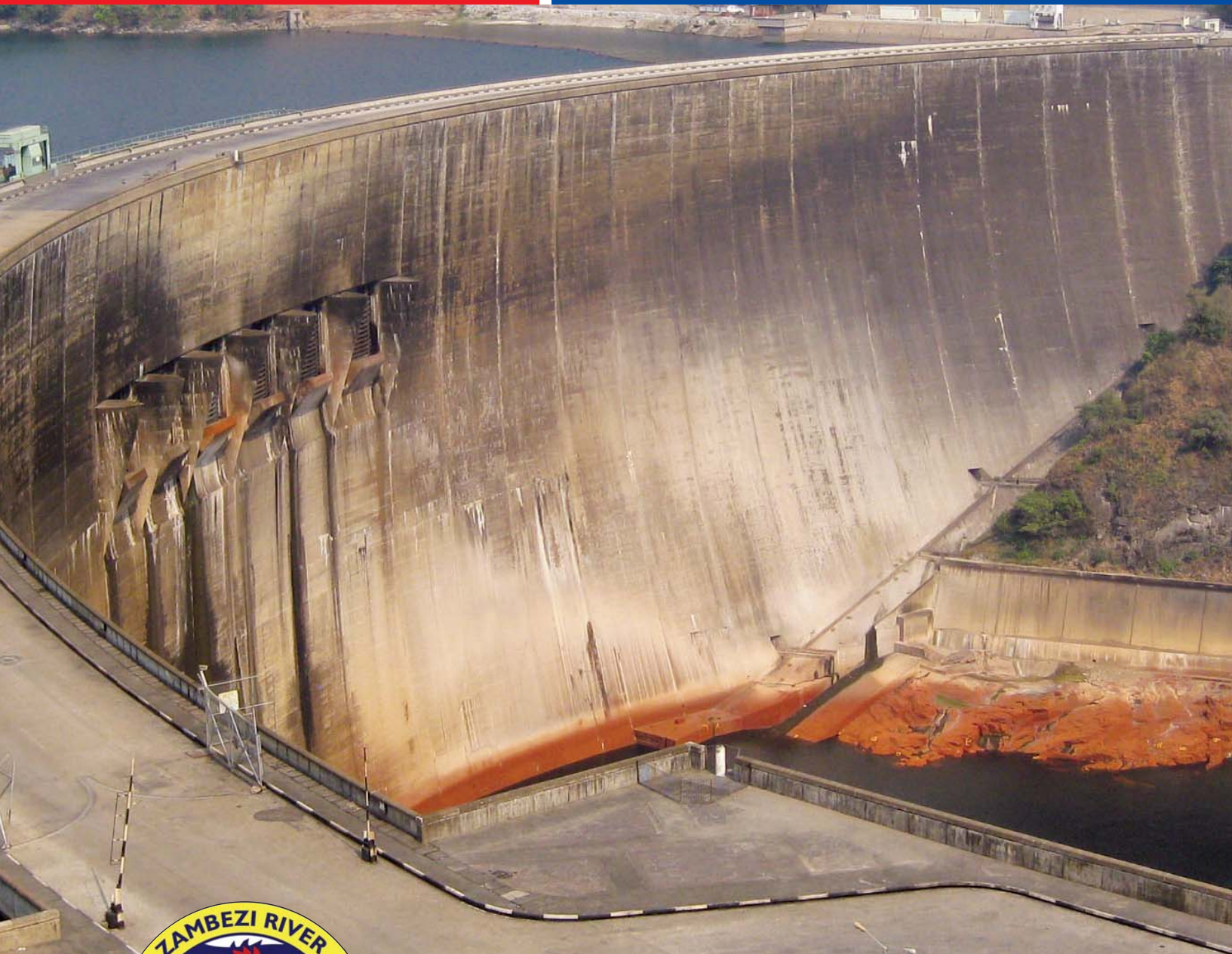


**WATER! TODAY,
TOMORROW.**

Annual Report and Financial Statements for the year ended **31st December, 2015**



ZAMBEZI RIVER AUTHORITY

28TH
EDITION



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Cover Picture: Multi-beam Bathymetrical Survey
plot of the plunge pool - Kariba Dam

28th Edition of the ZRA Annual Report & Accounts 2015



MESSAGE FROM THE CHAIRPERSON



**Brigadier General (Rtd)
Emeldah Chola**

The Authority supports traditional ceremonies around the areas in which its projects are located.

It is an honour and a privilege for me to present the Zambezi River Authority Annual Report and Accounts for the year ended 31st December 2015.

The past 12 months have provided a great opportunity for collaboration with Co-operating partners on our output which has a strong bearing on regional socio-economic development.

The year 2015 marked the consolidation of all the preparatory studies undertaken for the major rehabilitation works at the Kariba Dam and the commencement of the Batoka Gorge Hydro Electric Scheme. The Annual Report provides the fiscal outlook, internal business, technical activities and the human resource and customer focus in line with the adopted Balanced Score Card Performance Management System.

FINANCIAL REVIEW

During the year under review, the operating income was 2% above budget due to higher generation of electricity by the two power utilities (ZESCO LTD and Zimbabwe Power Company). However, the total operating expenditure for the year was below the budgeted amount by 20% partly due to delayed execution of major dam rehabilitation works. There were also procurement processes that could not be fulfilled but shall take effect in the coming year.

The power utilities continued to make concerted efforts in managing their debts resulting in an improved reduction in the debts. Furthermore, management continued to engage both power utilities in order to achieve a complete liquidation of outstanding amounts.

The Authority's financial standing continued to be positive through investment in fixed deposits to raise the necessary resources to meet the counterpart funding on the rehabilitation projects currently underway.

OPERATIONS:

KARIBA DAM

The five-yearly inspection of the Kariba Dam was conducted in September 2015 by the Authority's Engineering Consultants, Tractebel Engineering in collaboration with Authority staff. The Inspection program included the spillway and the plunge pool and the results are expected to serve as the baseline for the implementation of the Kariba Dam Rehabilitation works which are earmarked to start in 2016.

BATOKA GORGE HYDRO-ELECTRIC SCHEME

The Scoping Report was approved by the regulators, Zambia Environmental Management Authority (ZEMA) and Environmental Management Agency (EMA) of Zimbabwe, and was released to the public on 3rd November 2015.

FINANCING OF THE PROJECTS

The African Development Bank and the World Bank commenced financial disbursements for the Kariba Dam Rehabilitation Project in the fourth quarter of 2015.

The consultant for the Financial and Legal Transaction Advisory Services, Ernst and Young Advisory Services (Pty) Limited (EY), commenced work and completed the Inception Phase. The Inception Report was approved by the Authority on 21st August 2015. In the year under review, EY also prepared a risk assessment report and submitted a draft risk register together with an options analysis report.

WATER RESOURCES AND ENVIRONMENTAL MANAGEMENT

Due to reduced water levels over most of the Zambezi River Basin, leading to below average river inflows into Lake Kariba, water allocation to the two power utilities, Zesco and ZPC was revised downwards from 45 billion cubic meters to 40.5 billion cubic meters for the year. The Lake Kariba water levels continued to recede from January 2015 due to increased generation activity by the two power utilities closing the year with 22% live storage (portion of water that can be used for flood control and power generation).

The Lake Kariba lake-wide water quality and weed monitoring was carried out in August 2015 and frequent water hyacinth hotspot sites on the Lake Kariba Eastern Basin were found to be clear of the water hyacinth weed.

CORPORATE SOCIAL RESPONSIBILITY

The Authority continued supporting its community projects among the marginalized communities through the provision of 2% of the water sales revenue towards the Zambezi Valley Development Fund (ZVDF) in support of the Tonga/Korekore people who were displaced by the construction of the Kariba Dam. The Authority staff remained focused on identifying and developing approved projects around the Zambezi Valley Basin that will lead to sustainable lifestyles for the displaced communities.

The focus for the year was on Nkandabwe Irrigation Scheme, Sinazongwe District (Zambia); construction of Kota Kota Clinic and School in Gwembe District (Zambia); rehabilitation of Syambwakkale Dam (Zambia); Construction of two classroom blocks and two teachers' houses at Chikuro Primary School, Kariba District, (Zimbabwe); Mlibizi Irrigation Scheme, Binga District, (Zimbabwe); connection of electricity to two nurses' houses at Sengwe Clinic, Hurungwe District (Zimbabwe); and construction of a clinic and three staff houses at Chiroti Clinic, Hurungwe District (Zimbabwe).

In addition, the Authority also supported traditional ceremonies around the areas in which its projects are located.

THE AUTHORITY'S VISIBILITY AND BILATERAL RELEVANCE

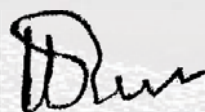
In the Authority's pursuit of the strategic objective of enhancing corporate image, the Authority embarked on the production of the Authority's information pack for use in the induction of board members and stakeholder relations. The Authority also provided assistance towards the holding of traditional ceremonies in chiefdoms situated in the riparian districts. The Authority sustainably planned media facility tours to the project sites which raised the visibility and coverage of Authority operations.

CORPORATE GOVERNANCE

The Authority recognises the responsibility of fostering a conducive and ethical environment for the conduct of its affairs through the highest personal and corporate conduct as reflected in the Board Charter and Employee Code of Ethics.

ACKNOWLEDGEMENTS

On behalf of the Council of Ministers and the Board of Directors, I would like to commend management and staff for their commitment throughout the year. I also wish to express our sincere gratitude and appreciation for the input and cooperation rendered by our partners, clients and stakeholders in shaping the Authority's goals and objectives.



Brigadier General (Rtd) Emeldah Chola
Lusaka, 2015

ZAMBEZI RIVER AUTHORITY PROFILE

The Zambezi River Authority (Authority) is a corporation jointly and equally owned by the Republic Governments of Zambia and Zimbabwe. It was established as a corporate body on 1st October 1987 by parallel legislation in the Parliaments of Zambia and Zimbabwe under the Zambezi River Authority Acts. Being an entity owned by two Governments and bearing in mind its strategic importance to the two countries, corporate strategy planning plays a critical role in the long term direction of the organisation.

The Authority's mandate is to obtain the greatest possible benefit from the natural advantages offered by the waters of the Zambezi River and to improve and intensify the utilization of the waters for the production of energy and for any other purpose beneficial to the two countries.

The key purpose underlying the mandate is for economic, industrial and social development.

KEY STRATEGIC FUNCTIONS

The following are the key strategic functions of the Authority.

a) The operation, monitoring and maintenance of the Kariba Complex.

b) In consultation with the national electricity undertakings, investigate the desirability of constructing new dams on the Zambezi River and make recommendations thereon to the COM.

c) To construct, operate, monitor and maintain any other dams on the Zambezi River.

d) To collect, accumulate and process hydrological and environmental data of the Zambezi River for the better performance of its functions and for any other purpose beneficial to the Contracting States.

e) Regulate the water level in the Kariba reservoir and any other reservoirs owned by the Authority.

f) Submit development plans and programmes to the COM for approval

The Authority is the only dam management organisation serving two states within the Zambezi River basin. The Authority generates its revenue from the sale of water from the Kariba Dam which is used for power generation by ZESCO Limited in Zambia and the Zimbabwe Power Company in Zimbabwe.

OUR STRATEGIC OBJECTIVES

Goal 1:

To secure the long term safety and reliability of the Kariba Complex by December 2022.

Goal 2:

To increase the utilisation of the Zambezi River through the commencement and further development of the two additional Hydro Electric Schemes by 2019

Goal 3:

To attain long term organisational sustainability and viability through improved operational efficiency and effectiveness.

Goal 4:

To have a positive corporate image for the Authority by 31 December 2019.

Goal 5:

To establish a Monitoring and Evaluation mechanism that would ensure effective implementation of the Corporate Strategic Plan.

CORPORATE STRUCTURE

The Authority has a three-level management structure as follows:

COUNCIL OF MINISTERS

Zambia

Hon. Christopher Yaluma, MP
(Minister of Mines, Energy & Water Development)
Until October 2015

Hon. Dora Siliya, MP
(Minister of Energy & Water Development)
From October 2015

Hon. Alexander B. Chikwanda, MP
(Minister of Finance)

Zimbabwe

Hon. Samuel Undenge, MP.
(Minister of Energy & Power Development)

Hon. Patrick A. Chinamasa, MP
(Minister of Finance & Economic Development)

THE BOARD OF DIRECTORS

Zambia

Brigadier General Emeldah Chola (Retired)
Permanent Secretary
Ministry of Mines, Energy & Water Development

Mr. Felix Nkulukusa
Permanent Secretary Finance (Retired)
Until October 2015

Dr. Ronald Simwinga
Permanent Secretary - Finance
From October 2015

Mr Mukutulu A. Sinyani
Independent Board Member

Zimbabwe

Mr Partson I. Mbiriri
Permanent Secretary
Ministry of Energy & Power Development

Mr Willard L. Manungo
Permanent Secretary - Finance & Treasury

Eng. Israel Rwodzi
Independent Board Member

DEPARTMENTS

Finance

- Financial Management
- Strategic Management
- Budgeting and Controls
- Risk Management
- Business Development
- Resource Mobilisation

Water Resources & Environmental Management

- Managing the Zambezi River's water quality and quantity for power generation and other stakeholders
- Hydrological operations, information systems, environmental and water quality monitoring.

Projects and Dam Safety

- Undertaking the monitoring and maintenance of Kariba Dam and appurtenant structures as per provisions of the Standing Operation Procedures (SOP) Manual.
- Implementing projects along the Zambezi River and other projects earmarked to improve the socio-economic status of the communities displaced from the Kariba Dam basin following dam construction.
- Projects design, projects construction, dam safety and maintenance.

Corporate Services

- Board secretarial services / Corporate Governance
- Legal
- Human Resource and Administration
- Procurement
- Public Relations & Communication

COUNCIL OF MINISTERS

Zambezi River Authority is governed by a Council of Ministers consisting of four members holding portfolios of Energy and Finance in the Republics of Zambia and Zimbabwe. According to the

ZRA Act, the Chairmanship of Council is held alternately by the Ministers responsible for energy in the Governments of Zambia and Zimbabwe.



Chairperson
Hon. Christopher B. Yaluma, MP
Zambia



Co - Chairperson
Hon. Dr. Samuel Undenge, MP
Zimbabwe



Member
Hon. Alexander B. Chikwanda, MP
Zambia



Member
Hon. Patrick Chinamasa, MP
Zimbabwe

BOARD OF DIRECTORS

The Zambezi River Authority Board of Directors is responsible for the policy and control of the Authority and is chaired alternately by Permanent Secretaries with Energy portfolios in the Governments of Zambia and Zimbabwe.

It also comprises two representatives from the ministries holding the Finance portfolios, plus two other independent members from the two Contracting States.



Chairperson
Brig. Gen. (Rtd) Emeldah Chola
Zambia



Co - Chairperson
Mr. Partson I. Mbiriri
Zimbabwe



Member
Dr. Ronald Simwinga
PS Finance, Zambia



Member
Mr. Willard L. Manungo
PS Finance & Treasury, Zimbabwe



Independent Member
Mr. Mukutulu Sinyani
Zambia



Independent Member
Eng. Israel Rwodzi
Zimbabwe

EXECUTIVE MANAGEMENT

The day to day management of the Authority is vested in the Chief Executive, assisted by four Directors namely; the Finance Director, Director –

Water Resources & Environmental Management, Director - Projects & Dam Safety and Board Secretary/Corporate Services Director.



Chief Executive
Eng. Munyaradzi C. Munodawafa
Zimbabwe



Board Secretary/Corporate Services Director
Mr. Peter Kapinga, Zambia



Finance Director
Mr. Edward Kabwe
Zambia



Dir. Projects & Dam Safety
Eng. David Z. Mazvidza
Zimbabwe



Dir. Water Resources & Env.
Eng. Christopher Chisense
Zambia



OPERATIONAL REPORT

Overview

One of the Authority's mandate is provision of water to the electricity generating utilities for power generation. To achieve this, the Authority continued to carry out preconstruction activities leading to development of the Batoka Hydro-electric Scheme whose construction is expected to start in 2017. During the year, the Council of Ministers approved the scheme's installed capacity and mode under which it will be developed. The studies are expected to be completed by mid-2016, after which funds for construction will be mobilised.

The Authority also continued to monitor and maintain the Kariba Dam and its appurtenances in line with Standing Operation Procedures (SOP). Work also continued in addressing the operation and maintenance recommendations of the 2010 five yearly inspection.

A five yearly inspection was carried out from the 7th - 19th September 2015. This was the 10th five yearly inspection of the Kariba Dam since 1970. This inspection was crucial in assessing the baseline conditions prior to implementation of the Kariba Dam Rehabilitation Project. During the inspection period, the dam's potential failure mode analysis was conducted. The exercise, carried out by the Authority's staff and facilitated by consultants from Tractebel Engineering, identified and analysed potential risks to the safe performance and operation of the Kariba Dam and prescribed mitigation measures.

Procurement of institutional support services for the Kariba Dam Rehabilitation Project continued in the year with procurement of the panel of experts and technical services and supervision consultants.

Dam monitoring and Surveillance Instrumentation

Data collection, evaluation and analysis continued during the year. Results from these analyses show that the dam continues to behave as expected. Notwithstanding this, long-term performance of the dam may be compromised by instability at the river banks and retrogressive erosion in

the plunge pool. In addition to the plunge pool instability, another risk identified in the potential failure modes analysis relates to deterioration of the spillway upstream facility civil works. The planned Kariba Dam rehabilitation works are aimed at addressing these threats to reduce the likelihood of risk occurrence.

Monitoring Results

Geodetic Measurements and Crest Levelling

In Fig 1, results from the August 2015 precision crest levelling measurement show that the dam concrete has continued to swell due to Alkali Aggregate Reaction (AAR). The spillway area has the largest deformations of approximately 80

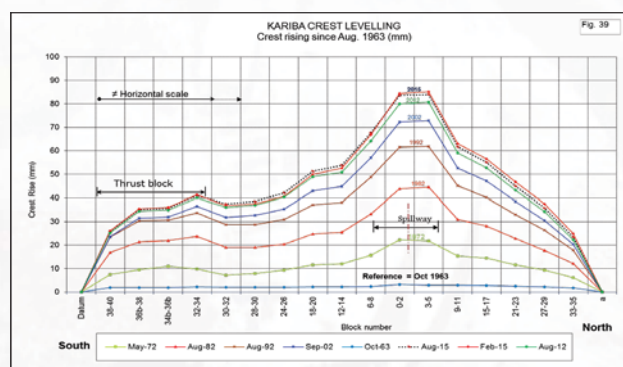


Fig 1

mm from the baseline measurement of October 1963. However, the August 2015 measurement indicates a slowing trend in the last 15 - 20 years when compared to the first years of impounding.

Main Dam Pendulums

Analysis of the pendulum data shows a continued upstream drift of the dam crest. Results from pendulum W06, located at the dam's central axis, are presented in Fig 2. The results also highlight effects of the marked reservoir drawdown experienced in the year. The upstream drift is attributed to Alkaline Aggregate Reaction as the Kariba Dam operates at full hydrostatic load with a 10.6 % load variance between maximum operating and minimum operating levels.

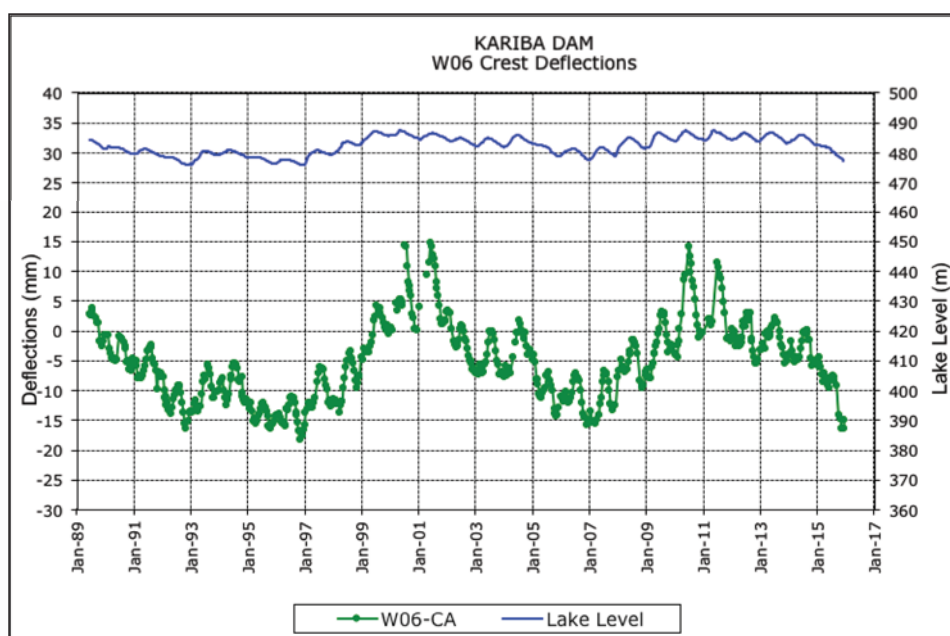


Fig 2

Fig 2: Kariba Dam pendulum W06-CA Deflections plots from the mini-geodetic deformation measurements on target 434, mounted on the upstream of Pier number 2, show an irreversible upstream deflection of the dam crest due to AAR. Data has been collected from target P434 for nearly 50 years and has been central in the analysis of AAR effects on Kariba Dam.

