance to the role of the board in superintending the affairs of the Authority as they are critical in driving policy and the strategic focus of WARMA." he said.**

The Hon. Minister stated that the appointment of the board reaffirms the government's commitment to upholding principles of corporate governance to encourage transparency and high standards of governance in both public and private sectors, in line with existing policy and legislative framework on corporate governance in Zambia.

The Hon. Minister's expectations of the new board are high. In highlighting his expectations for his Ministry, he stated that the board must prioritize certain key aspects of operation in order to effectively contribute toward national goals. He said the need to mitigate the effects of climate change, pollution of water bodies, and encroachment of headwaters and recharge zones as well as unsustainable use of water resources remain critical to sustainable development in Zambia.

"I wish, therefore, to appeal to the WARMA board to accelerate measures to protect and safeguard water resources from the pollution which has become rife in our country. Due to rapid development, there is an appetite for some people to ignore the law by putting up infrastructure in sensitive areas such as recharge zones and buffer zones thereby affecting the habitat. This compromises the integrity of the environment including water resources which is critical for human survival for the present and future generations," the Minister said.

The Minister however expressed concern about the high propensity to abstract or impound water without the authority of WARMA. He said it is worrying that water users are abrogating the conditions stipulated under their permits. The Minister further informed that his ministry is aware that some people are constructing hydraulic infrastructure without the approval of designs by WARMA as provided by the law thereby compromising the safety and lives of the people within the vicinity of the infrastructure. The Minister disclosed that the government is accelerating the construction of water and sanitation infrastructure aimed at improving water and sanitation services to spur socio-economic activities and contribute to national development. He said the WARMA Boards will play a significant role in ensuring that people's aspirations under the vision 2030 on water and sanitation for all and increased national water security become a reality.

In his congratulatory remarks, the Minister called on the new board to work in harmony with WARMA management while upholding the tenets of corporate governance during the tenure of office as board members.

# WARMA Renders Support to Irrigation Scheme Projects

Irrigation farming is one of the priorities of the Government of Zambia. According to the Eighth National Development Plan, Government has reiterated its commitment to ensuring water resources are properly harnessed, developed, and managed in order to enhance socio-economic development. With financial support from the World Bank and other donors, Government invested in irrigation schemes across the country with the view of transforming the agriculture sector and subsequently contributing to national food security. The three (3) renowned irrigation scheme projects are the Lusitu in Southern Province, Musakashi Irrigation Scheme in Mufulira, and the Mwomboshi Irrigation project in Chisamba District. Constructed under the Irrigation Development and Support Project (IDSP), the Mwomboshi dam gobbled approximately USD37 million in construction as the largest in the history of the country's agriculture sector, holding up to 65 million cubic meters of water. The Mwomboshi and Musakashi Irrigation Schemes are massive investments that will enable small-scale, medium, and large-scale farmers to conduct farming activities throughout the year. The Government's vision of improving agricultural productivity and contributing to the national gross domestic product through the irrigation schemes is being facilitated by the Water Resources Management Authority (WARMA). During the first quarter of 2021, WARMA facilitated dialogue meetings with water users in Mwomboshi and Musakashi Irrigation Projects under the auspices of IDSP.

The meetings were meant to precipitate growth in the irrigation landscape which is not devoid of water resources challenges.

During the dialogue meetings, it was heard that the partnership between WARMA and IDSP in championing growth in the agriculture sector through irrigation projects is a gesture of a greater good. This came to light when the Chairperson of the meeting, WARMA Director-General Engineer Kenneth Nyundu opened the meeting. The Director-General stressed that the Projects attracted a lot of national attention and that such projects must be replicated in other parts of the country once rendered successful.

**Government has reiterated its commitment to ensuring water resources are properly harnessed, developed, and managed in order to enhance socio-economic development**

The role of WARMA in managing, preserving, and protecting water resources was further explained as being a conduit to developing and sustaining the much-needed growth of the sector. The Authority through its mandate stands to support all small-scale, medium-scale, and large-scale farmers country-wide. The Chairperson further informed the meeting that

WARMA is currently encouraging farmers to adopt water harvesting and storage mechanisms. He pointed out this call comes in the wake of the lack of proper water harvesting mechanisms that can sustain all-year-round agriculture. The Director General called upon dam owners to strictly adhere to the requirements of water abstraction permits and to take full responsibility for reporting illegal activities conducted by members of the public to WARMA.



WARMA Director General addressing water users.

The Authority is therefore poised to help farmers to expand farming activities through constant dialogue, engagement, and proper access to water resources. WARMA is committed to offer guidance on the utilization and management of water resources for the protection of the environment and ecosystem

From the perspective of water users, challenges were raised and discussed. One of the issues raised was that of upstream commercial farmers that have constructed dams that hold large volumes of water but do not release water to the downstream scale farmers, there was a call for WARMA to intervene.

**"One of the issues raised was that of upstream commercial farmers that have constructed dams that hold large volumes of water"**



**THE WATER  
RESOURCES  
MANAGEMENT  
AUTHORITY (WARMA)  
SUPPORTS DRONE  
TECHNOLOGY**

IHS and COPPERBELT ENERGY fund the Drone project

The Water Resources Management Authority (WARMA) was delighted to have been among the key sponsors of the IHS Drone Business Challenge Awards. Under the theme 'Drones for Social Good & the Development of Zambia', WARMA believes that Drone Technology is the next cross-cutting issue that will contribute towards the promotion of economic development. WARMA believes that technology if well harnessed and applied correctly can achieve greatness in various sectors of the country. Drone technology is slowly being recognized in Africa as instrumental to national development and hence investment in the sector will undoubtedly enhance efficiency in service delivery.

The event drew participation from the country's young and vibrant population. The University of Zambia Vice-Chancellor Professor Luke Mumba said the initiative rides on the political will created by the government to blend innovation into economic development.

He said government provides an enabling environment for taking knowledge and transferring it to create jobs for Zambians. Prof. Mumba said drone technology accelerates the positive impact of global innovation and climate change. The technology could be used in climate change, disaster management, real estate, relief distribution, and health service delivery among others.

He thanked Zambia Fine Labs for its cooperating sponsors who have portrayed the capacity of developing research projects to provide solutions for various challenges in Zambia. He said the innovation shows what students are capable of doing if fully supported. He indicated that drone technology is becoming one of the tools to run business in Zambia.



An unmanned aerial vehicle (UAV), commonly known as a drone, is an aircraft without any human pilot, crew, or passengers on board. UAVs are a component of an unmanned aircraft system (UAS), which includes adding a ground-based controller and a system of communications with the UAV

# DRONE TECH EMBRACED

## BEYOND THE BROADER SPECTRUM

Minister of Lands and Natural Resources Mr. Elijah Muchima pointed out that technology is an asset of many business solutions today. He said drone technology can be used in aerial photography and gathering imagery information in disaster management, rescue operations, and other services that cannot be reached or accessed physically. The Minister called for constant research and capacity building so that technology can then be used for the benefit of the country.

He disclosed that his ministry attaches great importance to drone technology and that his Ministry was using drone technology in land titling nationwide and updating the national land database.

Minister of Technology Honourable Felix Mutati said the mantra 'technology says its never impossible,' is the backbone principle overriding the development and expansion of technology world-over.



**Hon. Elijah Muchima**  
Min. Of Lands & Natural Resources

## TECHNOLOGY BREAKTHROUGHS

"Technology is an asset of many business solutions today, drone technology can be used in aerial photography and gathering imagery information in disaster management", Minister of Lands and Natural Resources Hon. Elijah pointed out.



## DRONES WILL CHANGE HOW WE WORK

He said it's a well-known fact that technology saves lives. He said his Ministry and the organizing partners of the event together are able to achieve an economy driven by digital transformation and technology. He said various stakeholders in the technology sector need to harness technology to change the landscape of the economy. The Minister further committed to creating a collaborative bridge between his Ministry and innovators in order to create solutions for Zambia.



## EMPLOYEE INDUCTION SETS OFF WITH THE HUMAN RESOURCES DEPARTMENT



Employee induction is a process of onboarding new entrants to an organisation in getting them in motion to success. An employee Induction programme is essential to any organization in that it integrates new staff into the company and shows them the systems, procedures, culture, values, and the organization itself. This process helps newly recruited employees ease into a new work environment. The process is viewed as key to ensuring the candidate's success, ensuring that they adapt quickly and easily to their new roles. It is believed that new employees need to be on-boarded on any legislative and compliance requirements related to the new organization, plus the processes and procedures when it comes to "how" business is done. Through this process, employees do acquaint themselves with culture, vision, mission, and goals in order to foster efficiency in service delivery.