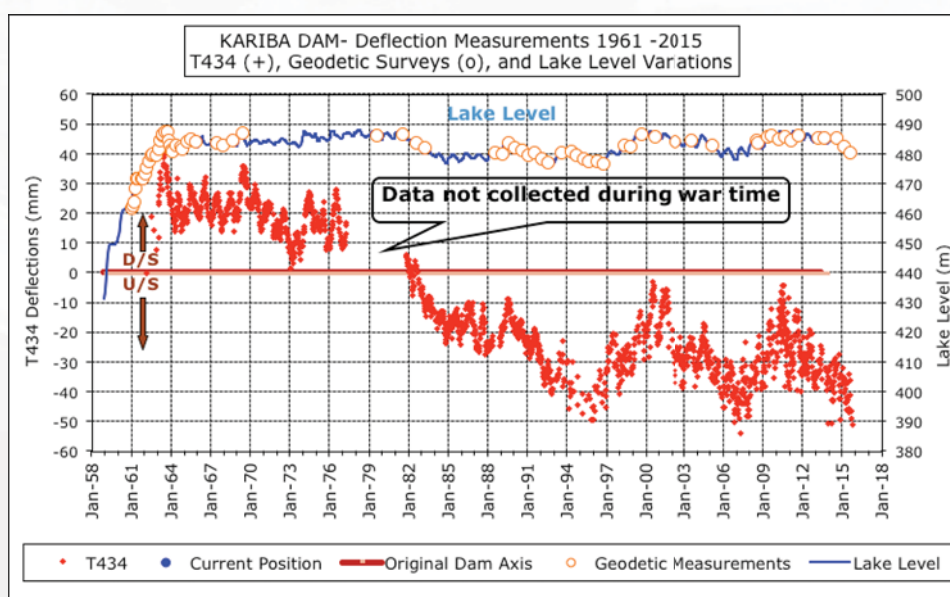


Fig 3

Routine Maintenance Works

Maintenance of the dam and its appurtenant structures continued in the year. The works included:

- Servicing of hydro-mechanical equipment,
- South Bank weeding and clearing of overgrowth,
- Maintenance of drainages,
- Cleaning and maintenance of drainages in adits, shafts, and galleries,
- Surface sealing of South Bank,
- Floodgates and sluice servicing and repair,
- Stop-beams and gantry maintenance,
- Clearing of South Bank Power Station intake trash screens,
- Floodgate sluices and apron repairs,
- Floodgate deflector plate repairs,
- Inspection, repair and maintenance of upstream navigational floats.



Fig. 4: South Bank slope before weeding



Fig. 5: South Bank clearing of overgrowth



Fig. 6: South Bank after removal of weeds

South Bank Monitoring and Surveillance

Monitoring and surveillance of the South Bank movements continued in the year. No changes in deformation trends were recorded in spite of the on-going Kariba South Power Station expansion project. Monitoring of the South Bank has also been enhanced by recording of blast vibrations to ensure that they do not exceed the 9mm/s as that could trigger accelerated slope movement.

Slope movements within the shallow slide continued to be monitored using the South Bank pendulum PS1. The graph below shows historical movements of the shallow slide.

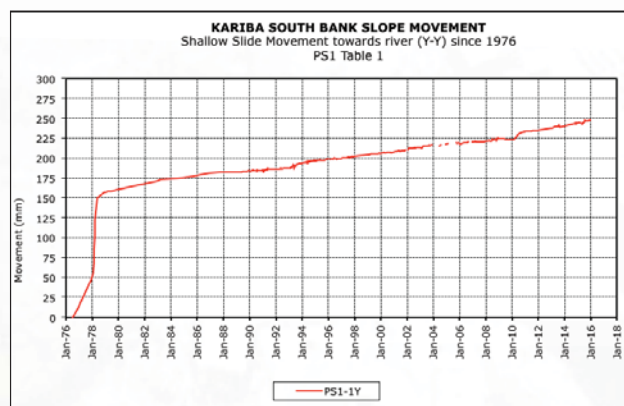


Fig 7: Shallow slide slope movement towards the river - measured from Pendulum PS1

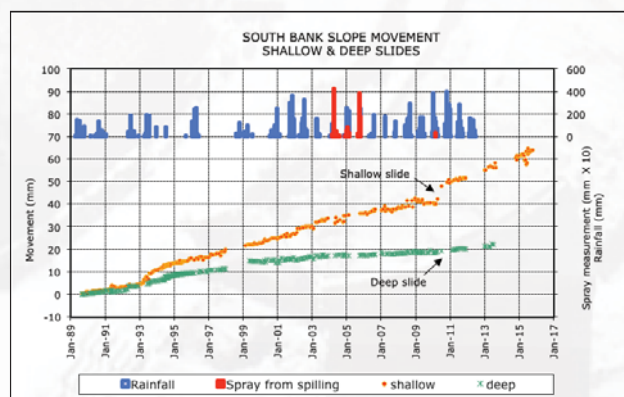


Fig 8: Plots of movements within the shallow and deeper slide of the South Bank slope.

Additional Instrumentation

The year also witnessed drilling and installation of pendulum W05. This instrument is expected to provide additional information on behaviour of the dam in the mid-section of the dam towards

the North Bank abutment. The contract was successfully completed and pendulum W05 was commissioned in October 2015 at a cost of nearly US\$700 000.00.



Fig. 9: Drilling rig at crest level



Fig. 10: Moving drilling rig into one of the dam galleries



Fig. 11: Drilling in one of the dam galleries

Kariba South Extension Works

By year end, the civil works under this project were at an advanced stage. Their effect on the Dam and its appurtenances were controlled by limiting blasting vibrations which were recorded

by vibration sensors. Results from collected data shows that the blast vibrations have remained below the recommended design limits.

KARIBA DAM REHABILITATION PROJECT

The Authority is embarking on major rehabilitation projects that are aimed at addressing significant safety shortcomings that could lead to potential failure modes at the Kariba Dam. The works include the Plunge Pool and the spillway. These projects are expected to improve the performance and long-term safety of the Kariba Dam.

Resource Mobilisation

Funds for implementation of the works were secured from the World Bank, European Union, African Development Bank and the Swedish Government. A total of US\$294.2 million was raised in the form of grants and concessionary loans. Of this amount, the Authority is contributing US\$19 million.

Plunge Pool Reshaping

Work on the plunge pool will comprise reshaping of the pool to increase its efficiency and capacity to dissipate energy from the spilling jets. The plunge pool fault area will also be strengthened

under this project. A technical services and supervising consultant has been engaged to serve as the Authority's representative and to review the designs. The consultant commenced work towards the end of the year and is expected to finish reviewing the plunge pool designs by end of April 2016. Launching of tender is expected soon after the design reviews are completed and tender award is scheduled for September 2016. The work is expected to be completed over two years.

Spillway Refurbishment

Rehabilitation of the spillway civil works forms the second stage of the Kariba Dam rehabilitation project. In this component, the second stage concrete supporting built-in parts will be replaced with reinforced concrete. The built-in parts will be realigned to remove distortions caused by Alkaline Aggregate Reaction that could trigger jamming of stop-logs. An emergency gate and new gantry with capacity to operate the much heavier emergency gate will also be fabricated.

BATOKA GORGE HYDRO-ELECTRIC SCHEME

The Authority continued with the implementation of the project preparatory activities, which included Updating of Engineering Feasibility Studies, Environmental and Social Impact Assessment Studies (ESIA) and Legal and Financial Transaction Advisory Services.

Updating of Engineering Feasibility Studies

Studio Pietrangeli (SP) of Italy who were engaged in 2014 to undertake the Updating of Engineering Feasibility Studies continued to undertake the studies during 2015. Phase two of the studies was completed. This involved an options assessment and confirmation of the Scheme layout. A Scheme layout with an Arch gravity Dam and two outdoor power houses, one on each bank, (north and south) with an installed power of 1200MW each, was adopted. Phase three which included preparation of the Draft Feasibility Report commenced and will be completed in 2016.

Environmental and Social Impact Assessment Studies (ESIA)

The Consultant appointed to undertake the Environmental and Social Impact Assessment

Studies completed the Scoping and the Baseline Studies. Work on the draft ESIA Report commenced during the year and will be completed in 2016. Environmental and Social impacts of the Project and the mitigation measures were also identified.

Legal and Financial Transaction Advisors

The consultant engaged to provide Legal and Financial Transaction Advisory Services completed the Inception and the Options Analysis components of the assignment. Council of Ministers approved a structure under which the Project will be developed. The Structure comprises of an Authority-owned and financed dam with the power plants developed under Public Private Partnerships. Preparation of the Legal Diagnostic Report, Economic and Financial Analysis for the selected commercial structure commenced during the year.

Batoka Gorge South and North Bank Access Roads

Work commenced on the annual maintenance of the access roads to the Project site.

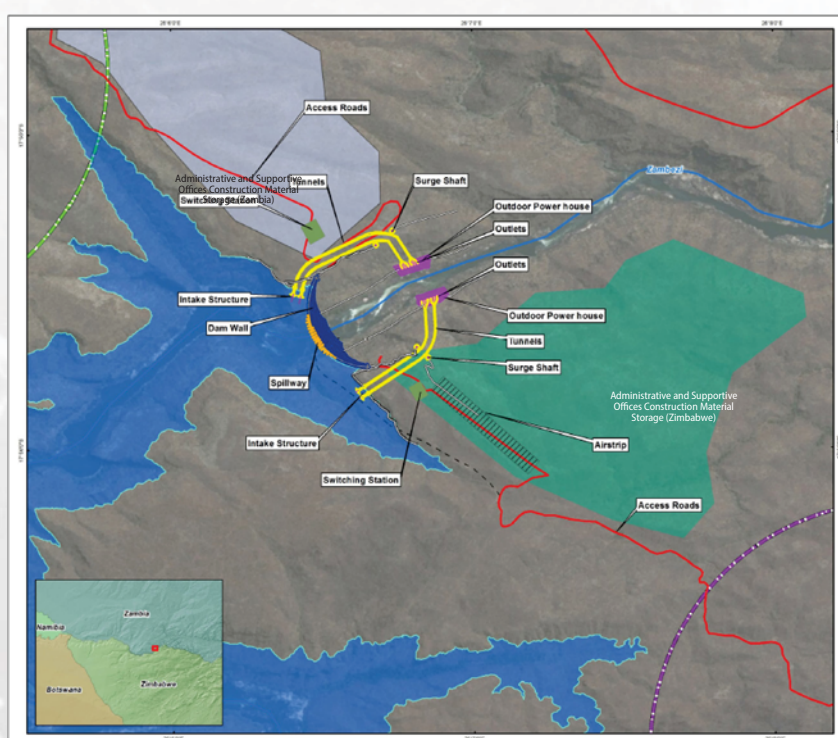


Fig. 12: Proposed layout of the Proposed Batoka Gorge HPP

ZAMBEZI VALLEY DEVELOPMENT FUND

The Authority continued to implement projects amongst the communities displaced by the construction of Kariba Dam as part of its Corporate Social Responsibility.

Kalomo District Borehole Drilling Project (Zambia)

Six boreholes were drilled and handed over to communities in the Nkandazovu area of Kalomo District. The boreholes will go a long way in alleviating the water problems faced by the communities.



Fig. 13: One of the six boreholes handed over to Kalomo District community

Gwembe District Hamatuba Primary School Project (Zambia)

Construction of teachers' houses and classrooms at Hamatuba Primary School commenced during the year. These are meant to replace the existing temporary thatched shelters. The school currently has a single 1x2 classroom block. A 1x3 classroom block, a 1x2 classroom block and three teachers' houses were under construction.

Construction of the school progressed under the site supervision of Gwembe District Council. Progress attained was as stated below:

- (a) Construction of the super structure, including roofing, for the teacher's houses

was completed. Completion is expected in the first quarter of 2016.

- (b) Construction of super structures for two classroom blocks was completed as planned. The target for final completion is the first quarter of 2016.



Fig. 14: Teachers' houses under construction at Hamatuba Primary School



Fig. 15: 1 x 2 Classroom Block at Hamatuba Primary School under construction

Hamatuba Clinic Project

To improve access to primary healthcare, the Authority embarked on the construction of a clinic. This will reduce distances the community has to walk to get to the existing health facilities. Construction of super structures for the two staff houses was completed. Completion is earmarked for the first quarter of 2016. Construction of maternity and admission wards progressed to roof level before end of 2015.



Fig. 16: Maternity ward under construction, Sinazongwe District



Fig. 19: Rehabilitated dam at full supply level

Syambwakkale Dam Rehabilitation Project (Zambia)

The Authority in collaboration with Sinazongwe District Council implemented the rehabilitation work of Syambwakkale Dam. The scope of the works involved rehabilitating the Dam that failed due to the eroded foundation on the left bank. Syambwakkale Dam is the only source of water for livestock in the area. The streams in the area are seasonal and the water usually dries up in the dry season with the alternative source being more than 30km away.

The community contributed resources in the form of labour. River sand and stone for masonry works were also mobilized by the community. The works were completed before end of December 2015.



Fig. 17: Rehabilitation project



Fig. 18: Dam was cracked at the centre and undercut foundations on the left abutment

Chirundu District Lusitu Irrigation Scheme Project (Zambia)

The Lusitu Irrigation Scheme saw the introduction of a higher capacity pump that significantly improved water supply. The irrigation cycles were reduced from six to two days. The installation of the new pump also contributed to the reduction of electricity bills by 30%.

Bananas and vegetables were the major crops grown at the scheme in 2015.



Fig. 20: New pump at Lusitu irrigation scheme



Fig. 21: Pump house under construction



Fig. 22: Completed pump house



Fig. 23: Crops under irrigation in Lusitu

Kariba District

Chikuro School Project (Zimbabwe)

Chikuro is located in the Nebiri Chiefdom of Kariba District. The following structures were constructed in 2015:

- Two staff houses
- 3 x 2 classroom blocks

Construction was completed during the year under review. The School will provide learning opportunities to all the children within the community.



Fig. 24: Completed staff houses at Chikuro School



Fig. 25: One of the three completed 1 x 2 classroom block

Karoi District

Chiroti Clinic Project (Zimbabwe)

The Authority embarked on the construction of a clinic at Chiroti to provide primary health care services to the Chiroti community who have had to travel great distances to access health care services.

- (a) Construction of super structures for the three staff houses was completed. Roofing is earmarked for the first quarter of 2016.
- (b) Construction of the clinic progressed to gable level before end of 2015. Roofing will commence in the first quarter of 2016.

The Ministry of Health will be the main health service provider and eventual manager of the clinic after completion and handover.



Fig. 26: Three staff houses at Chiroti clinic project site



Fig. 27: Chiroti community clinic under construction

STRATEGIC LEADERSHIP & PEOPLE MANAGEMENT

Employer/Employee Relations

The Authority continued to experience harmonious Employer-Employee relations across its entire network during the period under review.

Employee Establishment

The employee complement as at December 31st, 2015 was 152 against the approved establishment of 158.

The details of employee engagements and separations during the period under review and for the year 2014 are indicated below:

Year	Engagements	SEPARATIONS					
		Death	Retirement/Medical Discharge	Resignation	Dismissal	Expiry of Contract	Other (Termination by Mutual Consent)
2014	11	3	1	0	0	3	0
2015	5	0	3	0	0	1	1

Details of Employee Engagements

The details of the five (5) employees who were engaged during the period under review are indicated below:

				
Mr. Ambrose Navhaya	Mrs. Chileshe Hamuwele	Mr. Edson Dharabhani	Mr. Peter Kapinga	Mr. Brian Philemon
Manager ICT	Personal Assistant	Accountant - Projects	Board Secretary/Corp. Services Director	Legal Counsel
WREM Department	Finance Department	Finance Department	Executive Office	Corporate Services Department
Engaged 15th January 2015	Engaged 2nd February 2015	Engaged 1st April 2015	Engaged 1st May 2015	Engaged 15th September 2015

Details of Employee Separations

Management and staff bade farewell to Mr Caxton Makombera, Manager - Finance and Administration after expiry of his Employment Contract on January 16, 2015. Ms Margaret Gwenelo, Mr Norbert Rwodzi and Mr Cephas Muyakesa left the employment of the Authority

through medical discharge on February 28, 2015 whilst Mr. Peter Kapinga's permanent and pensionable employment service was mutually terminated on April 30, 2015, following his appointment as Board Secretary / Corporate Services Director.



Mr. Caxton Makombera



Ms. Margaret Gwenelo



Mr. Norbert Rwodzi



Mr. Peter Kapinga

Employee Placements / Promotions

In a quest to manage and nurture internal talent, the Authority appointed Mr. Boniface Mfula as Senior Manager (Water Resources & Environmental Management) while Mr. Ernest M

Katonga was appointed as Projects Coordinator. Prior to their promotions, the duo held the positions of Project Coordinator and Dam Safety Monitoring Officer, respectively.



**Eng. Boniface Mfula,
Senior Manager,
Water Resources
& Environmental
Management**



**Eng. Ernest Katonga
Project Coordinator**

Training and Development / Capacity Building

Various training programmes, workshops and study tours were conducted in order to continue developing and enhancing the knowledge and skills base for employees.

Some of the training programmes undertaken were as indicated below:

- The Balanced Scorecard Performance Management System
- Procurement Works for World Bank Funded Projects
- Effective Supervisory Skills Development
- Defensive Driving Course
- Financial Management & Disbursement
- Basic First Aid Course
- Dive Master Professional Course
- FIDIC/DISPUTE Program 1 & 2
- Integrated Project Control
- Design of Hydraulic Structures
- Treasury Management
- Effective Tender Preparation/Evaluation Techniques
- Financial Modelling Course



Fig.28: Finance Department employees attending the Financial Modelling training facilitated by Intelligent Africa

Performance Management System

The Authority encountered a number of challenges regarding the execution of the performance management system implemented in 2013. The challenges were largely attributed to the fact that the system was not robust enough to manage all the pertinent issues regarding

performance measurements and linkage to the Corporate Strategy.

Consequently, there was need for a paradigm shift for the Authority in order to embrace a more efficient and effective performance management system which would embed high performance culture in the Authority. The Balanced Scorecard Performance Management System was identified as one of the robust performance and strategy management systems that had turned around many organisations regarding performance, growth and achievement of corporate strategic objectives.

In that regard, the Authority embarked on a project to develop and implement the Balanced Scorecard Performance and Strategy Management System during the period under review.



Fig. 29: Some of the staff members who attended the BSC PMS training

The full implementation of the Balanced Scorecard Performance and Strategy Management System would be undertaken in 2016.

Employee Welfare HIV/AIDS

The Authority continued to provide support to its employees through training, counseling services and medical support. Employees who have declared their HIV/AIDS status continued to receive food packs and nutritional supplements on a monthly basis.

Health and Safety

The Health and Safety Committee continued to carry out its functions aimed at ensuring that the Authority had a healthy and safe work place environment for its employees and other stakeholders.

Home Ownership Scheme

The Authority continued to support and empower its employees through the Home Ownership Scheme by availing them with loans at low interest rates to purchase or build houses.

Long Service Awards

The Authority continued with its tradition of recognizing long serving employees. The

employees recognized as such are those who serve the Authority for 10, 15, 20, 25, 30, 35 and 40 years.

Twenty five (25) employees were awarded long service tokens of appreciation during the period under review. Indicated below are the numbers of long serving employees and the categories of awards given:

Category	10 Years	15 Years	20 Years	25 Years	30 Years	35 Years	40 Years
Number of Employees	3	12	3	3	1	1	2

Vitality and Fitness Programs

The Authority continued to support recreational programmes in the following sporting activities:

Social Football

During the period under review, the Social Football Club played four (4) games in Zambia and Zimbabwe.

It was anticipated that a similar number of games will be played in 2016 as a way of motivating employees, promoting cordial working relationships and team building amongst employees.

the assistance of the Authority. In that regard, employees participated in two tournaments held in Mazabuka/Choma and Kitwe Golf Clubs in July and October 2015 respectively.

May Day Activities

Authority employees joined their colleagues from other organizations both in Zambia and Zimbabwe to commemorate and celebrate Labour day which falls on 1 May each year. The Zimbabwean nationals celebrated Labour day in Kariba while their Zambian counterparts celebrated the May day in Lusaka.

Golf

The employees in Harare and Head Office continued to participate in golf tournaments with



Fig. 30: 2015 Labour day celebrations in Lusaka, Zambia

Operational Hydrology

The Zambezi River Authority operates a network of fifteen hydrometric stations used for the monitoring of river flows and operation of the Kariba Reservoir. These stations are depicted in Figure 33 below. All these stations are manned by observers who are fulltime employees of the Authority, with six of them complemented by automatic Data Collection Platforms (DCPs) that are designed to transmit data via near real-time satellite transmission to Head Office.

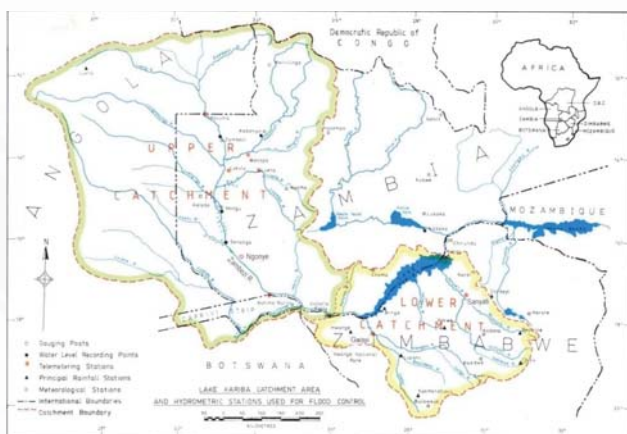


Fig. 31: Lake Kariba Catchment Area Showing Hydrometric Stations

Whereas the telemetry system remained dysfunctional during 2015 due to challenges of obtaining licences with the service provider, Eumetsat of Germany, alternative transmission mechanisms, particularly engaging with the Water Resources Management Authority (WARMA, Zambia) who were in the process of implementing a GSM-based telemetry system were under consideration as at the end of the year under review.

Rainfall

Whereas the 18th Southern Africa Regional Climate Outlook Forecast (SARCOF-18) and the collaborated National Meteorological/Hydrological Services for Zambia and Zimbabwe indicated a normal-to-above normal rainy season between November 2014 and March 2015, the recorded rainfall between October 2014 and April 2015 turned out to be below normal over most of the Zambezi Basin, leading to below average river

inflows to the Kariba Reservoir and subsequently low Lake levels.

According to the 19th SARCOF meeting held in Kinshasa, DRC, from 26 to 28 August 2015 to present a consensus outlook for the 2015/2016 rainfall season over the Southern African Development Community (SADC) region, the region was expected to receive normal to below-normal rainfall for the period October to December 2015 and January to March 2016. This forecast was based on the fact that most of the models predicted a more than 90% likelihood of a strong El Niño developing in the Southern Hemisphere that would persist through the summer of 2015-16. This situation was likely to result in below-average river flows with direct impact on inflows into the Kariba Reservoir, exacerbating further the energy generation capacity at the Kariba Complex.