The Water Resources Management Authority (WARMA) conducted its first-ever employee induction and onboarding programme for new staff. The programme was conducted by the Department of Human Resources and Administration in liaison with other departments. WARMA Director General Eng. Kenneth Nyundu welcomed the new staff to WARMA and encouraged them to embrace the team spirit of togetherness as they join the WARMA family. The induction was facilitated by Director HR Mr. Chishimba who stated that WARMA values teamwork and hard work that in turn help enhance the achievement of the Authority's mandate. In his presentation on the Human Resources Department Policy and Procedures, Mr. Chishimba highlighted the key functions and mandate of the Authority and that human capital stands at the center of all WARMA operations. The HR Director encouraged all new staff to work extra hard and perform in order to maintain their stay in WARMA.

**OUR**

# FACT FILE

GLOBALY And locally ,water resources are considered to be the lifeblood of any economy as it largely sustains sectors like the agriculture, energy, health, construction, tourism and mining. Water resources tremendously contributes to national and regional economic development in various aspects. It is for this reason that a country like Zambia needs a dependable and integrated water resources management system in place to have an upper hand national goal achievement and contributing to the vision 2030.

# MINISTRY OF WATER DEVELOPMENT & SANITATION PERMANENT SECRETARY VISITS WARMA

The Ministry of Water Development and Sanitation (MWDS) Permanent Secretary Mr. Joe Kalusa visits Water Resources Management Authority (WARMA), to familiarise himself with the operations of the Authority. Mr. Kalusa who was in the company of the Directors and Corporate Affairs team from the Ministry toured WARMA facility and abraded themselves with the works and mandate of WARMA as stipulated in the Water Resources Management Act No. 21 of 2011.

In his speech to the WARMA Senior Management Team, the Permanent Secretary said he was delighted to be part of the water sector, the sector that he has vested knowledge in. Mr. Kalusa pointed out that he served in various capacities and was also an active member of the Water Users Association in Western Province. The PS expressed confidence that with the current staff establishment of WARMA, the Authority has the propensity of fulfilling its institutional framework and delivering at full capacity. The PS also urged management to work extra hard and establish presence in all the ten provinces of Zambia in order to serve the public better. He however pledged his commitment to furthering the aspiration and realization of the mandate of WARMA. He informed management that his Ministry will work closely with WARMA in order to mitigate some notable operational challenges the Authority has. The newly installed PS further assured the management team that his Ministry will remain open for developmental dialogue that will push the achievement of its mandate.

**"You must be able to handle the worst, i'm happy with the current staff composition"**

Mr. Joe Kalusa  
Ministry of Water Development  
and Sanitation Permanent  
Secretary



MWDS Permanent Secretary with  
WARMA Management Team



WARMA Director General making a presentation to the MWDS Permanent Secretary

## "AUTHORITY GRADUALLY GAINING SUBSTANTIAL GROUND"

**WARMA Director General  
Eng. Kenneth Nyundu**

In his welcoming remarks, WARMA Director General Eng. Kenneth Nyundu said the Authority is gradually gaining substantial ground in offering public service and delivering on its mandate. Eng. Nyundu said despite notable challenges that include, water pollution, depletion of headwater in catchments, flooding, lawlessness among water users, lack of integrated planning, and unwillingness to pay user water fees, his team is positive and resolute to achieving the goal that WARMA has set.

The Director General disclosed to the meeting that various stakeholders have varying expectations that WARMA must deliver on. He pointed out that among the key expectations that the Authority is placing more weight is a fully operationalised WARMA with structures such as catchment councils, and sub catchment councils. Other expectations are to stop water resources pollution, enforcement and regulation of water use in all districts, halting of encroachment of all water bodies, and establishment of WARMA offices in all provinces.

Eng. Nyundu further made an appeal to the new PS to support WARMA in lobbying for adequate financial support and in enforcement of the Water Resources Management Act provisions.

# STAKEHOLDER ENGAGEMENT

## WARMA MEETS DRILLING COMPANIES

Zambia's water sector is managed by an approach that encompasses the views and aspirations of all key stakeholders with vested and varying interests to the sector. The Integrated Water Resources Management (IWRM) approach demands continuous engagement of stakeholders in managing this important resource. One such key player in water resources management is the drilling sector. Drillers in Zambia are involved in drilling boreholes in order to make groundwater easily accessible to water users. This sector as the case may be, is in private business but regulated the Water Resources Management Authority (WARMA).

WARMA is in this vein empowered by the Water Resources Management Act No. 21 of 2011 to regulate among other sectors, the drilling sectors. As of end of 2021, WARMA had on its national database about 299 fully registered drilling companies licenced to conduct drilling activities countrywide. Through its robust corporate communication strategy, the Authority engages all drilling companies in a roundtable meeting to reflect on performance and outward look on conditions for registration of drillers. One such meeting was the recent one held in Lusaka in December 2021, graced by the representative of the Permanent Secretary of Ministry of Water Development and Sanitation Mr. Joe Kalusa. Riding on the objective of providing policy direction on drilling Licence renewal conditions and addressing complaints surrounding drilling standards, the meeting brought together about 63 fully registered drilling companies within the country.



Officially opening the meeting, Ministry of Water Development and Sanitation Permanent Secretary Mr. Joe Kalusa directed WARMA to take necessary measures in line with the law to ensure that all those found wanting in abrogating the set laws in borehole drilling are brought to book without fail.

In a speech read on his behalf by the Director of Planning Mr. Tobias Musanda, the Permanent Secretary told the meeting that water is life and that there is need therefore for WARMA as a regulator, to ensure that the general public is protected from any form of exploitation with regard to borehole drilling activities.



This clarion call by the PS came timely and resonated well with the Director General's call to all drillers for strict adherence to all laws governing drilling. The meeting heard through the PS that his Ministry through WARMA is mandated to enforce regulations pertaining to the management of water resources including groundwater in Zambia. The PS added that the principal Act for regulating, protecting, and conserving water resources in Zambia is the Water Resources Management Act No. 21 of 2011, which is enabled by subsequent statutory instruments.

"The Government issued three enabling Statutory Instruments on 9th March 2018, namely statutory instruments number 18 on fees and charges, statutory number 19 on licensing of drillers and statutory instrument number 20 on groundwater and boreholes which guides regulation and control of drilling activities' Mr. Kalusa said.

The Permanent Secretary indicated that Government's vision for the borehole drilling sector is to have a cost-effective and efficient drilling industry where drillers fully Adhere to Construction standards and provide competitive pricing while rendering excellent borehole services to the public.

It was eloquently stressed that WARMA was established by the Water Resources Management Act No. 21 of 2011 to implement regulations in the drilling sector. The Authority has functions bestowed by the Act to among others, promote and adopt a dynamic, gender-sensitive, integrated, interactive, participatory, and multi-sectoral approach to water resources management.

During his presentation to the meeting, the WARMA Director General Engineer Kenneth Nyundu showed the compliance status of drilling companies for the year 2021. This picture shows that Global Positioning System (GPS) on trucks was at 83% while Borehole Completion Reports (BCR) submission stood at 30%. The year 2021 closed with ten (10) cases of substandard drilling, while illegal drilling recorded four (4) cases. The Director-General stated that the total number of complaints received in the year 2021 was 55

Other matters of interest to the drilling sector came up from the presentation. The meeting heard that currently, pricing is not standard in that the pricing brings ambiguity and chaos to the sector. It is WARMA's obtained view that the drilling sector is a licensed industry in Zambia and that not everyone can drill at will.

Meanwhile Director General warned that failure for stakeholders to observe license conditions will lead to suspension or cancellation of license, He warned that failure to submit Borehole Completion Reports (BCR) will lead to no granting of Permits to drill

The Director General since took the opportunity of the presence of all drilling companies to call on them to develop a culture of complying with all laws governing the drilling sector in order to render the best quality service to the water users.



Eng. Kenneth Nyundu  
WARMA Director General

# TRACING HISTORICAL DEVELOPMENTS IN THE WATER SECTOR (WARMA)

Zambia is a country sitting on approximately 752,614 square kilometers of landmass. The country has abundant natural resources, including extensive mineral and water resources. However, this water is unevenly distributed both in time and space and has been diminishing. This, therefore, made it imperative for Zambia to ensure sustainable management and development of the water resources to facilitate socio-economic development and environmental protection. Further, the country has a high water per capita with the renewable water resources per capita being estimated at about 8,700m<sup>3</sup> per capita per year. Over the years, the Government of Zambia has made significant progress in increasing access to safe drinking water and water allocation to all sectors of the economy, however despite this effort, the country still experiences low water utilisation for economic growth and wealth creation.

This, therefore, necessitated the formation of the Water Resources Management Authority (WARMA) through the Water Resources Management (WRM) Act number 21 of 2011. WARMA was established for the sole purpose of promoting Water Resources Management and Development in Zambia. However, it is significant to note that two comprehensive water sector reforms preceded the establishment of WARMA. The first and second phases of reforms in Zambia commenced in the late 1980s and early 1990s respectively. This led to the development of the National Water Policy of 1994, which provided guidelines for reorganising the sector into two sub-sectors namely, the Water Supply and Sanitation sub-sector, and the Water Resources Development and Management sub-sector.