River Flows

The Zambezi River flows as monitored at the key Victoria Falls Hydrometric Station which commands approximately 80% of annual average inflows into Lake Kariba were in recession as at the end of the year. The mean discharge for 2014/15 hydrological season (that is, between the period covering October 2014 to September 2015) at this station was 24 billion cubic meters against a mean annual discharge of 35 billion cubic meters. The lowest annual discharge on record was in 1995/96 with a magnitude of 12 billion cubic meters, while the highest was in 1957/58 with a discharge of 73 billion cubic meters. The discharge in 2013/14 was 43 billion cubic meters. Figure 34 below shows annual discharge volumes at Victoria Falls for selected years between 1958 and 2015, including the long term mean (LTM).

The mean discharge recorded at the station for 2015 was below the mean annual discharge and this contributed to the low lake levels recorded at Kariba Dam in the 2015 period.

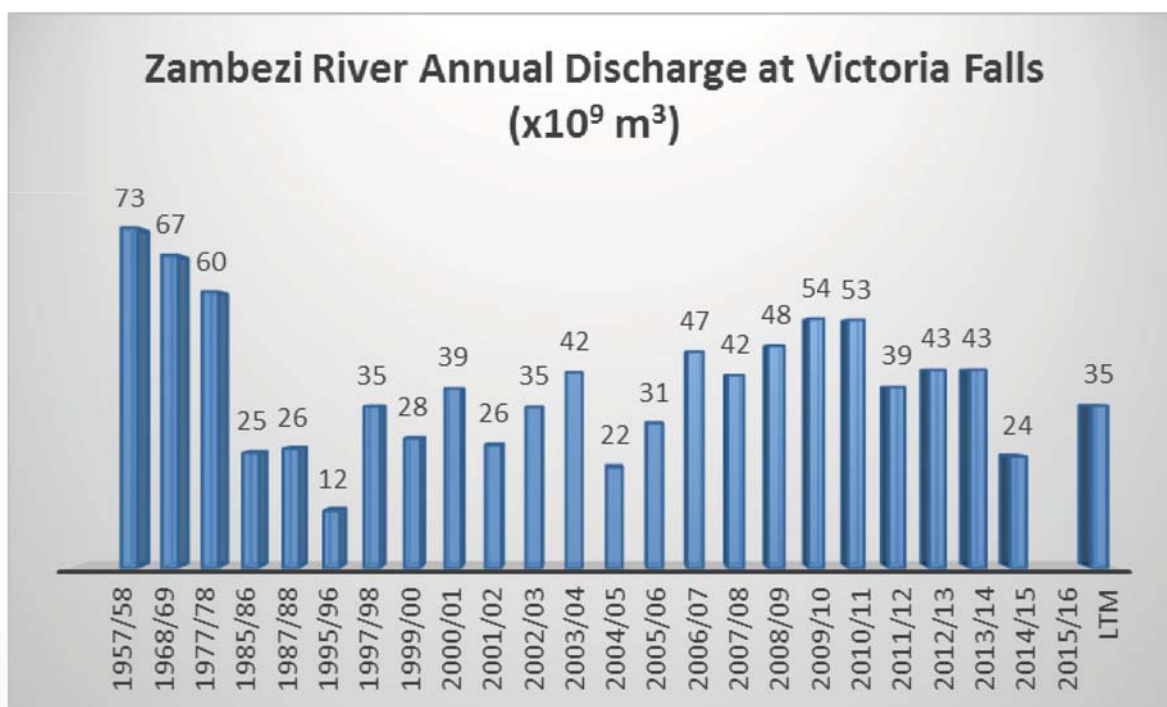


Fig. 32: Zambezi River Annual Discharge at Victoria Falls

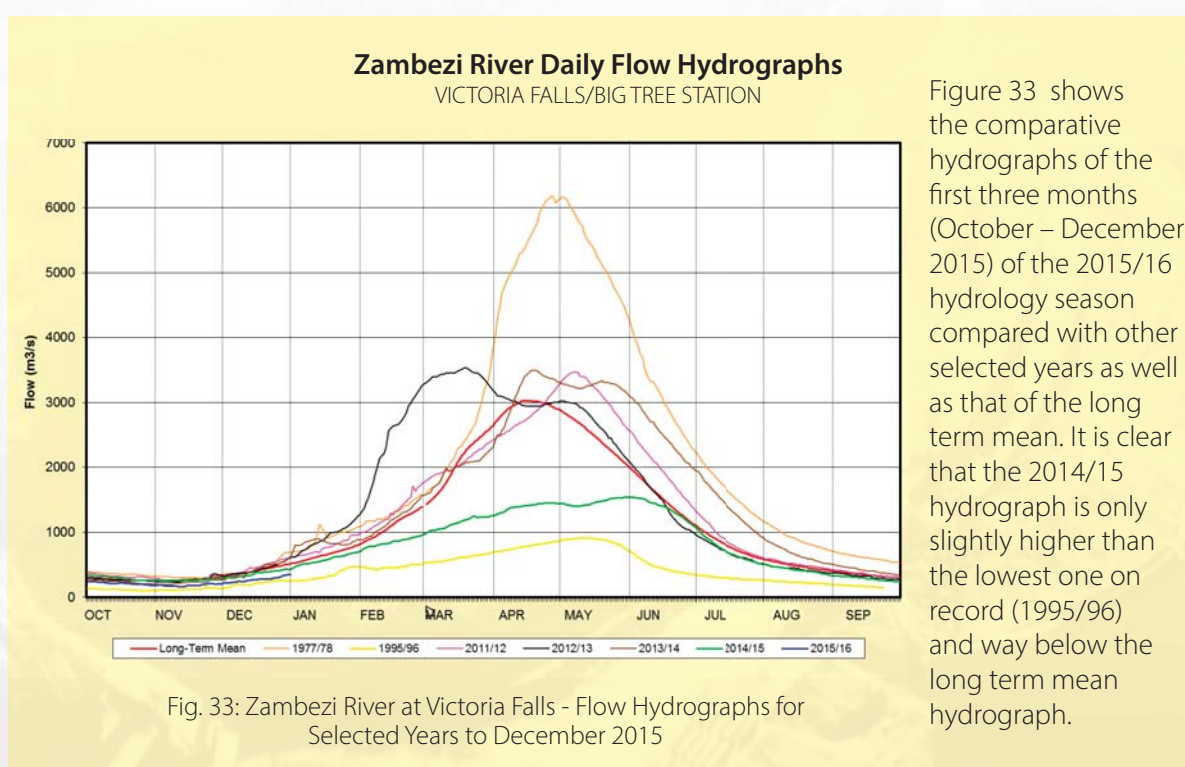


Fig. 33: Zambezi River at Victoria Falls - Flow Hydrographs for Selected Years to December 2015

Lake Levels

The Kariba Lake levels continued to recede since January 2015 owing to below average inflows as indicated above, a situation compounded by the increased generation activity by the two power generation utilities (Zesco Limited which operates Kariba North Bank Power Station & Zimbabwe Power Company which operates the

Kariba South Bank Power Station) at Kariba. The Lake dropped by 5.08m between 1st January 2015 and 31st December 2015, ending with 14% usable storage for generation on the latter date. It is notable that usable storage for generation on 31st December 2014 was at 57% full. The Lake level on 31st December 2015 was 477.52m which is 2.02m above the Minimum Operating Level.

Figure 36 below shows the performance of the Kariba Reservoir in 2015 compared to other selected years, the flood control rule curve and the operational rule curves (i.e., the Full Supply and Minimum Operating Levels). The 2014/15 and 2015/16 lake level graphs clearly reflect the combined impact of low inflows against increased outflows due to over-generation above allocation. As a result, the Lake level was receding during the months January to June when normally it should be rising during this period.

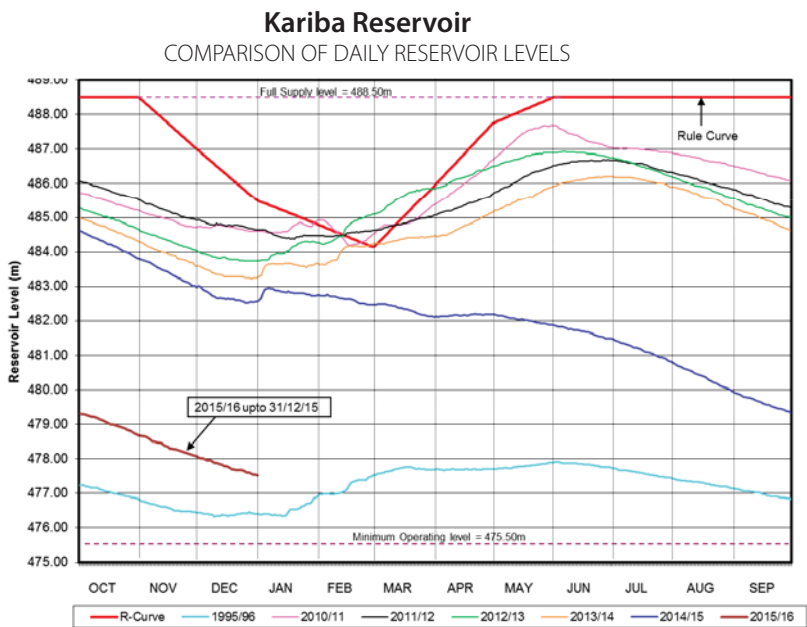


Fig. 34: Seasonal Variation of Lake Kariba Lake Levels in relation to the Flood Control Rule Curve

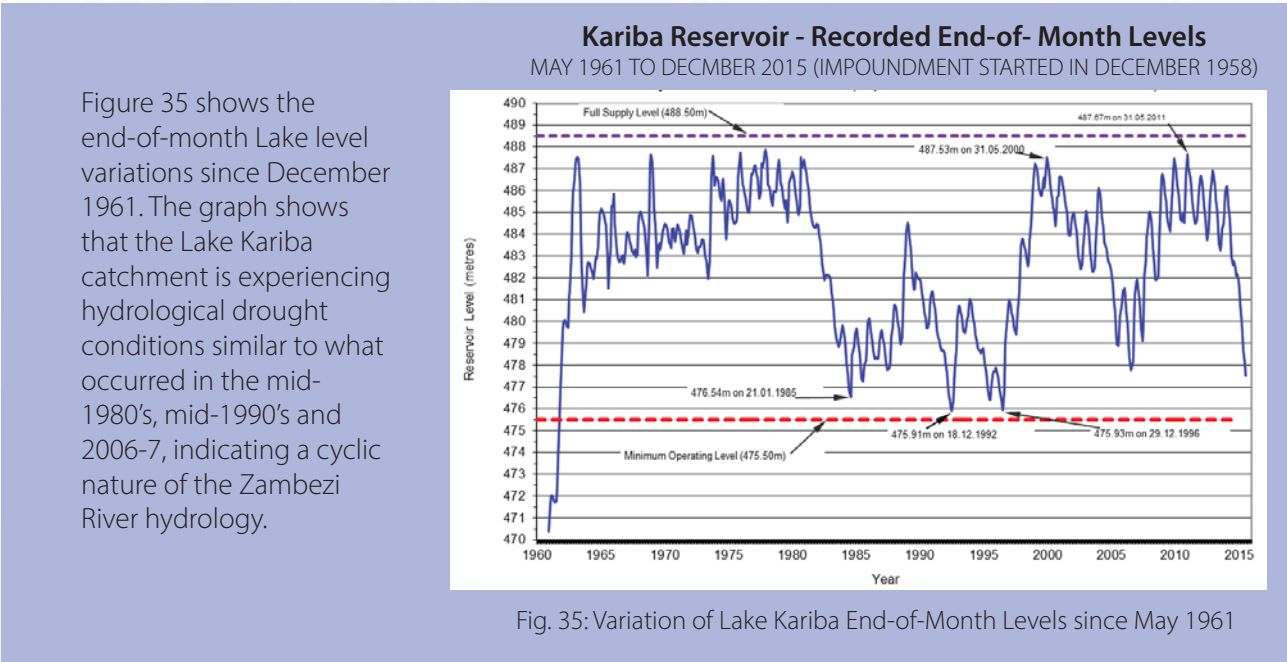


Fig. 35: Variation of Lake Kariba End-of-Month Levels since May 1961

Operation of Spillways

Considering that the Kariba lake levels remained below the Flood Control Rule Curve, there was no need to carry out any spilling and therefore, the spillway flood gates remained closed during the whole of 2015.

Water Balance

The total inflow into Lake Kariba during the period January – December 2015 was 28.50 milliards, a decrease of about 46% from that recorded in 2014. The Lower Catchment contribution accounted for 22% while the rest came from the upper Catchment.

On the other hand, the total outflow from the Lake was 52.68 milliards, composed of 43.82 milliards turbine discharge and 8.86 milliards as evaporation. The net effect on the Reservoir was a storage decrease of 24.18 milliards. Table 1 below gives the annual water balance of the Lake Kariba for 2015 compared with two preceding years.

It can be seen from Table 1 that the inflows for 2015 drastically reduced when compared to the previous two years as a result of below normal rainfall received during the 2014/15 season.

Table 1 Comparative Annual Water Balance for Lake Kariba (January - December)

	2015	2014	2013
INFLOWS:			
From the Upper catchment	23.37	42.86	42.52
From the Lower catchment	5.13	9.80	7.27
Total	28.50	52.66	49.79
OUTFLOWS:			
Turbine Discharge	43.82	46.95	41.58
Spillways Discharge	0.0	0.0	1.62
Evaporation	8.86	9.14	9.10
Sub-Total	52.68	56.09	52.30
Storage increase/Decrease	-24.18	-3.43	-2.51
Total	28.50	52.66	49.79

The information presented in Table 1 above is further displayed graphically in Figure 36, and schematically in Figure 37. Historical water balance data is also presented graphically in Figure 38.

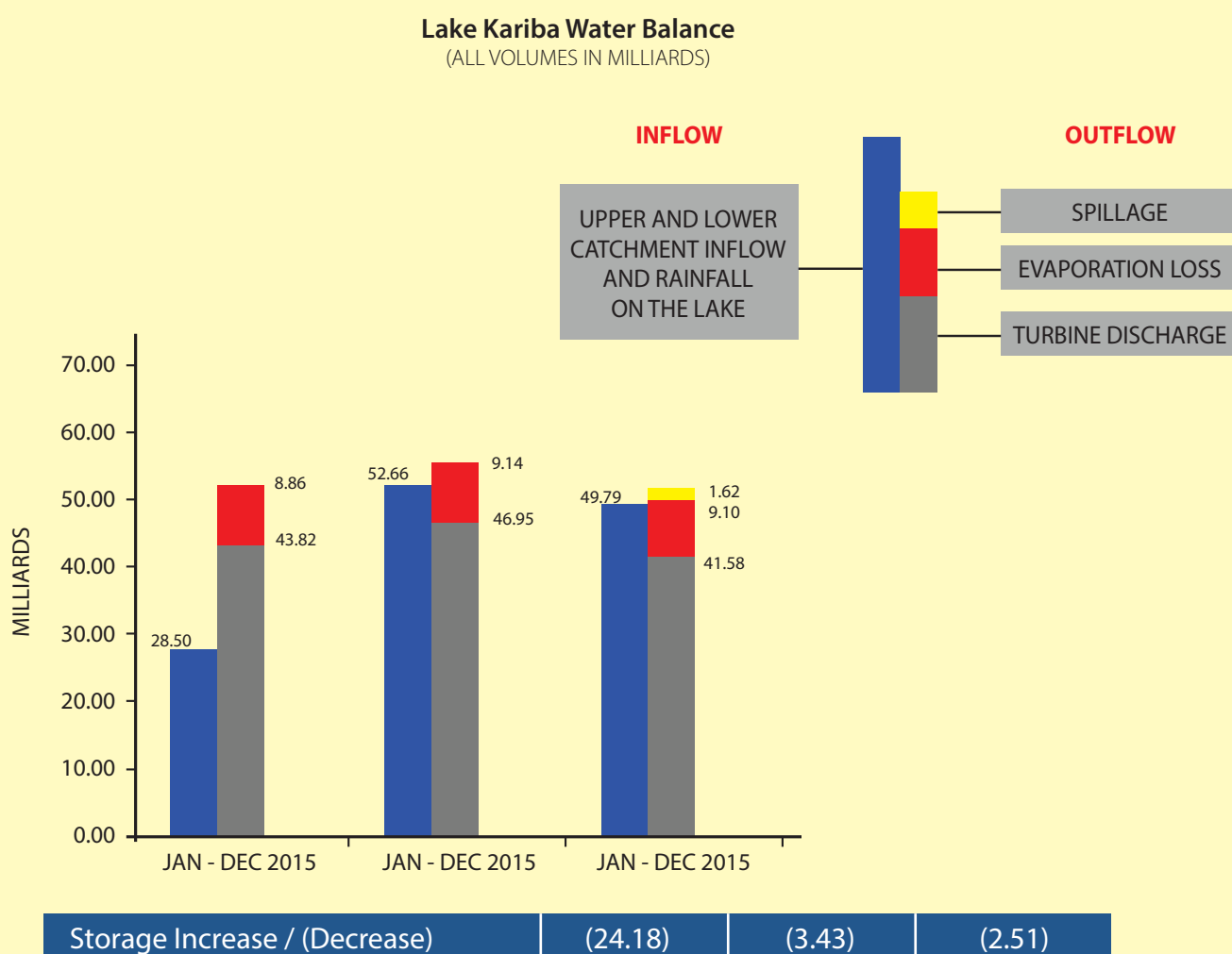


Fig. 36: Lake Kariba Water balance comparisons over three recent years (2015, 2014 and 2013)

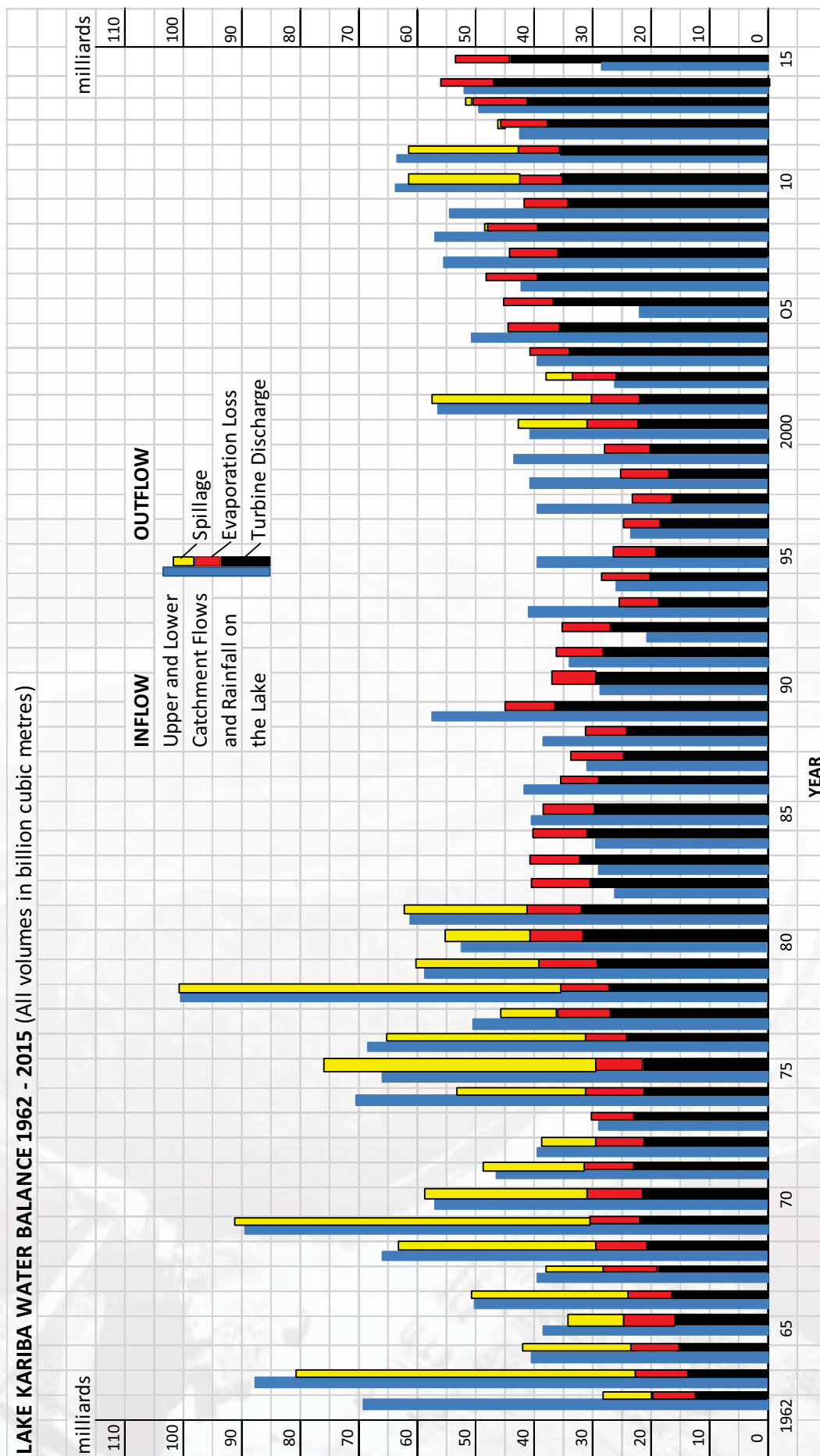


Fig . 38: Kariba Water Balance 1962 - 2015 (All Volumes in Millions)

Water Usage for Energy Generation at Kariba

Based on the 2014/15 rainy season forecast by the 18th Southern Africa Regional Climate Outlook Forum (SARCOF-18, August 2014) which indicated normal to above normal rainfall for the period October 2014 – March 2015 over the region (including the Zambezi River Basin), the Authority projected above average inflows into Lake Kariba and therefore allocated 45 milliards of water to be shared equally by the power utilities for energy generation at Kariba for the year 2015. However, by March 2015, the Zambezi River Basin had received generally below normal rainfall, necessitating a downward adjustment of the allocation by some 10%, lowering the allocation

to 40.5 milliards for 2015 as a whole.

During the year 2015, the Power Utilities used a total of 43,831.48 Million Cubic Meters (MCM) against 40,500 MCM allocation, representing 108% of combined allocation. Individually, Kariba North Bank Power station utilised 23,509.98 MCM (representing 116% of the 20,250 MCM allocation) while Kariba South Bank Power station utilised 20,321.50 MCM (representing 100% of the 20,250 MCM allocation).

Table 2 below displays water usage statistics at Kariba Complex during the period January – December 2015.

Table 2: Summary of Water Used for Power Generation at Kariba Complex in Million Cubic Meters (MCM) January – December 2015

Month	KARIBA NORTH			KARIBA SOUTH			Cumulative Allocation for Kariba Complex (MCM)	Cumulative Water Used at Kariba Complex (MCM)	% of Allocation
	Water Allocated (MCM)	Actual Used (MCM)	% of Allocation	Water Allocated (MCM)	Actual Used (MCM)	% of Allocation			
JAN	1,875.00	2,094.67	112	1,875.00	1,678.18	90	3,750.00	3,772.85	101
FEB	1,875.00	1,921.78	102	1,875.00	1,521.52	81	7,500.00	7,216.15	96
MAR	1,650.00	2,494.68	151	1,650.00	1,887.14	114	10,800.00	11,597.97	107
APR	1,650.00	1,961.30	119	1,650.00	1,817.85	110	14,100.00	15,377.12	109
MAY	1,650.00	2,283.43	138	1,650.00	2,022.60	123	17,400.00	19,683.15	113
JUN	1,650.00	2,444.58	148	1,650.00	1,914.13	116	20,700.00	24,041.86	116
JUL	1,650.00	2,318.06	140	1,650.00	1,940.39	118	24,000.00	28,300.31	118
AUG	1,650.00	2,216.72	134	1,650.00	2,053.73	124	27,300.00	32,570.76	119
SEP	1,650.00	1,623.57	98	1,650.00	1,419.51	86	30,600.00	35,613.84	116
OCT	1,650.00	1,377.06	83	1,650.00	1,501.47	91	33,900.00	38,492.37	114
NOV	1,650.00	1,390.00	84	1,650.00	1,264.33	77	37,200.00	41,146.70	111
DEC	1,650.00	1,384.13	84	1,650.00	1,300.65	79	40,500.00	43,831.48	108
Total:	20,250.00	23,509.98	116	20,250.00	20,321.50	100	40,500.00	43,831.48	108

MCM = Million Cubic Metres

The water usage situation is further presented graphically in Figure 41 below. The graph shows that despite the Authority's efforts through numerous letters and Joint Technical Committee (JTC) meetings with the Power Utilities to comply with the March 2015 downward adjustment of water allocation for energy generation at Kariba, the two utilities actually increased their

generation levels between March and August 2015. Consequently, the reduction in the generation regime (and therefore reduced water utilization) in the last four months of the year did not quite help matters as the usable storage for energy generation at Kariba continued to plummet from 31% on 1st September to 14% at the end of 2015.

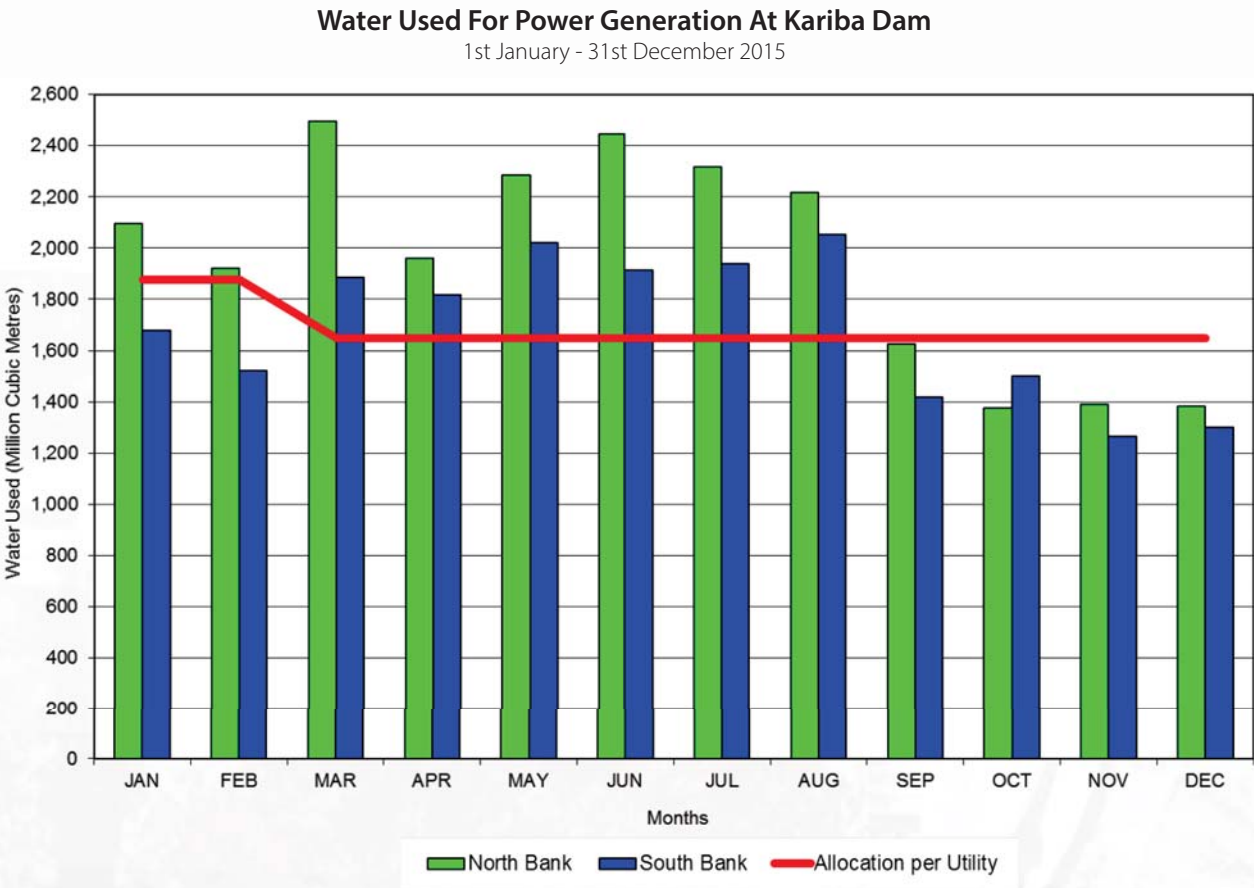


Fig. 39: Comparison of Water Utilization for Power Generation at Kariba - 2015

Hydrological Investigations

Routine maintenance and river flow measurements were undertaken during the year. The equipment and infrastructure at most stations were generally in good and functional state. Rating curves for the Kalomo and Ume Rivers could not be finalised due to low runoff that made it not possible to close up the high discharge range on the values measured so far. However, provisional rating curves for the two stations are available covering the lower segment of the river profiles. The higher range has hitherto

been a challenge to capture due to the flashy nature of the two rivers.

Figure 42 below shows staff carrying out gauge plate adjustments at Nana's Farm Hydrometric Station where the Authority's Internal Auditor had an opportunity to witness. Figures 44 and 45 show installation of a solar panel used for powering telemetry equipment at Senanga Hydrometric Station in June 2015 as well as a newly painted Gauge Reader's shelter at Kalomo Hydrometric Station (November 2015).



Fig. 40: Hydrology staff adjusting the 11-13m range gauge plate



Fig. 41: Internal Auditor in attendance while doing level-checks at Nana's Farm hydrometric station, December 2015

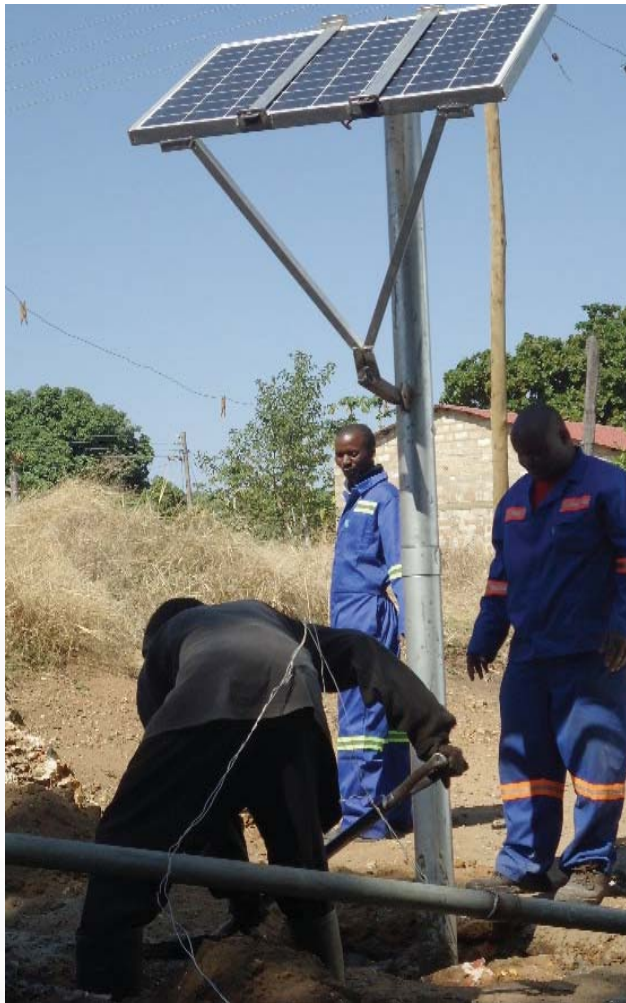


Fig. 42: Installation of a Solar Panel at Senanga

Kariba Dam Turbine Flow Metering Project

Following some system configuration challenges that were being experienced with the Winter-Kennedy flow meters at Kariba, arrangements were made to bring the Contractor on site to carry out maintenance works. However, due to challenges with contractual issues (terms of payment), this could not be resolved by the end of 2015 and therefore had to be deferred to the first quarter of 2016.

Meanwhile, the two ultrasonic flow meters installed on the two new machines of the Kariba North Bank Extension (Unit 5 and 6) were working well and, accordingly, the monthly billing schedules to Zesco Ltd incorporated returns from these two machines.

Database System and Hydrological Model

The Hydstra Hydro-meteorological Database System licence was renewed during the year and the system was up to date as at the end of 2015. The training and installation of the Mike Hydro Basin modelling software was however, scheduled to be carried out in the first quarter of 2016.



Fig. 43: One of the gauge reader houses

WATER RESOURCES & ENVIRONMENTAL MANAGEMENT

Methods

During the period under review the Authority employed various methods and materials/tools to achieve set targets. These included the following:

- Weed monitoring; physical observations and photography
- Environmental and Social Impact Assessment/Project Brief
- Geographic Information System and Remote Sensing
- Water usage monitoring

Water Quality Analyses: sampling and lab analyses
- in-situ measurements of DO, oxygen saturation, pH, Electrical Conductivity and temperature. The other parameters were measured in the laboratory.

Operational Domain

Figures 46-48 below show the Authority's operational domain and stations used to meet the specified objectives. Figure 46 is a map of the Zambezi River Basin showing the location of the Authority's water sampling stations. Figure 47 shows the sampling sites on Lake Kariba corresponding to the five (5) hydro-geographic sub-basins. Figure 48 highlights the sub-basin of importance - the Kariba Eastern Basin (Basin 5), being the most downstream end of the Lake.



Fig. 44: Location of the Authority's Water Quality Sampling Sites in the Zambezi Basin

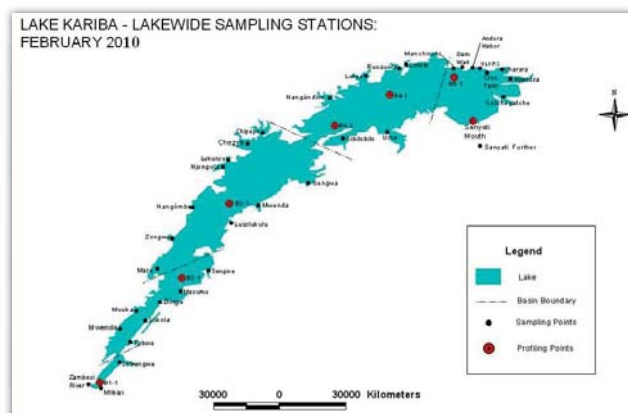


Fig. 45: Location of the Authority's Water Quality Sampling Sites on Lake Kariba



Fig. 46: Monitoring Stations in the Kariba Eastern Basin

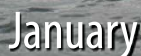
Data facilitation

The Authority provided support to tertiary institutions through provision of environmental monitoring data upon requests especially that relating to Lake Kariba water quality.

Water Hyacinth Monitoring

Water Hyacinth monitoring on Lake Kariba's Eastern Basin was successfully conducted each month of the year in 2015. It was noted that the status of the water hyacinth weed in the month of August 2015 had greatly reduced due to the rapidly receding water levels which left most of the weeds stranded on the lake shores.

The pictures below show the state of the weed at Gatchegatche one of the hotspot sites for the last quarter of 2015.

A photograph of a river or lake with a grassy bank and trees in the background. The word "July" is written in a stylized font in the bottom left corner.

December

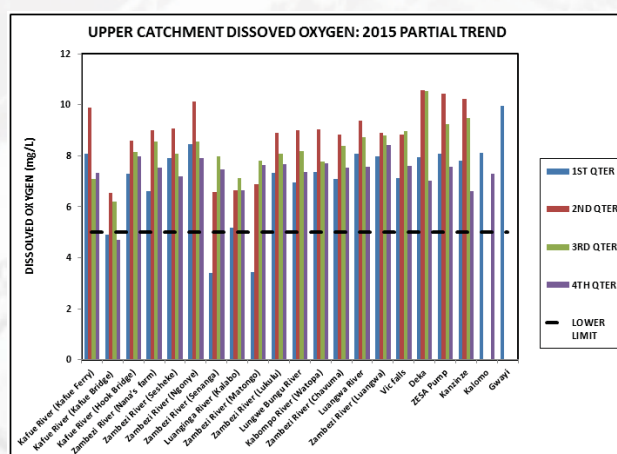
Geographic Information System & Remote Sensing

Management of the laboratory included updating software to enhance mapping. The laboratory was effectively used to create water quality maps.

Water Quality Data Collection and Processing

Water quality data collection and processing activities were achieved during the period under review for all stations on Lake Kariba and the Zambezi River. The water quality data was generated through in-situ and Laboratory analyses. These included parameters such as Temperature, pH, Electrical Conductivity, Dissolved Oxygen, Total Suspended Solids, Total Dissolved Substances, Turbidity, Total Phosphorus, Chlorophyll, Ammonia, Alkalinity and Faecal Coliforms.

Quarterly (Partial) Trend Analysis for the Upper Catchment Stations



38

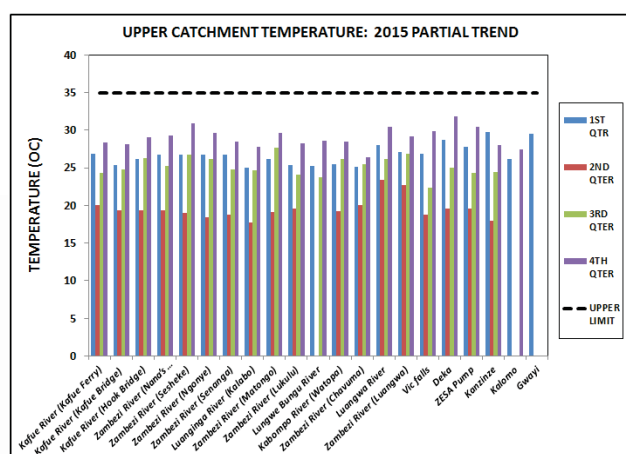


Fig. 51: Partial trend for temperature

A partial trend analysis covering the quarterly water quality monitoring programme was carried out as indicated in the two graphs above. In the two graphs

for dissolved oxygen and temperature respectively, the water quality was observed to be within the Authority's Water Quality Guidelines indicating a healthy water environment. Refer to annex II for similar graphs on other parameters observed.

5-Year Trend Analysis (2011 - 2015)

A trend analysis of the observed parameters for the station B51 which is also a critical station as it is a converging point for all lake flows before discharge through the two power station intakes was carried out for the years 2011 – 2015. This is depicted in figure 54.

The graph below shows that in the past 5 years dissolved oxygen at station B51 had been above the guideline minimum concentration of 5mg/l for the survival of aquatic life.

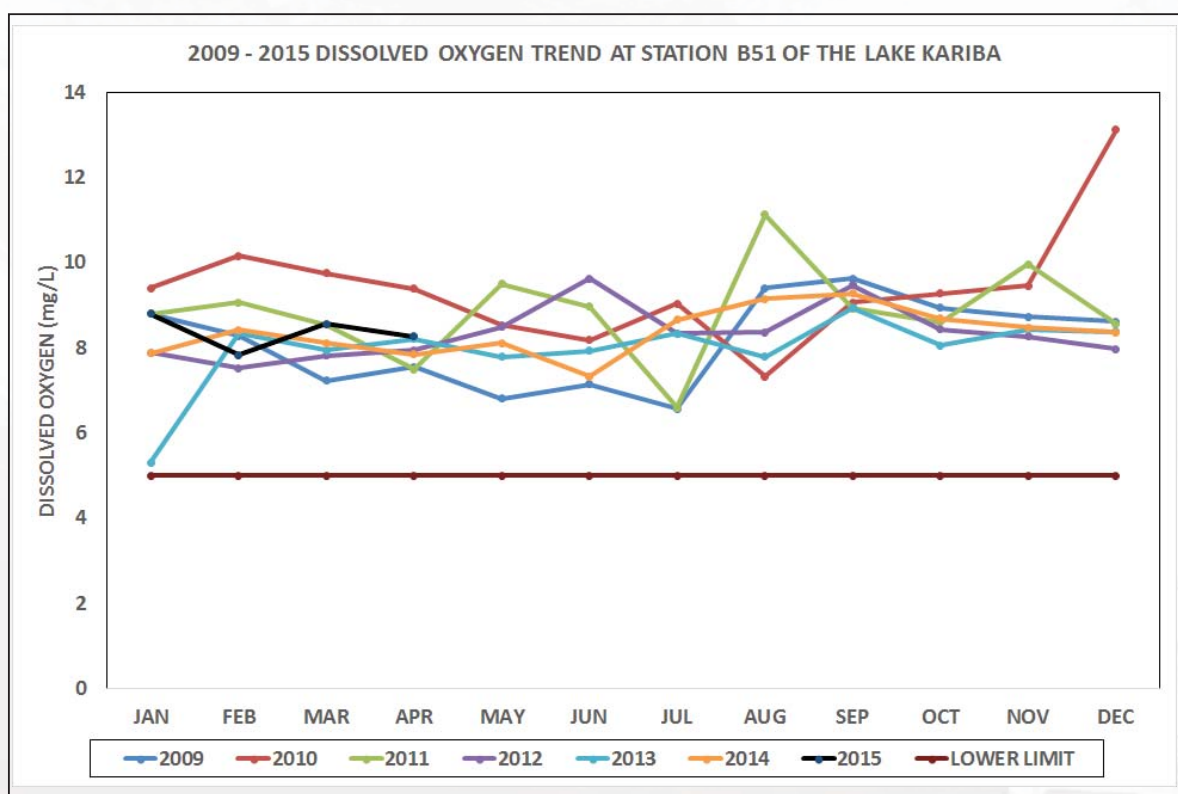


Fig. 52: 5-Year Trend analysis of dissolved oxygen at station B51

The Graph below shows that for the past 5 years, the pH had been within the recommended range of above 6 and below 9 indicating that with respect to water pH, the station was within the normal range.

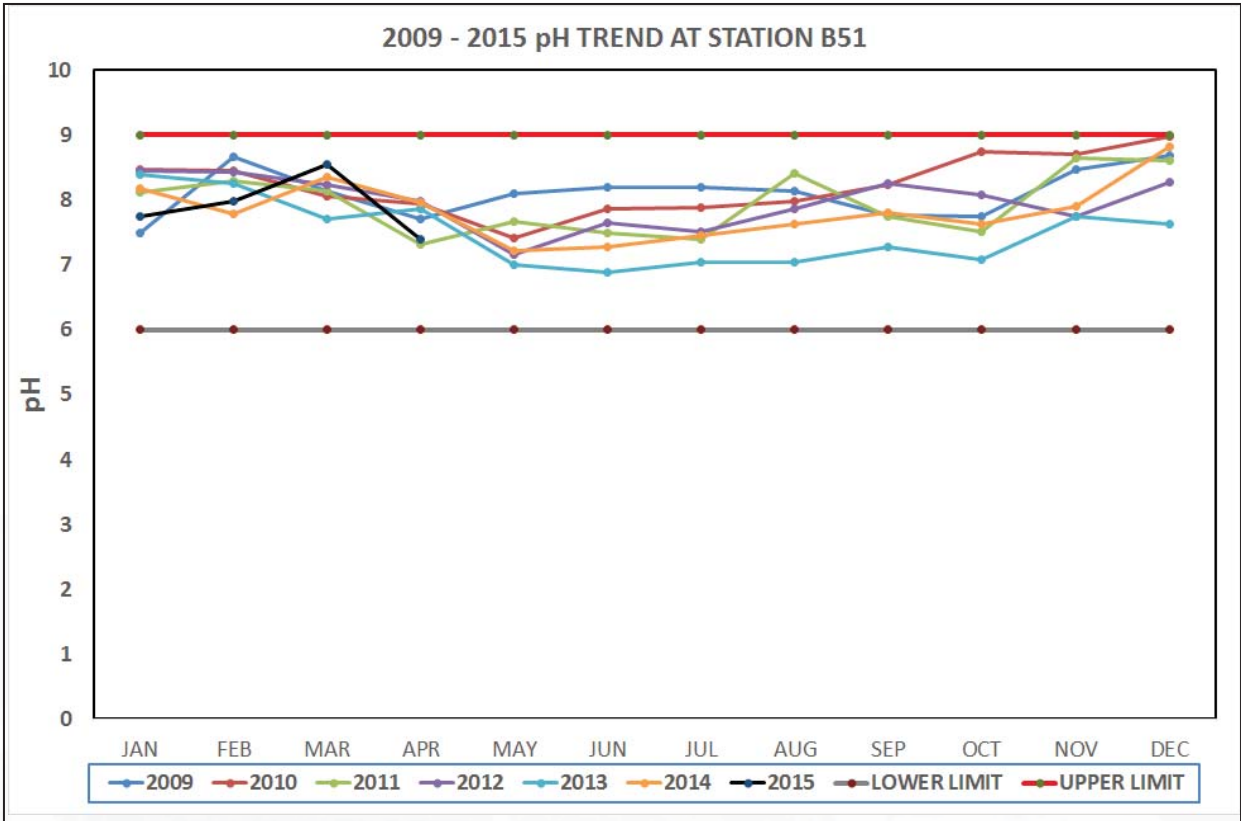


Fig. 53: 5-Year Trend analysis of pH at station B51 of the Lake Kariba

Water quality analysis using spatial maps for the Lake Kariba

Using the Geographic Information System, an assessment of the spatial variability of the water quality parameters in the Lake was carried out to establish which sections of the Lake area met the specified quality standards for the different water uses specified in the Authority’s Water Quality Guidelines. The spatial results were used in relating

nutrient concentrations in the Lake with water hyacinth proliferation. Water Hyacinth is prominent in areas with high concentrations of nutrients (nitrates and phosphates). The maps below show relatively high concentrations of nutrients in the Lake Kariba Eastern Basin, Binga and Mlibizi, which are also areas prone to water hyacinth.