Reforms in the water sector witnessed the separation of the water supply and sanitation functions from those of the water resources development and management sub-sector as outlined in the policy document of 1994. In cognisance of the vital role that water resources play in poverty eradication, economic development, and the importance of effective water resource management, the Zambian Government further revised the National Water Policy in 2010. The objective of this revision was to improve water resources management by setting out institutional coordination and defining roles as well as responsibilities of various ministries.

The second phase of water sector reforms involved the repealing of the Water Act of 1949 and replacing it with the Water Resources Management Act No. 21 of 2011. The process began with the implementation of the Water Resources Action Programme (WRAP), which was launched in 2001. The overall objective of the programme was to establish a comprehensive legal and institutional framework to promote the efficient development and management of water. The programme further improved equitable and sustainable use of water resources in Zambia to enhance sustainable economic development.

It therefore goes without saying the Government through WARMA, is today committed to the vision of a prosperous country where water resources are sustainably managed, developed, and equitably utilised. The Authority therefore remains indebted to the country and Government for the gains made in the past few years. We further remain resolute to providing access to water of acceptable quality and quantity, as a key catalyst to investment that will drive our socio-economic development agenda.

# THE LUNDAZI BRIDGE – OUR STAKEHOLDER ENGAGEMENT FOOTPRINT

The Water Resources Management Authority is mandated to regulate, manage, protect and preserve the surface and groundwater resources in Zambia. In actualizing this mandate, the Authority works closely with many stakeholders with various common interests. This deliberate initiative in integrating a multi-sectoral approach in water resources management is initiated through WARMA's robust Stakeholder Engagement system. The Authority through this initiative vies to strengthen its stakeholder network and sharpen its conflict resolution mechanisms. It is within the Authority's planned strategic pillars to implement stakeholder engagement initiatives with key stakeholders in the water sector. The Authority, therefore, undertook a series of meetings with sector players and lawmakers in Lundazi over the water contamination and stalled construction of the Lundazi bridge project. The failed project negatively impacted water resources in the Lundazi river catchment, prompting the need for an immediate solution. The worst affected was the Lundazi Dam reservoir, whose sediment concentration increased. The Lundazi bridge is located upstream of the Lundazi dam. According to expert reports, the bridge has so far been washed away twice since it was first constructed. The commencement of the construction of the bridge has been deemed a step in the right direction to infrastructural development although it has come with some negative effects, especially on the Lundazi dam.

The local people consider this bridge as the gateway to Chipata district and other key destinations for their business activities. Long before the bridge was put up, residents had huge mobility challenges in accessing destinations of their choice. However, it has now become a well-known fact in Lundazi that the bridge has in the recent past suffered perennial disasters of being washed away at the hands of river floods, posing a great danger of water contamination, and siltation along the river hence erratic water supply to Lundazi District. WARMA in collaboration with Eastern Water and Sanitation Company (EWSC), Road Development Agency (RDA), and other stakeholders facilitated the seamless and quick management of these dangers to Lundazi residents through engaging in dialogue. WARMA, therefore, is of the view that the construction of the bridge did not follow the right procedure. The consultant and the contractor did not seek permission from WARMA to construct the bridge hence several technical factors were not considered during the construction process. The long-term effect of this construction was the heavy siltation into the Lundazi river leading to drinking water contamination



The dialogue meeting had the presence of the Provincial Water Supply and Sanitation Officer representing the Permanent Secretary. Representing Eastern Water Supply and Sanitation Company was the company's Managing Director, who informed the meeting that the effects of the bridge's poor construction had reached alarming levels. He mentioned that the loose sand that washed away when the cofferdam collapsed had reduced the dam's water holding capacity. The Managing Director stressed that these effects have in the long run affected the water treatment plant and the entire water supply chain.

Through the Engineering Manager for Eastern Water Supply and Sanitation Company, the meeting heard that the major concern that stakeholders must focus on was the protection of the water body. He stated that both the bridge and the water are important to the District. He disclosed that the following changes have been noticed at the plant: That Silt has led to a reduction in the dam holding capacity. That the initial dam capacity was at 600,000m<sup>3</sup> and that the new volume would be determined with the help of the Water Resources Management Authority. That every year the abstraction point is always relocated due to dam water levels being shallow.