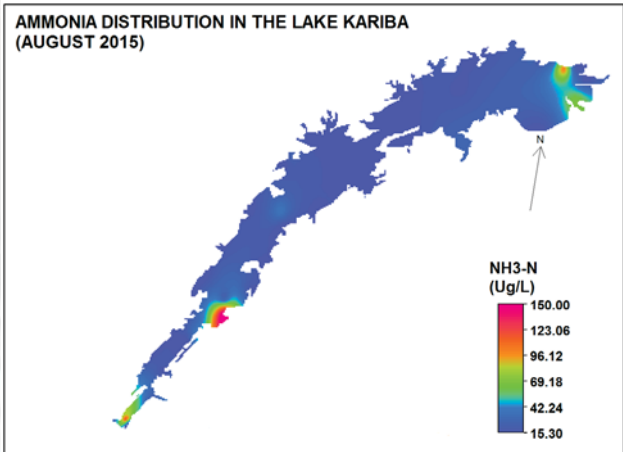


Fig. 54: Spatial Distribution of Ammonia in Lake Kariba

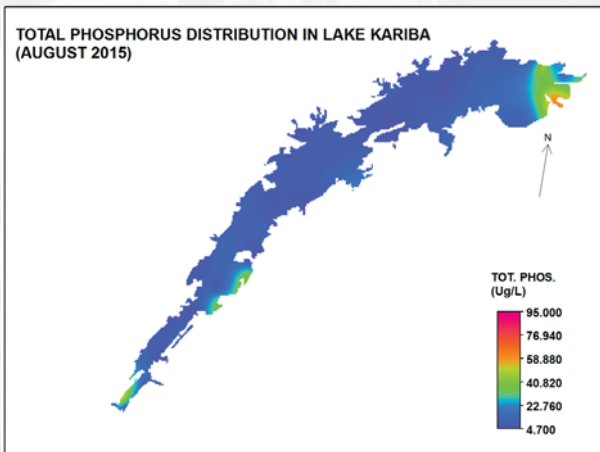


Fig. 55: Spatial distribution of Total Phosphorus in Lake Kariba

The results of the analyses conducted both in-situ and in the Authority's Environmental Laboratory during the 2015 period indicated that the Lake was in a healthy situation with respect to pollution as most parameters continued to register within the limits set under the Authority's Water Quality Guideline values.

Water Abstractions

A water usage data collection exercise was undertaken in the last quarter of 2015. The aim of the water usage programme was to update the database of water users from the Zambezi River and Lake Kariba. The significance of the activity was to take stock of the amounts of water consumed by all activities (in addition to hydropower), as part of the water resource management mandate of the Authority. Among the key water users included in the exercise were the following;

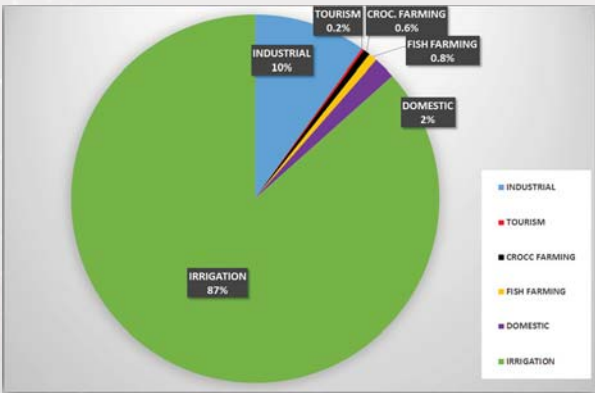
- Zimbabwe Power company - Hwange
- Hwange Colliery Company
- Hwange RDC
- Kariba Prawns
- Municipality of Kariba
- Siavonga Council
- Zambeef - Sinazongwe
- Emvest Kalonga Farm Limited - Kazungula
- Maamba Colliery Company - Sinazongwe

The data that was collected from the above water users was combined with inputs form Water Resources Management Authority of Zambia (WARMA) and Zimbabwe National Water Authority (ZINWA) to produce the water abstraction status results as at December 2015.

Table 3: SUMMARY STATISTICS FOR WATER ABSTRACTION PER SECTOR

SECTOR	WATER ABSTRACTION m ³ /month	%SHARE BY SECTOR
INDUSTRIAL	6604000.0	9.9
TOURISM	141049.9433	0.2
CROCODILE FARMING	395000	0.6
FISH FARMING	507125	0.8
DOMESTIC	1306908.15	2.0
IRRIGATION	58018905.88	86.6
TOTAL	66972989.0	100.0

The impact of Water abstraction on the Lake Kariba inflows are such that the average annual inflow into the reservoir as read from the Victoria Falls Gauge Station for 2015 was in the order of 40.5 billion cubic meters (which also translated into total allocation for hydropower generation) whilst the total pumped by activities around the water body computed in December 2015 is 66,972,989m³/month (803,675,867.7 m³/year). This translated into 1.98% (2%) when compared with the total inflows into the Lake Kariba.



New Environmental Boat (The Mukunganyinka Boat)

The Mukunganyika house boat was officially commissioned by the Authority's Board of Directors on 11th May 2015 through a ceremony that was held at the Caribbea Bay in Kariba. Following its commissioning, the Boat was fully utilised in the implementation of the Authority's monthly Lake-wide Environmental Monitoring Program in the 2015 period.



Fig. 56: The Mukunganyika boat in use on Lake Kariba



Fig. 57: The Mukunganyika boat captain



Fig. 58: District Commissioner of Siavonga witnesses the handing over of life jackets by the Authority Chief Executive



Fig. 59: The Mukunganyika sails on Lake Kariba

Outlook - 2016

Most of the planned activities under the year 2015 were implemented as provided for under both the 2015 Annual Work Plans and the Zambezi River Authority 2015-2019 Corporate Strategy. The following are some of the activities that were scheduled for rolling over into the year 2016:

- Monthly Water Quality Sampling Programmes for Victoria Falls and Kariba Eastern Basin
- Quarterly Lower and Upper Catchment Water Quality Sampling Programme
- Bi-annual Water Quality Sampling Programme
- Quarterly Water Abstraction data collection programmes.
- Implementation of the Mike Basin Database / Modeling Systems
- Acquisition of satellite imagery

INFORMATION & COMMUNICATION TECHNOLOGY (ICT)

ICT Governance ICT Policy

In line with the dictates of the provisions of the Control Objectives for Information and Related Technology (COBIT) the Authority developed and adopted an ICT Policy Manual as one of the key initiatives designed to bridge the gap between control requirements, technical issues and business risks. The ICT Policy was approved by the Board on the 18th of December 2015 and represents a positive milestone towards standardized guidance on the deployment and usage of Information Communication Technologies (ICTs) in the Authority by both employees and the Authority's ICTs business partners.

ICT Infrastructure and Security ICT Network Overhaul Project

On the 2nd of November 2015 the Authority and Zamnet Communication Services signed off phase one of the Network Overhaul Project which was rolled out in 2013. Phase one of the Project entailed conducting a refurbishment of the Authority's Local Area Networks in all the four offices, that is, Kariba House – Lusaka, Club Chambers - Harare, the Administration Office Block - Kariba and Kariba Hydro. Phase one therefore witnessed replacement of active network equipment such as routers, hubs and switches as well passive network equipment such as network cables and cabinets.

Phase one of the Project further witnessed an upgrade of the underlying server infrastructure software to Windows Server 2012 R2 edition which improved network uptime and security on the end user through usage of Microsoft Active Directory Platform for controlled access to the corporate network. In line with Green ICT initiatives phase one of the project also introduced the concept of server Virtualization through use of VMware and Microsoft HyperV aimed at lessening server density, reducing down on carbon emissions by servers and optimal utilization of space through installation of several server systems on a single hardware device.

Completion of phase one of the Project triggered the commencement of the second and final phase being the six (6) months non-defects liability and maintenance period to facilitate monitoring and an evaluation of phase one and rectify defects. The Project is expected to be completed by 1st of May 2016.

Wide Area Network (WAN Connectivity)

In March 2015 the Authority contracted Liquid Telecommunications both in Zambia and Zimbabwe to undertake a project aimed at achieving network level integration for in-country and inter-country office connectivity through fiber. The Project was rolled out in March 2015 and successfully completed in July 2015 and this resulted in real time communication between the main Authority's Offices.

The greatest benefit flowing from this Project is the creation of a Ubiquitous network inside enabling central deployment and multi user access to systems. This in turn made systems decentralization possible and created a platform for rolling out networked services such as Voice Over Internet Protocol (VoIP) and Video conferencing Services.

Business Application Systems Audit Management and Data Analytics System

During the fourth quarter of 2015, the Authority successfully acquired and implemented Teammate Audit Management and Data Analytics system. This has resulted in the automation of the Audit function through facilitation of electronic management, filing and scheduling of the Audit process.

Automation of the Audit function would lead to the following key benefits:

- i less time on documentation and review of audit work
- ii enhanced consistency in audit performance
- iii real time and remote reviews of prior audit work with enhanced efficiency and shortened turn - around times
- iv Ability to automatically produce Audit reports using predesigned templates
- v Allows for development and production of a risk based audit plan
- vi Ability to make audit follow-ups, trend analysis and prior audit review resulting in time savings

SunSystems

In 2015, the Authority's Financial Management System (Sun Systems) was upgraded from Version 5.2 to version 6.2.2 and the applicable license upgraded from one (1) user to five (5) concurrent users. This

enabled the Finance Department to decentralize access to the system between the Harare and Kariba Offices and achieve live data capturing at sites where transactions occur. This would gradually improve the reporting time for financial and management accounts and eliminates errors associated with inability to capture data at source.

Website

The Authority continued to use its corporate website as one of its key communication tools with its stakeholders. As such during the year under review, the Authority signed a Maintenance Contract with the website Developer (Quatrohaus) to improve on the uptime, security and facilitate up to date information on the website. The Authority continued to capacitate

its relevant personnel with skills to effectively manage the website through training and increased interaction with the Software vendor. The website is expected to continue playing a critical role as a platform for information sharing and stakeholder engagement especially in view of the Kariba Dam Rehabilitation (KDRP) Project and Batoka Gauge Hydro - Electric Scheme (BGHES).

Conclusion

The Authority plans, in 2016, to increase its human capital and other resources and engage stakeholders both internally and externally in order to achieve total systems integration both at Infrastructure and Applications level.

A photograph of a large concrete dam with multiple spillways. Water is cascading over the spillways, creating a white, frothy flow. The dam structure is made of large, rectangular concrete blocks. The sky is visible in the background, and the overall scene is one of a powerful natural force being controlled by human engineering.

FINANCIAL STATEMENTS

**FOR THE YEAR ENDED
31st DECEMBER 2015**

REPORT OF THE DIRECTORS

The Board of Directors of the Zambezi River Authority ("the Authority" or "ZRA") submits its report together with the financial statements of the Authority for the year ended 31st December 2015.

1. Establishment and Functions

The Authority was established as a corporate body on 1st October 1987 by parallel legislation in the Parliaments of Zambia and Zimbabwe under the Authority's Acts No.17 and 19 respectively. It was tasked with the management of the Zambezi River, which flows between the two countries' common boarder. The Authority is also mandated to maintain the Kariba Dam Complex (Kariba Complex) and to construct and maintain other dams or infrastructure on the river forming the border between the two countries.

2. Principal Functions

The functions of the Authority are set out in the schedule to the Authority's Acts of 1987 as follows:

- (a) Operate monitor and maintain the Kariba Complex. The Kariba complex means:
 - (i). The Kariba Dam and Reservoir
 - (ii). All telemetering stations relating to the Kariba Dam
 - (iii). Any other installations owned by the Authority
- (b) In consultation with the National Electricity Undertakings, investigate the desirability of constructing new dams on the Zambezi River and make recommendations thereon to the Council of Ministers ("the Council");
- (c) Subject to the approval of the Council, construct, operate, monitor and maintain any other dams on the Zambezi River;
- (d) Collect, accumulate and process hydrological and environmental data of the Zambezi River for the better performance of its functions and for any other purpose beneficial to the Contracting States;
- (e) In consultation with the National Electricity Undertakings, regulate the water level in the Kariba Reservoir and in any other reservoir owned by the Authority;
- (f) Make such recommendations to the Council as will ensure the effective and efficient use of the waters and other resources of the Zambezi River;
- (g) Liaise with the National Electricity Undertakings in the performance of its functions that may affect the generation and transmission of electricity to the Contracting States;
- (h) Subject to provisions of Article 13, recruit employ and provide for the training of staff as may be necessary for the performance of its functions under the Agreement;
- (i) From time to time and subject to the approval of the Council, make such revision of salaries, wages and other remuneration to its employees as it considers appropriate;
- (j) Submit development plans and programmes to the Council approval;

- (k) Give effect to such directions, as may from time to time, be given by the Council; and
- (l) Carry out such other functions as are provided for in the Agreement or are incidental or conducive to the better performance of its functions.

3. Place of Business

- (a) Head Office: Kariba House, 32 Cha Cha Cha Road, P.O. Box 30233, Lusaka, Zambia
- (b) Harare Office: Club Chambers, Nelson Mandela Avenue, P.O. Box 630, Harare, Zimbabwe
- (c) Kariba Office: Administration Block, 21 Lake Drive, Pvt. Bag 2001, Kariba, Zimbabwe

4. Capital

The Authority has no subscription capital; its capital resources comprise mainly of accumulated funds.

5. Operating Surplus (In ZMW'000 and US\$'000)

The operating surplus for the year amounted to ZMW73,937 (US\$6,673) ((2014: ZMW31,502 (US\$4,923).

6. Capital Expenditure (In ZMW'000 and US\$'000)

The capital expenditure for the year amounted to ZMW63,027 (US\$5,688) ((2014:- ZMW22,341 (US\$3,491).

7. Risk Factors

The Authority faces a number of operational, legal and financial risks in its operations:

(a) Operational Risk

Operational risk is the risk of losses from inadequate or failed internal processes and systems, caused by human error or external events. It has a broad scope and includes transaction authorisation and processing; completeness of income recording; payments processing and the management of information, data quality and records. The following are the main risks noted under this classification:

(i). Financial Crime Risk - Financial crime risk is the risk that the Authority suffers losses as a result of internal and external fraud or intentional damage, loss or harm to people, premises or its moveable assets. The risk in the Authority is directly attributable to its people risk.

(ii). People Risk - People risk arises from failures of the Authority to manage its key risks as an employer, including lack of appropriate people resource, failure to manage performance and reward, unauthorised or inappropriate employee activity and failure to comply with employment related requirements.

(b) Legal Risk

The Authority is subject to a comprehensive range of legal obligations, mostly covered by the Authority's Acts of 1987. As a result, it is exposed to many forms of legal risk, which may arise in a number of ways: its business may not be conducted in accordance with requirements of the Act; contractual obligations may either not be enforceable as intended or may be enforced against the Authority in an adverse way; the Authority may face risk where legal proceedings are brought against it, in the course of carrying out its mandate, etc. Regardless of whether such claims have merit, the outcome of legal proceedings is inherently uncertain and could result in financial loss. Defending legal proceedings can be expensive and time-consuming and there is no guarantee that all costs incurred will be recovered, even if the Authority is successful.

(c) Reporting Risk

(i). Financial Reporting Risk - Financial reporting risk arises from a failure or inability to comply fully with regulations or codes in relation to the preparation, presentation or disclosure of financial information. Non-compliance could lead to damage to reputation or, in extreme cases, withdrawal of external funding.

(ii). Accounting Risks - The Authority's future performance and results could be materially different from expected results depending on the outcome of certain potential risks and uncertainties, details of which are discussed above. The reported results of the Authority are also sensitive to the accounting policies, assumptions and estimates that underlie the preparation of its financial statements. Details of its critical accounting policies and key sources of accounting judgments are included on pages 13 to 23.

(iii). Financial Risks - The Authority through its normal operations is exposed to a number of risks on its financial instruments, the most significant of which are credit and liquidity. Market (currency and interest) risks are generally low. The two main risks on its financial instruments are generally deemed to be within manageable limits. The Authority's financial risk exposures are discussed on pages 37 to 42 in Note 15 to the financial statements.

8. Risk Management and Control

As explained on Statement 6 above, the Authority through its normal operations is exposed to a number of risks, the most significant of which are operational, legal and financial risks. The Board is responsible for establishing and ensuring maintenance of adequate internal controls over financial reporting. However, all internal control systems, no matter how well designed, have inherent limitations. Therefore, even those systems determined to be effective can provide only reasonable assurance with respect to financial statement preparation and presentation.

9. Governance Structure

(a) Council of Ministers

Name	Title
Hon. Christopher B. Yaluma MP	Chairperson
Hon. Dr. Samuel Undenge MP	Co-Chairperson
Hon. Alexander B. Chikwanda MP	Member
Hon. Patrick Chinamasa MP	Member

(b) Board

Name	Title
Brigadier General (Rtd) Emelda Chola	Chairperson
Mr. Partson I Mbiriri	Co-Chairperson
Dr. Ronald Simwinga	Member
Mr. Willard Manungo	Member
Mr. Mukutulu Sinyani	Member
Eng. Israel Rwodzi	Member

(c) Directors

Name	Position
Eng. Munyaradzi C. Munodawafa	Chief Executive
Mr. Peter Kapinga	Board Secretary/Corporate Services Director
Mr. Edward M. Kabwe	Director - Finance
Eng. David Mazvidza	Director - Projects & Dam Safety
Eng. Christopher Chisense	Director - Water Resources & Environmental Management

10. Employees

As at 31st December 2015 the number of staff employed at the Authority was 147.

11. Related Party Transactions

The Authority has a common enterprise relationship with Governments of the Republic of Zambia and Zimbabwe. Other related party relationships and material balances that the Authority has with its related parties are listed in Note 16 to the financial statements.

12. Post Balance Sheet Events

There have been no significant events between the year-end and the date of approval of these financial statements.

13. Auditors

EMM Corporate Partners

On behalf of the Board:



 Company Secretary

08/08/16

 Date

STATEMENT OF RESPONSIBILITIES

FOR THE FINANCIAL STATEMENTS

The following statement, which should be read in conjunction with the Auditors' report on page 6, is made with a view to distinguishing the respective responsibilities of the Board of the Authority and of the auditors in relation to the financial statements for the year to 31st December 2015.

Statement of Responsibility for Financial Statements

In conformity with International Financial Reporting Standards ("IFRSs"), the Board are required to prepare financial statements for each financial year, which give a true and fair view of the state of affairs of the Authority and of the operating result for that year. IFRSs provide, in relation to such accounts, that references to accounts giving a true and fair view are references to fair presentation. The Board considers that, in preparing the financial statements on pages 8 to 12, and the additional information contained on pages 13 to 44, the Authority has used appropriate accounting policies, supported by reasonable judgements and estimates, and all accounting standards which it considers to be applicable.

The Board has responsibility for ensuring that the Authority keeps accounting records which disclose with reasonable accuracy the financial position of the Authority and which enable it to ensure that the financial statements comply with generally accepted reporting standards and with the Authority's Acts of 1987. The Board has general responsibility for taking such steps as are reasonably open to them to safeguard the assets of the Authority and to prevent and detect fraud and other irregularities. The Board accepts responsibility for the annual financial statements, which have been prepared using appropriate accounting policies supported by reasonable estimates, in conformity with IFRSs. In preparing such financial statements, the Board is required to: select suitable accounting policies and then apply them consistently; make judgements and estimates that are reasonable and prudent; state whether the applicable accounting standards have been followed; and comply with IFRSs.

In the opinion of the Board:

1. The statement of comprehensive income is drawn up so as to give a true and fair view of the result of the Authority for the year ended 31st December 2015;
2. Based on current records that it holds:
 - (a) The statement of financial position is drawn up so as to give a true and fair view of the state of affairs of the Authority as at 31st December 2015 and
 - (b) There are reasonable grounds to believe that the Authority will be able to pay its debts as and when they fall due.

Accordingly, the financial statements set out on pages 8 to 12 were approved by the Board and signed on its behalf by:


Chairperson

08/08/16
Date


Co-Chairperson

08/08/16
Date

REPORT OF THE INDEPENDENT AUDITORS

Report on the Financial Statements

We have audited the accompanying financial statements of Zambezi River Authority ('the Authority') set out on pages 8 to 12. These financial statements comprise the statement of financial position, at 31st December 2015, the statement of income, statement of comprehensive income, statement of changes in equity and statements of cash flows for the year then ended, and a summary of significant accounting policies and other explanatory notes. The financial reporting framework that has been applied in their preparation is Zambezi River Authority Acts of 1987 and International Financial Reporting Standards ("IFRS") as issued by the International Accounting Standards Board ("IASB").