That the Utility company was facing huge challenges in water purification due to high turbidity. And that the Utility company would use one (1) bag of Aluminium Sulphate to treat the water but since the onset of the rains, the company currently uses four (4) bags per day.

The Area Member of Parliament (MP) who was also present at the meeting wanted to know where the problem was in connection with the delayed completion of the bridge works. She stated that the Minister of Infrastructure holds that the bridge works are expected to be completed by 30/03/2022 on the basis that the remaining works were minimal. The Lundazi Central lawmaker stressed the need to have access to running water in the District. The MP further stressed to the meeting the adverse effects that come with a lack of water to key institutions and households. She went on to talk about the number of times the bridge had been washed away and how many lives have been lost on the bridge. In his response to the MP, the bridge Consultant representing BICON company stated that the works were currently standing at 75% completion. He assured the Member of Parliament that indeed the main structural works on the bridge would be done by 30/03/2022 and that the final works would be done by 31/05/2022. The Consultant further disclosed that silt was also noticed upstream of the bridge.

Further, the Member of Parliament raised concern over the delayed completion of the bridge leading to the intermittent water supply at the Hospital in the District. She lamented that if the situation is not addressed quickly, it might lead to various waterborne disease outbreaks. The lawmaker further called on all stakeholders present to utilize the meeting to find a lasting solution to the matter.



At the same meeting, the District Administrative Officer (DAO) who was representing the District Commissioner, in his presentation, said the Contractor was in agreement to cushioning the cost of continuous water supply to the district, but however wanted to know how far the agreement had gone. The DAO further raised concern over the high volumes of loaded trucks using the bridge and how much the bridge would take to sustain such heavy traffic. He concluded by expressing the need for residents to have a continued water supply at all times.

On behalf of the Water Resources Management Authority was the Luangwa Catchment Manager who explained that the Authority’s mandate is to safeguard the water resources and approve all hydraulic infrastructure. The Catchment Manager cleared that the Authority was not informed at the onset of the Project construction, a situation he described as a serious oversight. He mentioned that the matter prompted WARMA and RDA to enter into a Memorandum of Understanding (MoU) on such future projects to avoid such costly ambiguities. The Manager explained to the Stakeholders that it is WARMA’s attained view that domestic water usage takes priority seconded by environmental usage. On a positive development, the Catchment Manager informed the meeting that WARMA has expanded its operational base by establishing presence in Chipata. He explained that the initiative was in a bid to take care of all water user needs promptly.



## APPLICATION PROCEDURE FOR A SURFACE WATER PERMIT

### DEFINITIONS

The Water Resources Management Act defines Surface Water as “All water found on or below the bed of a water resource and includes water in storage works, drainage works or permanent pools.

The Act further defines “Permit” as An authorization for the right to the use of water for the purposes specified in the Act, for the construction of any waterworks, or for the sinking, altering, or deepening of any borehole in a water shortage area;

The steps involved in applying for a surface water permit are as follows:

### STEP 1

Submit application forms for Surface Water Permit to any WARMA Catchment Office with the following attachments:

- Two Completed WARMA Form A (download from [www.warma.org.zm](http://www.warma.org.zm) or collect hard copies from any WARMA Office)
- Title Deed or Letter from the local chief for customary land.
- Approval letter for an Environmental Impact Assessment (EIA) from the Zambia Environmental Management Agency (ZEMA) if a permit will include civil works such as the construction of Dam, Weir, Furrow, Dambo or Bridge.
- Design Report and Design Drawing of Hydraulic structure if Surface Water Permit is for Storage of Surface Water.
- Proof of payment of application fee.

**Step 2:**  
WARMA reviews the application for Completeness.

**STEP 3**  
WARMA assigns an Application Number to your application and conducts field investigations/assessments and prepares an Engineers’ Report.

**STEP 4**  
WARMA advertises the application in print media. If objections come forward and have merit, a public hearing is held to address the objections. If no objections come forward, then the application is considered by the Technical Committee of the WARMA Board of Directors.

**STEP 5**  
The Technical Committee recommends application for approval, deferment or rejection to the WARMA Board of Directors.

### STEP 6

If successful, the client is requested to pay appropriate fees and charges, and WARMA issues a Surface Water abstraction or Storage Permit for a specified period. If unsuccessful, the client is notified accordingly.

# PHOTO GALLERY

















# WARMA



**Water Resources  
Management  
Authority**

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