This report is made solely to the members of the Authority. Our audit work has been undertaken so that we might state to the Authority's members those matters we are required to state to them in an auditors' report and for no other purpose. To the fullest extent permitted by law, we do not accept or assume responsibility to anyone other than the Authority, for our audit work, for this report, or for the opinions we have formed.

Respective Responsibility of Directors and Auditors for the Financial Statements

As explained more fully in the Directors' Responsibilities Statement on Page 5, the Directors are responsible for the preparation and fair presentation of these financial statements in accordance with International Financial Reporting Standards and with the requirements of the Companies Act and for being satisfied that they give a true and fair view. This responsibility includes: designing, implementing and maintaining internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error; selecting and applying appropriate accounting policies; and making accounting estimates that are reasonable in the circumstances. Our responsibility is to express an independent opinion on the financial statements based on our audit.

Scope of the Audit of the Financial Statements

We conducted our audit in accordance with International Standards on Auditing. Those standards require that we comply with ethical requirements and plan and perform our audit to obtain reasonable assurance that the financial statements are free from material misstatement. An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgement, including assessments of risks of material misstatement in the financial statements, whether due to fraud or error. In making the risk assessment, the auditor considers internal control relevant to the entity's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for purpose of expressing an opinion on the effectiveness of the entity's internal control. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates made by those charged with governance, as well as evaluating the overall presentation of the financial statements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Opinion on Financial Statements

In our opinion, the financial statements present fairly, in all material respects, the financial position of the Authority as of 31st December 2015, and of the results of its operations and its cash flows for the year then ended.

Separate Opinion in relation to IFRS as issued by the IASB

The Authority has prepared Financial Statements that comply with IFRS as issued by the IASB. In our opinion, the Financial Statements comply with IFRS as issued by the IASB.

Report on Other Legal Requirements

The Zambezi River Authority Acts of 1987, which defines the applicable reporting framework for these financial statements, requires that in carrying out our audit we consider whether the Authority has kept the accounting records, other records and registers required by this Act. We confirm that in our opinion the accounting records, other records, and registers required by the Act have been kept by the Authority, so far as appears from our examination of those records.

EMM CORPORATE PARTNERS
Chartered Accountants and Management Consultants



Elasto Mambo
Partner
PC: MPC: 000132

08/08/16

Date

INCOME STATEMENT

Amounts are stated in ZMW'000 and US\$'000

	Note	31 December 2015		31 December 2014	
		ZMW'000	US\$'000	ZMW'000	US\$'000
INCOMING RESOURCES					
Income from Operating Activities					
Revenue	3.	224,858	25,822	131,691	21,558
Non-Operating Income					
Other Income	4.	23,930	1,662	9,908	1,559
Profit on Sale of Non-current Assets		-	-	-	-
Total Incoming Resources		248,788	27,484	141,600	23,117
RESOURCES EXPENDED					
Depreciation	6.	31,211	3,584	15,686	2,568
Employee Costs		91,779	10,482	64,269	10,416
Operational Costs		51,697	6,726	30,053	5,195
Loss on Disposal of Non-current Assets		123	14	90	15
Finance Costs		40	5	-	-
		174,851	20,811	110,097	18,194
Surplus		73,937	6,673	31,502	4,923
Other Comprehensive Income:		-	-	-	-
Total Comprehensive Income		73,937	6,673	31,502	4,923
Total surplus attributable to:					
Controlling interests		73,937	6,673	31,502	4,923
Non-controlling interests		-	-	-	-
		73,937	6,673	31,502	4,923

STATEMENT OF COMPREHENSIVE INCOME

Amounts are stated in ZMW'000 and US\$'000

	31 December 2015		31 December 2014	
	ZMW'000	US\$'000	ZMW'000	US\$'000
Surplus	73,937	6,673	31,502	4,923
Other Comprehensive Income:				
Items that will not be subsequently reclassified to profit and loss:				
Revaluation Adjustment-Cost	39,411	3,557	-	-
Revaluation Adjustment-Depreciation Write Back	14,919	1,346	-	-
Revaluation Adjustment-Investment Property	2,871	259		
Depreciation Write Back on Investment Property	5,586	504		
Items that may be subsequently reclassified to profit and loss				
Exchange Difference Arising During the Year	590,598	-	133,250	
Total Comprehensive Income	727,320	12,340	164,752	4,923
Total comprehensive income attributable to:				
Controlling interests	727,320	12,340	164,752	4,923
Non-controlling interests	-	-	-	-
	727,320	12,340	164,752	4,923

STATEMENT OF CHANGES IN FUNDS

Amounts are stated in ZMW'000 and US\$'000

Amounts in Zambian Kwacha ZMW'000	Revaluation Reserves	Revenue Reserves	Total Equity
Balance as at 1 January 2013 (as previously reported)	518,730	(582,561)	(63,831)
Adjustments	(26,291)	722,240	695,948
Balance as at 1 January 2013 (restated)	492,438	139,679	632,117
Surplus (Deficit) for the Year		10,486	10,486
Other Comprehensive Income for the Year			
Amortisation of Revaluation Reserve	13,146	(13,146)	-
Total changes in Equity	13,146	(2,659)	10,486
Balance as at 31 December 2014 (restated)	505,584	137,020	642,604
Surplus (Deficit) for the Year	-	31,502	31,502
Other Comprehensive Income for the Year			
Amortisation of Revaluation Reserve	(15,152)	15,152	-
Effects of Foreign Currency Exchange Differences	72,376	60,873	133,250
Total Comprehensive Income	57,225	107,527	164,752
Balance at 1 January 2015	562,809	244,547	807,356
Surplus (Deficit) for the Year	-	73,937	73,937
Other Comprehensive Income for the Year			
Effects of Foreign Currency Exchange Differences	411,707	178,891	590,598
Other Comprehensive Income for the Year			
Revaluation Adjustment-Cost of Property	39,411	-	39,411
Revaluation Adjustment-Depreciation Write Back	14,919	-	14,919
Revaluation Adjustment-Investment Property	2,871	-	2,871
Depreciation Write Back on Investment Property	5,586	-	5,586
Amortisation on Depreciation Write Back	(2,176)	2,176	-
Amortisation of Revaluation Reserve - Dam Wall Complex	(27,482)	27,482	-
Total changes in Equity	444,835	282,485	727,320
Balance at 31 December 2015	1,007,644	527,032	1,534,676

STATEMENT OF CHANGES IN FUNDS

Amounts are stated in ZMW'000 and US\$'000

Amounts in United States Dollars (US\$'000)	Revaluation Reserves	Revenue Reserves	Total Equity
Balance as at 1 January 2013 (as previously reported)	95,394	(198,549)	(103,156)
Adjustments	(2,480)	224,904	222,423
Balance as at 1 January 2013 (restated)	92,913	26,354	119,267
Surplus (Deficit) for the Year	-	1,979	1,979
Other Comprehensive Income for the Year			
Amortisation of Revaluation Reserve	(2,480)	2,480	-
Total changes	(2,480)	4,459	1,979
Balance as at 31 December 2013 (restated)	90,433	30,813	121,246
Surplus (Deficit) for the Year	-	4,923	4,923
Other Comprehensive Income for the Year			
Amortisation of Revaluation Reserve	(2,480)	2,480	-
Total changes in Equity	(2,480)	7,403	4,923
Balance at 1 January 2015	87,953	38,216	126,169
Surplus (Deficit) for the Year	-	6,673	6,673
Other Comprehensive Income for the Year			
Revaluation Adjustment-Cost	3,557	-	3,557
Revaluation Adjustment-Depreciation Write Back	1,346	-	1,346
Revaluation Adjustment-Investment Property	259	-	259
Depreciation Write Back on Investment Property	504	-	504
Amortisation on Depreciation Write Back	(196)	196	-
Amortisation of Revaluation Reserve - Dam Wall Complex	(2,480)	2,480	-
Total changes in Equity	2,990	9,350	12,340
Balance at 31 December 2015	90,943	47,566	138,509

STATEMENT OF CASH FLOWS

Amounts are stated in ZMW'000 and US\$'000

	Note	2015 ZMW'000	2015 US\$'000	2014 ZMW'000	2014 US\$'000
Cash Inflow From Operating Activities					
Operating Result		73,937	6,673	31,502	4,923
Depreciation & Amortisation		31,211	3,584	15,686	2,568
Finance Costs		40	5	-	-
Impairment Losses		6,986	802	-	-
(Gain) Loss on Disposal of Assets		123	14	90	15
(Increase)/Decrease in Receivable		(47,870)	(632)	(17,378)	(1,469)
Interest Received		(12,230)	(1,404)	(8,074)	(1,322)
(Increase)/Decrease in Inventories		(1,005)	(24)	(162)	2
Increase in Accounts Payables		10,817	2	8,208	1,071
Increase/(Decrease) in Employee Benefit		12,265	351	4,084	399
Cash Generated From Operations		74,272	9,370	33,956	6,187
Interest Received		12,230	1,404	8,074	1,322
Net Cash Inflow From Operating Activities		86,503	10,775	42,030	7,509
Investing Activities					
Payments to Acquire Fixed Assets	6.	(63,027)	(5,688)	(22,341)	(3,491)
Proceeds From the Disposal of Assets	6.	55	5	812	114
Proceeds From Investments		4,363	193	-	-
Payments on Investments		-	-	(1,866)	(451)
Net Cash Outflow on Investing Activities		(58,609)	(5,490)	(23,394)	(3,828)
Financing Activities					
Revenue Grants Received	3.	21,236	1,917	-	-
Proceeds From Long-Term Loans	12.	2,658	240	-	-
Non-Cash Benefits From Grants	3.	412	37	-	-
Net Cash Outflow on Financing		24,307	2,194	-	-
Changes in Cash and Cash Equivalents		52,200	7,478	18,636	3,681
Effects of Changes in Exchange Rates on Cash Held in Foreign Currencies		107,503	1,284	20,352	901
Cash and Equivalents at start of year		85,601	13,377	46,613	8,795
Cash and Cash Equivalents at end of year		245,304	22,139	85,601	13,377
Represented By:					
Bank Balances	11.	35,454	3,200	66,332	10,366
Short Term Deposits	11.	209,850	18,940	19,269	3,011
		245,304	22,139	85,601	13,377

STATEMENT OF FINANCIAL POSITION

Amounts are stated in ZMW'000 and US\$'000

	Note	2015		2014		2013	
		ZMW'000	US\$'000	ZMW'000	US\$'000	ZMW'000	US\$'000
ASSETS							
Non-Current Assets							
Property, Plant and Equipment	6.	1,227,174	110,756	678,272	105,997	557,301	105,151
Investment Property	7.	22,637	2,043	9,771	1,527	8,360	1,577
		1,249,810	112,799	688,043	107,524	565,661	106,729
Current Assets							
Inventories	8.	2,016	182	1,011	158	849	160
Held to Maturity Investments	9.	7,405	668	3,043	476	4,908	926
Trade and Other Receivables	10.	103,732	9,362	55,862	8,730	38,484	7,261
Cash and Cash Equivalents	11.	245,304	22,139	85,601	13,377	46,613	8,795
		358,457	32,352	145,516	22,740	90,854	17,142
Total Assets		1,608,268	145,151	833,559	130,264	656,515	123,871
FUNDS AND LIABILITIES							
Funds and Reserves							
Revaluation Reserves		1,007,644	90,943	562,809	87,953	505,584	90,433
Revenue Reserves		527,032	47,566	244,547	38,216	137,020	30,813
		1,534,676	138,509	807,356	126,169	642,604	121,246
Non-Current Liabilities							
Capital Grants	2.	16,108	1,454	-	-	-	-
Deferred Revenue Grants	2.	5,540	500	-	-	-	-
Long-Term Loans	12.	2,658	240	-	-	-	-
		24,307	2,194	-	-	-	-
Current Liabilities							
Trade and Other Payables	13.	25,566	2,307	14,750	2,305	6,542	1,234
Employee Benefits and Provisions	14.	23,719	2,141	11,454	1,790	7,370	1,391
		49,285	4,448	26,204	4,095	13,912	2,625
Total Funds and Liabilities		1,608,268	145,151	833,559	130,264	656,515	123,871

The financial statements were approved by the Board of Directors on 08/08/16 and signed on their behalf by:

Chairperson:  Co-Chairperson: 

SUMMARY OF SIGNIFICANT ACCOUNTING POLICY

The basis of preparation and accounting policies used in preparing the financial statements for the year ended 31st December 2015 are set out below:

1. Statement of Accounts-Form and Currency

The Authority was constituted by the Zambezi River Authority Act 1987 of Zambia and Zimbabwe, which contain provisions relating to the form and content of the financial statements for the Authority. Being a bi-national institution, the Authority complies with core principles of IFRS 8-Operating Segments, which states that: "an entity shall disclose information to enable users of its financial statements to evaluate the nature and financial effects of the business activities in which it engages and the economic environment in which it operates".

Beginning January 2009, the Government of Zimbabwe suspended the use of the Zimbabwean Dollar in preference for convertible currencies such as the United States Dollars. Since then, the financial statements of the Authority have been presented in Zambian Kwacha and United States Dollars. Since exchange losses on consolidation no longer arise, past exchange losses carried in the exchange adjustment reserve have been treated as realised and transferred to the revenue reserve.

2. Basis of Preparation

The financial statements for the year ended 31st December 2015 are prepared on a going concern basis and in accordance with International Financial Reporting Standards issued by the International Accounting Standards Board ("IASB") and interpretations issued by the International Financial Reporting Interpretations Committee ("IFRIC") of the IASB. The financial statements have also been prepared on the historical cost basis. Historical cost is generally based on the fair value of the consideration given in exchange for assets.

3. Statement of Compliance

As explained above, the financial statements have been prepared in accordance with International Financial Reporting Standards applicable for the reporting period to 31st December.

4. Adoption of New and Revised International Financial Reporting Standards ("IFRSs")

(a) New and amended standards and interpretations

The Authority applied for the first time certain standards and amendments, which are effective

for annual periods beginning on or after 1 January 2015. The Authority has not early adopted any other standard, interpretation or amendment that has been issued but is not yet effective. The nature and the effect of these changes are disclosed below. Although these new standards and amendments applied for the first time in 2015, they did not have a material impact on the annual financial statements of the Authority. The nature and the impact of each new standard or amendment is described below:

(i). Amendments to IAS 19 Defined Benefit Plans: Employee Contributions. This amendment is not relevant to the entity.

(ii). Annual Improvements 2010-2012 Cycle

With the exception of the improvement relating to IFRS 2 Share-based Payment applied to share-based payment transactions with a grant date on or after 1 July 2014, all other improvements are effective for accounting periods beginning on or after 1 July 2014. The Authority has applied these improvements for the first time in these financial statements. They include:

- **IFRS 2 Share-based Payment.** This amendment is not relevant for the entity

- **IFRS 3 Business Combinations.** This amendment is not relevant for the entity

- **IFRS 8 Operating Segments:** The amendments are applied retrospectively and clarify that: An entity must disclose the judgements made by management in applying the aggregation criteria in paragraph 12 of IFRS 8, including a brief description of operating segments that have been aggregated and the economic characteristics (e.g., sales and gross margins) used to assess whether the segments are 'similar'; The reconciliation of segment assets to total assets is only required to be disclosed if the reconciliation is reported to the chief operating decision maker, similar to the required disclosure for segment liabilities; The Authority has not applied the aggregation criteria in IFRS 8.12. The Authority has presented the reconciliation of segment assets to total assets in previous periods and continues to disclose the same in this period's financial statements as the reconciliation is reported to the chief operating decision maker for the purpose of her decision making.

- **IAS 16 Property, Plant and Equipment and IAS 38 Intangible Assets:** The amendment is applied retrospectively and clarifies in IAS 16 and IAS 38 that the asset may be revalued by reference to observable

data by either adjusting the gross carrying amount of the asset to market value or by determining the market value of the carrying value and adjusting the gross carrying amount proportionately so that the resulting carrying amount equals the market value. In addition, the accumulated depreciation or amortisation is the difference between the gross and carrying amounts of the asset. This amendment did not have any impact to the revaluation adjustments recorded by the Authority during the current period.

• **IAS 24 Related Party Disclosures:** The amendment is applied retrospectively and clarifies that a management entity (an entity that provides key management personnel services) is a related party subject to the related party disclosures. In addition, an entity that uses a management entity is required to disclose the expenses incurred for management services. This amendment is not relevant for the Authority as it does not receive any management services from other entities.

(iii). Annual Improvements 2011-2013 Cycle

These improvements are effective from 1 July 2014 and the Authority has applied these amendments for the first time in these financial statements. They include:

- **IFRS 3 Business Combinations;** this amendment is not relevant for the entity.
- **IFRS 13 Fair Value Measurement:** The amendment is applied prospectively and clarifies that the portfolio exception in IFRS 13 can be applied not only to financial assets and financial liabilities, but also to other contracts within the scope of IAS 39. The Authority does not apply the portfolio exception in IFRS 13.
- **IAS 40 Investment Property:** The description of ancillary services in IAS 40 differentiates between investment property and owner-occupied property (i.e., property, plant and equipment). This amendment is not relevant for the entity.

(b) Standards issued but not yet effective

The standards and interpretations that are issued, but not yet effective, up to the date of issuance of the Authority's financial statements are disclosed below. The Authority intends to adopt these standards, if applicable, when they become effective:

- (i). IFRS 9 Financial Instruments: IFRS 9 is effective for annual periods beginning on or after 1 January 2018, with early application permitted.
- (ii). IFRS 14 Regulatory Deferral Accounts: IFRS 14 is effective for annual periods beginning on or after 1 January 2016. Since the Authority is an existing IFRS preparer, this standard would not apply.
- (iii). IFRS 15 Revenue from Contracts with Customers.

(iv). Amendments to IFRS 11 Joint Arrangements: Accounting for Acquisitions of Interests.

(v). Amendments to IAS 16 and IAS 38: Clarification of Acceptable Methods of Depreciation and Amortisation: The amendments clarify the principle in IAS 16 and IAS 38 that revenue reflects a pattern of economic benefits that are generated from operating a business (of which the asset is part) rather than the economic benefits that are consumed through use of the asset. The amendments are effective prospectively for annual periods beginning on or after 1 January 2016, with early adoption permitted. These amendments are not expected to have any impact to the Authority given that it has not used a revenue-based method to depreciate its non-current assets.

(vi). Amendments to IAS 16 and IAS 41 Agriculture: Bearer Plants.

(vii). Amendments to IAS 27: Equity Method in Separate Financial Statements.

(viii). Amendments to IFRS 10 and IAS 28: Sale or Contribution of Assets between an Investor and its Associate or Joint Venture: These amendments are not expected to have any impact on the Authority.

(ix). Annual Improvements 2012-2014 Cycle-These improvements are effective for annual periods beginning on or after 1 January 2016. They include:

• **IFRS 5 Non-current Assets Held for Sale and Discontinued Operations**

• **IFRS 7 Financial Instruments:** Disclosures

• **IAS 19 Employee Benefits**

• **IAS 34 Interim Financial Reporting**

• **Amendments to IAS 1 Disclosure Initiative** - The amendments to IAS 1 Presentation of Financial Statements clarify, rather than significantly change, existing IAS 1 requirements. The amendments clarify: The materiality requirements in IAS 1; That specific line items in the statement(s) of profit or loss and OCI and the statement of financial position may be disaggregated; That entities have flexibility as to the order in which they present the notes to financial statements; That the share of OCI of associates and joint ventures accounted for using the equity method must be presented in aggregate as a single line item, and classified between those items that will or will not be subsequently reclassified to profit or loss; and Furthermore, the amendments clarify the requirements that apply when additional subtotals are presented in the statement of financial position and the statement(s) of profit or loss and OCI. These amendments are effective for annual periods beginning on or after 1 January 2016, with early adoption permitted. These amendments are not expected to have any impact on the Authority.

• **Amendments to IFRS 10, IFRS 12 and IAS 28 Investment Entities:** Applying the Consolidation Exception-The amendments address issues that have arisen in applying the investment entities exception under IFRS 10. The amendments to IFRS 10 clarify that the exemption from presenting consolidated financial statements applies to a parent entity that is a subsidiary of an investment entity, when the investment entity measures all of its subsidiaries at fair value.

These amendments must be applied retrospectively and are effective for annual periods beginning on or after 1 January 2016, with early adoption permitted. These amendments are not expected to have any impact on the Authority.

There are no other IFRSs or IFRIC interpretations that are not yet effective that would be expected to have a material impact on the Authority.

5. Foreign Currencies

In preparing the financial statements, transactions in foreign currencies are recognised at the rates of exchange prevailing at the dates of the transactions. At the end of each reporting period, monetary items denominated in foreign currencies are retranslated at the rates prevailing at that date. Non-monetary items carried at fair value that are denominated in foreign currencies are retranslated at the rates prevailing at the date when the fair value was determined. Exchange differences are recognised in profit or loss in the period in which they arise.

6. Investment Property

Investment property comprises a number of commercial and residential properties that are leased to individuals and organisations. Each of the leases contains an initial non-cancellable period of one year. Subsequent renewals are negotiated with the lessee. Property interests held under operating leases are classified as investment properties. No contingent rents are charged.

Investment property, held to earn rentals and/or for capital appreciation or both and not occupied by the Authority is carried at fair value. The carrying amount of investment property is the revalued amount of the property as determined by a registered independent appraiser having an appropriate recognised professional qualification and recent experience in the location and category of the property being valued. Revaluations are determined having regard to recent market transactions for similar properties in the same location as the Authority's investment property. Revaluations are recognised in equity and transferred to revenue reserves over the remaining life of the asset.

7. Property, Plant and Equipment

(a) Cost and Valuation

Land and buildings held for use in the supply of services, or for administrative purposes, are stated in the statement of financial position at their revalued amounts, being the fair value at the date of revaluation, less any subsequent accumulated depreciation and subsequent accumulated impairment losses. Revaluations are performed with sufficient regularity such that the carrying amounts do not differ materially from those that would be determined using fair values at the end of the reporting period.

Any revaluation increase arising on the revaluation of such land and buildings is recognised in equity, except to the extent that it reverses a revaluation decrease for the same asset previously recognised in income, in which case the increase is credited to income to the extent of the decrease previously expensed. A decrease in the carrying amount arising on the revaluation of such land and buildings is recognised in income to the extent that it exceeds the balance, if any, held in the properties revaluation reserve relating to a previous revaluation of that asset.

Depreciation on revalued buildings is recognised in income. On the subsequent sale or retirement of a revalued property, the attributable revaluation surplus remaining in the properties revaluation reserve is transferred directly to retained earnings. Further, as the asset is put to use, the difference between the depreciation on the revalued amount and the depreciation on the cost is transferred from the revaluation reserve to retained earnings.

(b) Subsequent Expenditure

The Authority recognises, in the carrying amount of a tangible fixed asset, the cost of replacing part of such an item when that cost is incurred if it is probable that the future economic benefits embodied with the item will flow to the Authority and the cost of the item can be measured reliably. All other costs are recognised in the income statement as an expense as incurred.

(c) Capital Work in Progress

Expenditure on assets under construction is initially shown as Capital Work in Progress and is transferred to the relevant class of asset when commissioned or completed.

(d) Depreciation

Property, plant and equipment are stated at cost less accumulated depreciation and impairment losses. Depreciation is recognised so as to write off the cost or valuation of assets less their residual values over their useful lives, using the straight-line method, with full year depreciation being charged in the year of acquisition at the following rates:

- Leasehold Buildings	2.5%
- Kariba Dam Complex	2.5%
- Motor Vehicles	25%
- Machinery and Equipment	10% - 20%
- Furniture and Fittings	20%
- Capital Work in Progress	0%

The estimated useful lives, residual values and depreciation method are reviewed at each year end, with the effect of any changes in estimate accounted for on a prospective basis. However, assets with nil book values but still employed in the operations of the Authority have been revalued and reinstated on the statement of financial position based on their current depreciable values determined by insurable values.

(e) De-recognition

An item of property, plant and equipment is de-recognised upon disposal or when no future economic benefits are expected to arise from the continued use of the asset. Any gain or loss arising on de-recognition of the asset (calculated as the difference between the net disposal proceeds and the carrying amount of the item) is included in the income statement in the year the item is de-recognised.

(f) Impairment

At each reporting date, the Authority assesses whether there is any indication that an asset may be impaired. Where an indicator of impairment exists, the Authority makes a formal estimate of recoverable amount. Where the carrying amount of an asset exceeds its recoverable amount the asset is considered impaired and is written down to its recoverable amount. Recoverable amount is the higher of an asset's or cash-generating unit's fair value less costs to sell and its value in use and is determined for an individual asset, unless the asset does not generate cash inflows that are largely independent of those from other assets or groups of assets. An impairment loss is reversed only to the extent that the asset's carrying amount does not exceed the carrying amount that would have been determined, net of depreciation, if no impairment loss had been recognised.

8. Consumable Stores

Inventories are valued at the lower of cost and net realisable value. Cost is determined on a first in first out basis and includes production labour cost, transport and handling costs. Net realisable value is the estimated selling price at which inventories can be realised in the normal course of business, less estimated costs of completion and the estimated costs necessary to make the sale. Provision is made for obsolete, slow moving and defective inventories.

9. Financial Instruments

(a) Composition

The Authority's financial instruments consists of cash and equivalents, accounts and sundry receivables, accounts payables, employee benefits provision, accrued liabilities and provisions due to sundry suppliers and government departments and/or authorities to whom statutory deductions are due. Cash and cash equivalents, accounts receivable, payables, and accrued liabilities are reflected in the statement of financial position at cost, which approximates to fair value due to the short-term nature of these instruments.

(b) Financial Assets

(i). Classification

The Authority's principal financial assets are cash and cash equivalents and accounts receivable from revenue arising from rendering of services and sundry receivables from administrative advances, prepayments and deposits:

- Cash and cash equivalents include cash in hand and deposits held at call with banks, including bank overdrafts. Bank overdrafts are shown as net of cash balances within current assets on the statement of financial position.

- Accounts receivables and sundry receivables are stated in the balance sheet at original amount less an allowance for any uncollectible amounts. An estimate for impairment is made when collection of the full amount is no longer probable. Bad debts are written off when identified.

(ii). Impairment

Financial assets are considered to be impaired when there is objective evidence that, as a result of one or more events that occurred after the initial recognition of the financial asset, the estimated future cash flows of the investment have been affected.

(iii). De-recognition

The Authority derecognises a financial asset only when the contractual rights to the cash flows from the asset expire, or when it transfers the financial asset and substantially all the risks and rewards of ownership of the asset.

(c) Financial Liabilities

(i). Classification and Measurement

Financial liabilities are classified according to the substance of the contractual arrangements entered into:

- Payables and accruals are stated at their nominal value.

- Provisions are recognised when the Authority has a present legal or constructive obligation as a result of a past event, and it is probable that the Authority will be required to settle the obligation, and a reliable estimate can be made of the amount of the obligation. When some or all of the economic benefits required to settle a provision are expected to be recovered from a third party, a receivable is recognised as an asset if it is virtually certain that reimbursement will be received and the amount of the receivable can be measured reliably.

- Employee Benefits: The Authority subscribes to defined contribution schemes for the benefit of its permanent or pensionable staff. Contributions are charged to income at 15% of the basic salary. In addition, the Authority has taken out benefits insurance in respect of gratuity for contract employees at 35% of total earned gross salary.

- Other Employee Benefits - The estimated monetary liability for employees' accrued gratuity pay entitlement at the balance sheet date is recognised as an expense accrual.

- Contingent Liabilities - Contingent liabilities are initially measured at fair value. At the end of subsequent reporting periods, such contingent liabilities are measured at the higher of the amount that would be recognised in accordance with IAS 37 Provisions, Contingent Liabilities and Contingent Assets and the amount initially recognised less cumulative amortisation recognised in accordance with IAS 18 Revenue.

(ii). De-recognition

The Authority derecognises financial liabilities when, and only when, the Authority's obligations are discharged, cancelled or they expire.

(d) Offsetting of Financial Assets and Liabilities

Financial assets and liabilities are offset and net amounts reported in the statement of financial position when there is a legally enforceable right to offset the recognised amounts and there is an intention to settle on a net basis, or realise the asset and settle the liability simultaneously.

(e) Fair Values of Financial Assets and Liabilities

The carrying amounts of financial assets and liabilities are, in the opinion of the Board, not significantly different from their respective fair values due to generally short periods to maturity dates. Liabilities in respect of retirement benefit contributions, which are of a long-term nature are reflected at cost as the benefit plan operated by the Authority is a defined contribution scheme, under which the Authority's liability is limited to shortfalls between total

contributions paid and amounts payable as at the reporting date.

(f) Financial Risks

The Authority's activities expose it to a variety of financial risks. The most important types of risk are credit risk, and liquidity risk. Policies and exposures on risks and financial instruments are discussed in Note 15 to the financial statements.

10. Grants

Grants are not recognised until there is reasonable assurance that the Authority will comply with the conditions attaching to them and that the grants will be received. Grants whose primary condition is that the Authority should purchase, or otherwise acquire non-current assets are recognised as capital grants in the statement of financial position and transferred to income on a systematic and rational basis over the useful lives of the related assets. Other grants are recognised as deferred revenue over the periods necessary to match them with the costs for which they are intended to compensate, on a systematic basis. Grants that are receivable as compensation for expenses or losses already incurred or for the purpose of giving immediate financial support to the Authority with no future related costs are recognised in income in the period in which they become receivable.

11. Taxation

No allowance is made for income or deferred taxes as the Authority is exempted from paying taxes on capital, income or profit under Articles 17 and 19 of the Zambezi River Authority Acts, 1987 of Zambia and Zimbabwe respectively.

12. Capital Management

Capital resources comprise accumulated funds and unamortised portions of revaluations and grant balances. The Authority's objectives for the management of capital are to safeguard its ability to continue as a going concern. The Authority considers its cash and cash equivalents to be the manageable capital from its financial resources. The Authority's policy is to maintain sufficient cash balances to cover operating and administration costs over a reasonable future period. The Authority currently has no externally-imposed capital requirements except to maintain sufficient cash balances.

13. Segmental Reporting

The Authority has two sets of segments: geographical i.e. Zambia and Zimbabwe, and operating segments. An operating segment is a component of the Authority for which discrete financial information is available; that engages in business activities (earns revenue, incurs expenses); and for which operating results are regularly reviewed to assess performance

and to make resource allocation decisions (to the segment). Hence the two operating segments of the Authority are:

(a) Water Sales Segment: The Operating income is based on water tariffs charged based on the water consumed in the generation of electricity as invoiced to the two utility companies, ZSECO Limited and Zimbabwe Power Authority ("ZPC"). The formula used is intended to provide the Authority with sufficient revenues to carry out its mandate and not to generate profits.

(b) Investment Property Segment: This relates to investment property comprising a number of commercial and residential properties that are leased to third parties.

Segment information is presented in respect of the Authority's business. The primary format is based on the Authority's geographical segments and then on the management and internal reporting structure. Segment results, assets and liabilities include items directly attributable to a segment as well as those that can be allocated on a reasonable basis. Unallocated items comprise mainly income-earning assets and revenue, interest-bearing loans, borrowings and expenses, and corporate assets and expenses. Segment capital expenditure is the total cost incurred during the period to acquire segment assets that are expected to be used for more than one period.

14. Revenue

(a) Water Sales Revenue

Revenue is recognised to the extent that it is probable that economic benefits will flow to the Authority, the significant risks and rewards of the service have passed to the consumer and the amount of revenue can be measured reliably. Revenue represents the value of sales invoices. No value added taxes are charged.

(b) Investment Property

The Authority leases out its investment property under operating leases. None of the Authority's properties held for rental were disposed of, since the last balance sheet date. Further, all the properties are generally committed to tenants over the next one year.

15. Administrative Costs

Operating and administrative costs are accrued as incurred.

16. Critical Judgements in Applying Accounting Policies and Key Sources of Estimation Uncertainty

Many of the amounts included in the financial statements involve the use of judgement and/or estimation. These judgements and estimates are

based on management's best knowledge of the relevant facts and circumstances, having regard to previous experience, but actual results may differ from the amounts included in the financial statements. Information about such judgements and estimation is contained in the accounting policies above and/or the notes to the financial statements on Pages 24 to 44. However, the key areas are summarised below.

(a) Areas of judgement that have the most significant effect on the amounts recognised in the financial statements are:

- (i). Review of asset carrying values and impairment charges and reversals
- (ii). Determination of fair values of non-current assets
- (iii). Capitalisation of software costs
- (iv). Impairment losses on receivables: The Authority reviews its gross receivables to assess impairment. In determining whether an impairment loss should be recorded in the income statement, the Authority makes judgments as to whether there is any observable data indicating that there is a measurable decrease in the estimated future cash flows from debtors before the decrease can be identified with an individual debtor in its portfolio.

(b) Key sources of estimation uncertainty that have a significant risk of causing a material adjustment to the carrying amounts of assets and liabilities within the next financial year are:

- (i). Estimation of asset lives
- (ii). Estimation of liabilities for post-retirement costs
- (iii). Contingencies

17. Comparatives

Where necessary, corresponding figures have been restated to conform to changes in the presentation of the current period.

NOTES TO THE FINANCIAL STATEMENTS

Amounts are stated in ZMW'000 and US\$'000

1. Segment Information

The Authority principally operates in two (2) geographical areas, namely Zimbabwe and Zambia. Sales revenues are derived from both countries whilst rental income received mainly from investment properties located in Zimbabwe. The Authority also derives rental income from the property that houses its Headquarters, however a negligible portion of its offices are let out with this building being classified as property plant and equipment.

Services from which segments derive their revenues. The Authority currently derives its revenues from water sales to ZESCO Limited and Zimbabwe Power Company (Pvt) Limited and rental income from lease of owned property. The Chief Executive is presented with the results of each segment for the purposes of resource allocation and assessment of the results of each segment.

Segment revenues and results: Below are the operating results from the continuing operations of the reportable segments.

Amounts Stated in ZMW'000	31st December 2015					
	ZAMBIA		ZIMBABWE		CONSOLIDATED	
	Water Sales	Investment Property	Water Sales	Investment Property	Water Sales	Investment Property
Sales Revenue	128,479	-	96,379	-	224,858	-
Rental Income	-	566	-	777	-	1,343
Other Income	12,624	-	9,963	-	22,587	-
Segment Income	141,104	566	106,341	777	247,445	1,343
Segment Costs						
Board Expenses	3,652	-	2,431	-	6,083	-
Repairs and Maintenance	357	-	9,352	714	9,709	714
Staff Costs	57,433	-	34,346	-	91,779	-
Other Administration Expenses	47,310	-	19,256	-	66,566	-
	108,752	-	65,385	714	174,137	714
Net Surplus	32,352	566	40,956	63	73,308	629

NOTES TO THE FINANCIAL STATEMENTS

Amounts are stated in ZMW'000 and US\$'000

Amounts Stated in US\$'000	31st December 2015					
	ZAMBIA		ZIMBABWE		CONSOLIDATED	
	Water Sales	Investment Property	Water Sales	Investment Property	Water Sales	Investment Property
Sales Revenue	14,754	-	11,068	-	25,822	-
Rental Income	-	65	-	89	-	154
Other Income	364	-	1,144	-	1,508	-
Segment Income	15,118	65	12,212	89	27,330	154
Segment Costs						
Board Expenses	419	-	279	-	699	-
Repairs and Maintenance	41	-	191	82	232	82
Staff Costs	6,559	-	3,923	-	10,482	-
Other Administration Expenses	4,893	-	4,423	-	9,316	-
	11,912	-	8,817	82	20,729	82
Net Surplus	3,206	65	3,395	7	6,601	72

Amounts Stated in ZMW'000	31st December 2014					
	ZAMBIA		ZIMBABWE		CONSOLIDATED	
	Water Sales	Investment Property	Water Sales	Investment Property	Water Sales	Investment Property
Sales Revenue	70,441	-	61,251	-	131,691	-
Rental Income	-	509	-	633	-	1,142
Other Income	2,996	-	5,770	-	8,766	-
Segment Income	73,437	509	67,021	633	140,458	1,142
Segment Costs						
Board Expenses	2,701	-	2,471	-	5,172	-
Repairs and Maintenance	427	-	617	413	1,044	413
Staff Costs	39,436	-	24,833	-	64,269	-
Other Administration Expenses	13,476	-	25,723	-	39,199	-
	56,040	-	53,644	413	109,684	413
Net Surplus	17,397	509	13,377	220	30,774	729

NOTES TO THE FINANCIAL STATEMENTS

Amounts are stated in ZMW'000 and US\$'000

Amounts Stated in US\$'000	31st December 2014					
	ZAMBIA		ZIMBABWE		CONSOLIDATED	
	Water Sales	Investment Property	Water Sales	Investment Property	Water Sales	Investment Property
Sales Revenue	11,531	-	10,027	-	21,558	-
Rental Income	-	-	-	104	-	104
Other Income	511	-	945	-	1,455	-
Segment Income	12,042	-	10,971	104	23,013	104
Segment Costs						
Board Expenses	442	-	404	-	847	-
Repairs and Maintenance	70	-	101	68	171	68
Staff Costs	6,391	-	4,025	-	10,416	-
Other Administration Expenses	2,482	-	4,211	-	6,693	-
	9,385	-	8,741	68	18,126	68
Net Surplus	2,657	-	2,230	36	4,887	36

31 December 2015		31 December 2014	
ZMW'000	US\$'000	ZMW'000	US\$'000

2. Grant Income

(a) Summary of Revenue Grants

Revenue Grants from World Bank	-	-	-	-
Revenue Grants from SIDA	-	-	-	-
Amortisation of Capital Grants (Note 1 (c)(ii))	-	-	-	-
	-	-	-	-

Revenue Grants received are for the sole purpose of conducting the activities of the Authority.

(b) Revenue Grants

Revenue grants from donors are recognised to match approved expenditure in accordance with annual work plans, budgets and provisions as stipulated by the respective grant agreements.

(c) Movements in Deferred Revenue

Amortised grant income represents capital asset grants, grant funds received from donors for the acquisition of assets, for the Rehabilitation of the Kariba Dam and the Batoka Hydro-Electric Scheme Project. This is charged to income over the period necessary to match them with the costs for which they are intended to compensate, on a systematic basis:

NOTES TO THE FINANCIAL STATEMENTS

Amounts are stated in ZMW'000 and US\$'000

(i) Movements in Deferred Revenue

Balance at Start of Year	-	-	-	-
Received during the year	21,236	1,917	-	-
Transferred to Income	-	-	-	-
Transferred to Capital Grants	(15,696)	(1,417)	-	-
Balance at End of Year	5,540	500	-	-

(ii) Movements in Capital Grants

Balance at Start of Year	-	-	-	-
Received during the year	-	-	-	-
Transferred from Revenue Grants	15,696	1,417	-	-
Benefit of Market Below Market Rates	412	37	-	-
Transferred to Income	-	-	-	-
Balance at End of Year	16,108	1,454	-	-

(iii) Total Amortisation

Deferred Revenue	-	-	-	-
Capital Grant Amortisation	-	-	-	-
	-	-	-	-

3. Revenue

31 December 2015		31 December 2014	
ZMW'000	US\$'000	ZMW'000	US\$'000

Revenue comprises Income derived from water sales which is categorised as follows:

Variable Charges	180,985	20,784	104,929	17,177
Fixed Charges	43,873	5,038	26,762	4,381
	224,858	25,822	131,691	21,558

NOTES TO THE FINANCIAL STATEMENTS

Amounts are stated in ZMW'000 and US\$'000

4. Other Income

Interest Received From:				
- Overdue Customer Accounts	2,425	279	1,607	263
- Term Deposits	8,979	1,031	4,343	711
- Staff House Loans	605	69	306	50
- Staff Car Loans	182	21	59	10
- Madison Asset Management	39	4	1,760	288
Plant Hire Income	51	6	81	13
Rental Income	1,343	154	1,059	173
Sale of Data	0	0	4	1
Sundry Income	578	66	38	6
Toll Fees	272	31	267	44
Exchange Gain	9,455	0	385	0
	23,930	1,662	9,908	1,559

5. Fixed Cost

Interest Paid	40	5	-	-
	40	5	-	-

NOTES TO THE FINANCIAL STATEMENTS

Amounts are stated in ZMW'000 and US\$'000

6. Property, Plant and Equipment

Amounts Stated in ZMW'000	2015				Total
	Kariba Dam & Complex	Leasehold Land & Buildings	Motor Vehicles, Furniture & Equipment	Capital Work in Progress	
Cost					
At 1 January 2015	647,271	31,773	41,941	69,561	790,546
Additions	-	3,399	24,729	34,898	63,027
Revaluations	-	39,411	-	-	39,411
Disposals	-	-	(1,160)	-	(1,160)
Transfers	-	-	-	(22,298)	(22,298)
Effects of Foreign Currency Exchange Differences	473,492	23,242	30,681	50,885	578,301
At 31 December 2015	1,120,763	97,826	96,191	133,046	1,447,826
	-	-	-	-	-
Depreciation					
At 1 January 2015	77,316	8,710	26,247	-	112,274
Charge for year	22,021	5,189	9,331	-	36,541
Depreciation Write-Back on Revaluation	-	(14,919)	-	-	(14,919)
Eliminated on Disposals	-	-	(1,372)	-	(1,372)
Effects of Foreign Currency Exchange Differences	62,556	6,372	19,200	-	88,129
At 31 December 2015	161,894	5,352	53,407	-	220,653
	-	-	-	-	-
Carrying Amounts					
At 31 December 2015	569,955	23,063	15,694	69,561	678,272
At 31 December 2015	958,870	92,474	42,785	133,046	1,227,174

NOTES TO THE FINANCIAL STATEMENTS

Amounts are stated in ZMW'000 and US\$'000

6. Property, Plant and Equipment cont'd

Amounts Stated in US\$'000	2015				Total
	Kariba Dam & Complex	Leasehold Land & Buildings	Motor Vehicles, Furniture & Equipment	Capital Work in Progress	
Cost					
At 1 January 2015	101,152	4,965	6,554	10,871	123,542
Additions	-	307	2,232	3,150	5,688
Revaluations	-	3,557	-	-	3,557
Transfers	-	-	-	(2,012)	(2,012)
Disposals	-	-	(105)	-	(105)
At 31 December 2015	101,152	8,829	8,682	12,008	130,670
	-	-	-	-	
Depreciation					
At 1 January 2015	12,083	1,361	4,102	-	17,546
Charge for year	2,528.80	468	842	-	3,839
Depreciation Write-Back on Revaluation	-	(1,346)	-	-	(1,346)
Eliminated on Disposals	-	-	(124)	-	(124)
At 31 December 2015	14,611	483	4,820	-	19,914
	-	-	-	-	
Carrying Amounts					
At 31 December 2014	89,069	3,604	2,453	10,871	105,997
At 31 December 2015	86,541	8,346	3,861	12,008	110,756

NOTES TO THE FINANCIAL STATEMENTS

Amounts are stated in ZMW'000 and US\$'000

6. Property, Plant and Equipment cont'd

Amounts Stated in ZMW'000	2014				Total
	Kariba Dam & Complex	Leasehold Land & Buildings	Motor Vehicles, Furniture & Equipment	Capital Work in Progress	
Cost					
At 1 January 2015	536,105	26,316	31,774	44,211	638,406
Additions	-	-	6,158	16,183	22,341
Revaluations	-	-	-	-	-
Disposals	-	-	(2,579)	-	(2,579)
Effects of Foreign Currency Exchange Differences	111,166	5,457	6,589	9,168	132,379
At 31 December 2015	647,271	31,773	41,941	69,561	790,546
Depreciation					
At 1 January 2015	55,012	7,065	19,027	-	81,105
Charge for year	10,402	172	4,803	-	15,377
Depreciation Write-Back on Revaluation	-	-	-	-	-
Eliminated on Disposals	-	-	(1,677)	-	(1,677)
Effects of Foreign Currency Exchange Differences	11,902	1,473	4,094	-	17,469
At 31 December 2015	77,316	8,710	26,247	-	112,274
	0.0000	(0.00000)	(0.0000)		
Carrying Amounts					
At 31 December 2015	481,093	19,251	12,746	44,211	557,301
At 31 December 2015	569,955	23,063	15,694	69,561	678,272

NOTES TO THE FINANCIAL STATEMENTS

Amounts are stated in ZMW'000 and US\$'000

6. Property, Plant and Equipment cont'd

Amounts Stated in US\$'000	2014				Total
	Kariba Dam & Complex	Leasehold Land & Buildings	Motor Vehicles, Furniture & Equipment	Capital Work in Progress	
Cost					
At 1 January 2015	101,152	4,965	5,995	8,342	120,454
Additions	-	-	962	2,529	3,491
Revaluations	-	-	-	-	-
Disposals	-	-	(403)	-	(403)
At 31 December 2015	101,152	4,965	6,554	10,871	123,542
	-	-	-	-	
Depreciation					
At 1 January 2015	10,380	1,333	3,590	-	15,303
Charge for year	1,703	28	786	-	2,517
Depreciation Write-Back on Revaluation	-	-	-	-	-
Eliminated on Disposals	-	-	(275)	-	(275)
At 31 December 2015	12,083	1,361	4,102	-	17,546
Carrying Amounts					
At 31 December 2014	90,772	3,632	2,405	8,342	105,151
At 31 December 2015	89,069	3,604	2,453	10,871	105,997

NOTES TO THE FINANCIAL STATEMENTS

Amounts are stated in ZMW'000 and US\$'000

7. Investment Property

	31 December 2015		31 December 2014	
	ZMW'000	US\$'000	ZMW'000	US\$'000
At Depreciated Cost	22,637	2,043	9,771	1,527
Cost				
At Start of Period	12,916	2,018	10,698	2,018
Effects of Foreign Currency Exchange Differences	9,449	-	2,218	-
Gain or Loss on Revaluation of Property	2,871	259		
At End of Period	25,235	2,278	12,916	2,018
Amortisation				
At Start of Period	3,145	492	2,338	441
Charge for the Period	468	42	308.26	50
Depreciation Write-Back on Revaluation	(5,586)	(504)	-	-
Impairment Losses Recognised in Profit and Loss	2,270	205	-	-
Effects of Foreign Currency Exchange Differences	2,301	-	499	-
At End of Period	2,599	235	3,145	492
Carrying Amounts	22,637	2,043	9,771	1,527

8. Inventories

Consumable Stores	2,016	182	1,011	158
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Inventory comprises stock of consumables and other items held for use in the business. There were no significant differences between net realisable values and cost of inventories.

9. Held to Maturity Investment

Investments at Amortised Cost

Madison Asset Management Company	7,405	668	3,043	476
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The investment in Madison Asset Manager Company Limited is a short term Investment for gratuity for employees. Gains are based on the individual units acquired which are linked to an interest rate of 19% (2013: 11%) per annum and is transferred to the Authority's account at the end of the tenure period. The investment is for the tenure of the contracts of management.

NOTES TO THE FINANCIAL STATEMENTS

Amounts are stated in ZMW'000 and US\$'000

10. Trade and Other Receivables

Water Sales Accounts Receivable

	31 December 2015		31 December 2014	
	ZMW'000	US\$'000	ZMW'000	US\$'000
ZESCO Limited	42,194	3,808	19,958	3,119
Zimbabwe Power Company (Pvt) Limited	37,185	3,356	25,038	3,913
	79,380	7,164	44,995	7,032

(a) Analysis of Receivables

Gross Amounts Receivable	79,380	7,164	44,995	7,032
Less: Impairment Provision	1,071	97	618	97
	78,309	7,068	44,377	6,935

(b) Movement in Impairment Provision

At the beginning of the Period	618	97	512	97
Charge for the Period	452	-	106	-
Written off during the Period	-	-	-	-
At the End of the Period	1,071	97	618	97

(c) Net Accounts Receivables are Summarised as follows:

Neither past due nor impaired	-	-	-	-
Past due but not impaired	78,309	7,068	44,377	6,935
Impaired	1,071	97	618	97
Gross	79,380	7,164	44,995	7,032
Less: allowance for impairment	(1,071)	(97)	(618)	(97)
Net	78,309	7,068	44,377	6,935

(d) Net Rental Debtors are Summarised as follows:

Neither past due nor impaired	1,471	133	885	138
Past due but not impaired	-	-	-	-
Impaired	575	52	-	-
Gross	2,046	185	885	138
Less: allowance for impairment	(1,471)	(133)	-	-
Net	575	52	885	138

NOTES TO THE FINANCIAL STATEMENTS

Amounts are stated in ZMW'000 and US\$'000

Sundry Receivables

	31 December 2015		31 December 2014	
	ZMW'000	US\$'000	ZMW'000	US\$'000
Staff Debtors	21,817	1,969	9,298	1,453
CBZ Homeownership Scheme	34	3	19	3
Prepayments and Deposits	480	43	548	86
Sundry Debtors	1,441	130	675	105
ZVDF Zimbabwe	1,075	97	59	9
	24,848	2,243	10,600	1,657
Total Trade and Other Receivables	103,732	9,362	55,862	8,730

11. Cash and Cash Equivalents

(a) Cash at Bank and in Hand

Held with Standard Chartered	59	5	811	127
- Current Account	7,511	678	4,377	684
- Forex Account	5,538	500	-	-
- Forex Account (World Bank)	19,771	1,784	4,528	708
Held with Barclays Bank	216	20	2,154	337
Held with Stanbic Bank	1	0	46,990	7,343
Held with BancABC	94	8	-	-
Held with First Merchant Bank	2,024	183	7,407	1,158
Held with CBZ	89	8	64	10
Cash on Hand	150	13	-	-
ZNCB Toll Fees				
	35,454	3,200	66,332	10,366

(b) Short-Term Bank Deposits

Held with CBZ	62,507	5,641	19,269	3,011
Held with BancABC (Zimbabwe)	69,514	6,274	-	-
Held with BancABC (Zambia)	22,252	2,008	-	-
Held with Stanchart (Zambia)	620	56	-	-
Held with Cavmont (Zambia)	16,978	1,532	-	-
Held with Zanaco (Zambia)	37,980	3,428	-	-
	209,850	18,940	19,269	3,011
Net Cash and Cash Equivalents	245,304	22,139	85,601	13,377

NOTES TO THE FINANCIAL STATEMENTS

Amounts are stated in ZMW'000 and US\$'000

In the statement of cash flows, cash and cash equivalents includes cash in hand, deposits held at call with banks, other short-term highly liquid investments with original maturities of three months or less and bank overdrafts.

12. Long-Term Loans

	31 December 2015		31 December 2014	
	ZMW'000	US\$'000	ZMW'000	US\$'000
Government of the Republic of Zambia	2,658	240		

In February 2015 the International Development Association ("IDA") made available to the Government of the Republic of Zambia ("GRZ") a credit facility worth US\$75,000,000 for the rehabilitation of the Kariba Dam. In August 2015 the GRZ agreed to on-lend the proceeds of the credit to the Authority. The interest rates applicable are at 2% per annum on withdrawn amounts with a repayment period of 30 years, including a grace period of 2 years on repayment of the principal and interest.

13. Trade and Other Payables

Staff Bank Loans	25	2	40	6
Trade Creditors	9,522	859	8,826	1,379
Provisions and Accruals	14,627	1,320	3,807	595
ZVDF Zambia	436	39	1,628	254
Sundry Creditors	198	18	353	55
NAPSA and NSSA	135	12	38	6
ZRA Pension Scheme Trust	609	55	37	6
Zimbabwe Revenue Authority	15	1	21	3
	25,566	2,307	14,750	2,305

14. Employee Benefits and Provisions Balances in Employee Benefits Provision

Leave Pay Provision	15,321	1,383	7,663	1,198
Gratuity Provision	8,398	758	3,791	592
	23,719	2,141	11,454	1,790

NOTES TO THE FINANCIAL STATEMENTS

Amounts are stated in ZMW'000 and US\$'000

Analysis of Movements in Provisions

	Leave Pay ZMW'000	Gratuity ZMW'000	Total ZMW'000
At December 2015			
Opening Balance	7,663	3,791	11,454
Charge for Period	3,799	4,719	8,518
Payments	3,859	(113)	3,746
	15,321	8,398	23,719

At December 2014			
Opening Balance	7,370	-	7,370
Charge for Period	3,402	7,778	11,180
Payments	(3,109)	(3,987)	(7,096)
	7,663	3,791	11,454

	Leave Pay US\$'000	Gratuity US\$'000	Total US\$'000
At December 2015			
Opening Balance	1,198	592	11,790
Charge for Period	434	539	973
Payments	(249)	(373)	(622)
	1,383	758	2,141

At December 2014			
Opening Balance	1,391	-	1,391
Charge for Period	551	1,260	1,812
Payments	(744)	(668)	(1,412)
	1,198	592	1,790

NOTES TO THE FINANCIAL STATEMENTS

Amounts are stated in ZMW'000 and US\$'000

15. Financial Instruments

The Authority faces exposure to the following financial risks:

(a). Total Financial Instruments

31 December 2015				
	Loans and Receivables ZMW'000	Assets at Fair Value through P & L ZMW'000	Assets at Amortised Cost ZMW'000	Total ZMW'000
Assets as per statement of financial position				
Loans and Receivables:				
-Trade and Other receivables	103,732	-	-	103,732
-Placements with Financial Institutions	-	-	7,405	7,405
-Cash and Equivalents	245,304	-	-	245,304
Total	349,036	-	7,405	356,441

	Liabilities at Fair Value through P & L ZMW'000	Other Financial Liabilities at Amortised Cost ZMW'000	Total ZMW'000
Liabilities as per statement of financial position			
Borrowings	-	2,658	2,658
Other Financial Liabilities	-	23,719	23,719
Trade and Other Payables	-	25,566	25,566
Total	2,658	49,285	51,943

31 December 2015				
	Loans and Receivables US\$'000	Assets at Fair Value through P & L US\$'000	Assets at Amortised Cost US\$'000	Total US\$'000
Assets as per statement of financial position				
Loans and Receivables:				
-Trade and Other receivables	9,362	-	-	9,362
-Placements with Financial Institutions	-	-	668	668
-Cash and Equivalents	22,139	-	-	22,139
Total	31,501	-	668	32,170

NOTES TO THE FINANCIAL STATEMENTS

Amounts are stated in ZMW'000 and US\$'000

	Liabilities at Fair Value through P & L US\$'000	Other Financial Liabilities at Amortised Cost US\$'000	Total US\$'000
Liabilities as per statement of financial position			
Borrowings	-	240	240
Other Financial Liabilities	-	2,141	2,141
Trade and Other Payables	-	2,307	2,307
Total	-	4,688	4,688

	31 December 2014			
	Loans and Receivables ZMW'000	Assets at Fair Value through P & L ZMW'000	Assets at Amortised Cost ZMW'000	Total ZMW'000
Assets as per statement of financial position				
Loans and Receivables:				
-Trade and Other receivables	55,862	-	-	55,862
-Placements with Financial Institutions	-	-	3,043	3,043
-Cash and Equivalents	85,601	-	-	85,601
Total	141,463	-	3,043	144,505

	Liabilities at Fair Value through P & L ZMW'000	Other Financial Liabilities at Amortised Cost ZMW'000	Total ZMW'000
Liabilities as per statement of financial position			
Borrowings	-	-	-
Other Financial Liabilities	-	11,454	11,454
Trade and Other Payables	-	14,750	14,750
Total	-	26,204	26,204

NOTES TO THE FINANCIAL STATEMENTS

Amounts are stated in ZMW'000 and US\$'000

31 December 2014

	Loans and Receivables US\$'000	Assets at Fair Value through P & L US\$'000	Assets at Amortised Cost US\$'000	Total US\$'000
Assets as per statement of financial position				
Loans and Receivables:				
-Trade and Other receivables	8,730	-	-	8,730
-Placements with Financial Institutions	-	-	476	476
-Cash and Equivalents	13,377	-	-	13,377
Total	22,107	-	476	22,582

	Liabilities at Fair Value through P & L US\$'000	Other Financial Liabilities at Amortised Cost US\$'000	Total US\$'000
Liabilities as per statement of financial position			
Borrowings	-	-	-
Other Financial Liabilities	-	1,790	1,790
Trade and Other Payables	-	2,305	2,305
Total	-	4,095	4,095

(b). Credit Risk

The Authority takes on exposure to credit risk, which is the risk that a counterparty will cause a financial loss to the Authority by failing to pay amounts in full when due. The maximum exposure to credit risk is represented by the carrying amount of each financial asset in the balance sheet. As shown below, exposure to credit risk is represented by cash balances and amounts due on accounts receivables:

	2015		2014	
	ZMW'000	US\$'000	ZMW'000	US\$'000
Cash and bank balances	245,304	22,139	85,601	13,377
Investments	7,405	668	3,043	476
Receivables	103,732	9,362	55,862	8,730
	356,441	32,170	144,505	22,582

NOTES TO THE FINANCIAL STATEMENTS

Amounts are stated in ZMW'000 and US\$'000

At the reporting date, other significant concentrations of credit risks lay in receivables, which consist of staff and sundry advances and prepayments. The nature of services offered by the Authority means it does not have significant credit risk exposure to a single counterparty.

(c). Currency risk

The Authority takes on exposure to the effects of fluctuations in the prevailing foreign currency exchange rates:

	2015		2014	
	ZMW'000	US\$'000	ZMW'000	US\$'000
Assets				
Cash and Cash Equivalents	9,535	861	11,784	1,842
Liabilities				
Other liabilities	9,522	859	8,826	1,379
Net on-balance sheet position	14	1	2,958	462
Net off-balance sheet position	-	-	-	-
Overall open position	14	1	2,958	462

(d). Liquidity Risk and Interest Rate Risk

The Authority's activities expose it to a variety of financial risk: market risk (including interest and liquidity risk). This is monitored on a daily basis by management and controlled as far as reasonably possible to minimise the risk of mismatches between current liabilities and current assets. The table below summarises the Authority's interest and liquidity risks:

	Weighted Average Effective Interest rate	Up to 1 Month	1 - 3 Months	4 - 12 Months	1 - 5 Years	Total
At 31 December 2015						
Non-Interest Bearing	0%	2,131	6,392	17,044	23,719	49,285
At 31 December 2014						
Non-Interest Bearing	0%	1,229	3,687	9,833	11,454	26,204
	Weighted Average Effective Interest rate	Up to 1 Month	1 - 3 Months	4 - 12 Months	1 - 5 Years	Total
At 31 December 2015						
Non-Interest Bearing	0%	192	577	1,538	2,141	4,448
At 31 December 2014						
Non-Interest Bearing	0%	192	576	1,537	1,790	4,095

NOTES TO THE FINANCIAL STATEMENTS

Amounts are stated in ZMW'000 and US\$'000

(e) Fair Value Estimation

The different levels of determining fair value, by valuation method, have been defined as follows:

- Level 1: Quoted prices (unadjusted) in active markets for identical assets or liabilities.
- Level 2: Inputs other than quoted prices included within level 1 that are observable for the asset or liability, either directly prices (or indirectly derived from prices).
- Level 3: Inputs for the asset or liability that is not based on observable market data (that is, unobservable inputs).

The Authority had no financial instruments carried at fair value, by valuation method.

16. Related Parties

(a) Identity of Related Parties

The Authority has a common enterprise relationship with Governments of the Republic of Zambia and Zimbabwe. Other related parties include the Board of the Authority (Pages 48) and management (Page 49).

(b) Control and Governance of the Authority

The Authority was constituted by the Zambezi River Authority Act 1987 of Zambia and Zimbabwe. As a result it has a common enterprise relationship with Governments of the Republic of Zambia and Zimbabwe. Oversight of the Authority is vested in the Ministers. Internal supervision of its management and control of the affairs of the Authority, however, is vested in the Board and the key executive officers.

The key personnel within the Authority who held office during the year and to the date of this report are shown on Page 49 in the Report of the Board.

(c) Key Management of the Authority

The key management, with the ability, directly or indirectly, to control or exercise significant influence over the Authority in making financial and operating decisions, are listed on Page 49.

NOTES TO THE FINANCIAL STATEMENTS

Amounts are stated in ZMW'000 and US\$'000

(d) Transactions with Related Parties

The list of related party transactions is limited shown below:

	31 December 2015		31 December 2014	
	ZMW'000	US\$'000	ZMW'000	US\$'000
Board Allowances	1,043	120	795	130
Board Fees	170	19	101	17
Board Meeting Expenses	1,164	134	1,290	211
Chairman's Fund	75	9	27	4
Council Meetings Allowances	461	53	335	55
Council Meetings Expenses	1,055	121	452	74
Gratuity	4,719	539	7,778	1,260
Salaries	39,244	4,481	25,559	4,141

17. Capital Management

The Authority's objectives when managing capital are to safeguard the Authority's ability to continue as a going concern in order to provide returns to controlling interests and benefits for other stakeholders and to maintain an optimal capital structure to reduce the cost of capital:

	2015		2014	
	ZMW'000	US\$'000	ZMW'000	US\$'000
Debt	-	-	-	-
Cash	(245,304)	(22,139)	(85,601)	(13,377)
Net Debt	(245,304)	(22,139)	(85,601)	(13,377)
Equity	1,534,676	138,509	807,356	126,169
Net debt to equity ratio	-15.98%	-15.98%	-10.60%	-10.60%

18. Capital Commitments

Capital Commitments of the Authority are shown in Appendix II.

19. Contingent Liabilities

No contingent liabilities have been identified as at the reporting date.

NOTES TO THE FINANCIAL STATEMENTS

Amounts are stated in ZMW'000 and US\$'000

20. Events Subsequent to Balance Sheet Date

The Authority has evaluated events subsequent to the reporting date. Based on this evaluation, the Authority has determined that there has not arisen since the end of the period any transaction or event of a material and unusual nature likely, in the opinion of the Board, to affect substantially the operations of the Authority, the results of those operations or the state of affairs of the Authority in subsequent financial periods.

21. Statement of Capital Expenditure Compared with Capital Budget

As at 31 December 2015	Spent ZMW'000	Budget ZMW'000	Balance ZMW'000
Kariba Dam Structure	-	14,262	14,262
CWIP- Kariba Rehabilitation	15,212	452,950	437,738
CWIP- Batoka HES	19,686	177,329	157,643
Land & Buildings	3,399	4,487	1,088
Furniture, Fittings, Plant & Equip.	17,848	6,319	(11,529)
Motor Vehicles	3,452	3,656	205
ICT Infrastructure	3,430	3,324	(106)
Total	63,027	662,328	599,301

As at 31 December 2015	Spent US\$'000	Budget US\$'000	Balance US\$'000
Kariba Dam Structure	-	1,287	1,287
CWIP- Kariba Rehabilitation	1,373	40,880	39,507
CWIP- Batoka HES	1,777	16,004	14,228
Land & Buildings	307	405	98
Furniture, Fittings, Plant & Equip.	1,611	570	(1,041)
Motor Vehicles	312	330	18
ICT Infrastructure	310	300	(10)
Total	5,689	59,777	54,088

The budget was approved by the Council of Ministers on _____ 2015.

Auditors Certificate

In accordance with Article 15(6)6 of the Zambezi River Authority Act 1987, we certify that the comparative statement shown above is correct.



Chairperson



Co-Chairperson



EMM Corporate Partners



Elasto Mambo Partner

APPENDIX – DETAILED STATEMENT OF EXPENDITURE

Amounts are stated in ZMW'000 and US\$'000

	2015 ZMW'000	2015 US\$'000	2014 ZMW'000	2014 US\$'000
Audit Fees	175	20	243	40
Bad Debts Written Off	1,328	153	652	107
Bank Charges	231	27	170	28
Board Expenses	6,083	699	5,172	847
Communications & Public Relations	1,699	195	696	114
Company Entertainment	5	1	1	-
Consultancy Fees	6,199	712	3,167	518
Depreciation Charge	31,211	3,584	15,686	2,568
Employee Pension	5,785	661	3,453	559
Employee Salaries and Allowances	69,675	7,956	44,698	7,243
Exchange Losses/Gain	-	789	-	278
General Insurance Expense	1,247	143	946	155
Gratuity	4,719	539	7,778	1,260
Group Life Assurance	1,469	169	1,115	183
Health and Safety Policy	242	28	10	2
HIV/Aids Policy	493	57	339	55
Hydrological Works	123	14	89	15
Impairment Loss	6,986	802	-	-
JOTC Programs	139	16	-	-
Kilometer Car Allowance	57	7	981	159
Laboratory Expenses	145	17	8	1
Lake Management Activities	373	43	46	8
Leave Pay Provision	3,799	434	3,402	551
Legal Expenses	439	50	145	24
Loss on Disposal of Non-current Assets	123	14	90	15
M/V Insurance & Licences	255	29	202	33
Medical Aid	4,013	458	2,743	444
Motor Vehicle Expenses	3,238	372	2,368	388
NSSA & NAPSA	1,090	124	839	136
Office Expenses	2,187	251	1,257	206
Overseas expenses & allowances	371	43	306	50
Postage, Telephone & Telex	607	70	488	80
Printing, Stationery, Photos	207	24	202	33
Professional Services	-	-	74	12
Protective Clothing	121	14	132	22
Recruitment Expenses	198	23	420	69
Removal/Transportation	375	43	110	18
Rent	345	40	305	50
Repairs - Dam Structure	1,090	125	554	91
Repairs - Residential Property	694	80	147	24
Repairs- General	644	74	238	39
Repairs-Offices & Commercial Buildings	821	94	674	110
Research & Development Costs	58	7	-	-
Restructuring Costs	1,932	222	-	-
Security	1,774	204	1,582	259
Seminars, Workshops and Meeting Expenses	4,577	526	3,637	595
Settling in allowance	142	16	49	8
Social Tour	99	11	122	20
Staff Welfare	1,808	208	811	133
Subscriptions to Professionals & Clubs	57	7	76	12
Subsistence & Travel	4,258	489	2,952	483
Survey Expenses	20	2	13	2
Telemetry Works	18	2	50	8
Utilities and Rates	1,067	123	860	141
	174,811	20,806	110,097	18,194

