PRESS STATEMENT
(For Immediate Release)

UPDATE ON THE HYDROLOGICAL OUTLOOK AT KARIBA DAM

Lusaka, 19th March 2024 – The Zambezi River Authority (the Authority) hereby wishes to provide an update on the hydrological outlook in respect of the Kariba Catchment and the water levels at the Kariba Dam as follows:

Zambezi River Flows at Chavuma

From the last update provided on 6th March 2024, the river flows at Chavuma gauging station, the first gauging station located in the North-Western province of Zambia which measures river flows as the Zambezi River enters Zambia from Angola have been increasing slowly. The slow increase has been occasioned by reduced rainfall activity in the headwaters of the Zambezi River. The recorded flows are trending below the flows recorded during the same period last year and are also significantly below the average flows for the station.

Weekly Comparative Chart in respect of the Zambezi River Flows at Chavuma Gauging Station

Date	2024	2023
6th March	357m^3/s	992m^3/s
19th March	371m^3/s	924m^3/s

Zambezi River Flows at Victoria Falls

The Zambezi River flow recorded on 19th March 2024 at Victoria Falls has receded from that recorded on 6th March 2024 as indicated below . Further, the obtaining flows are significantly lower than those recorded on the same date last year as shown below.

Weekly Comparative Chart in respect of the Zambezi River Flows at Victoria Falls Gauging Station (Nanas Farm Gauging Station)

Date	2024	2023
6th March	794m^3/s	2,569m^3/s
19th March	751m^3/s	2,510m^3/s

Kariba Lake Levels

The recession in the lake levels also continued from the previous update of 6th March 2024. This is due to low Lake inflows as a result of reduced rainfall activity on and around the lake and in the Kariba catchment generally.

The effects of the El Niño weather conditions being experienced globally and over the Southern African Region in particular have continued to negatively impact the Zambezi

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River inflows into Lake Kariba. This situation continues to greatly impact the lake Kariba water levels.

Weekly Comparative Chart in respect of the Lake Levels at Kariba Dam

The table below provides a comparison of the 6th and 19th March 2024 lake levels to that of the same period last year. It is noteworthy that the lake level is lower during this period than was recorded last year during the same period. Furthermore, the lake level is currently receding, contrary to its historical hydrological performance where it should have been rising during this period of the year. The obtaining recession in the lake levels is mainly due to the below average rainfall received during the on-going 2023/2024 rainfall season.

Date	**2024**			***2023***		
	Lake Level in meters Above Mean Sea Level (mASL)	**Stored Usable Water (Live Storage) in Billion Cubic Meters (BCM)**	**Stored Usable Water (Live Storage) as Percentage of the 65 BCM Maximum Possible Live Storage (%)**	**Lake Level in meters Above Mean Sea Level (mASL)**	**Stored Usable Water (Live Storage) in Billion Cubic Meters (BCM)**	**Stored Usable Water (Live Storage) as Percentage of the 65 BCM Maximum Possible Live Storage (%)**
6th March	477.66m	9.72	15.00%	*477.68m*	*9.81*	*15.15%*
19th March	477.54m	9.17	14.16%	*478.12m*	*11.83*	*18.25%*

Definition of Live Storage and Dead Storage at Kariba Dam

The water from the Kariba Reservoir is transferred into each of the two power stations for power generation purposes by intakes that are located within the reservoir and near the dam wall.

Owing to the location of the intakes in terms of their height when referenced with the base of the reservoir, the waters of the Kariba Reservoir are split into two, namely, water that is situated below the height of the intakes, which is referred to as Dead Storage, and water that is located above the height of the intakes, which is referred to as Live Storage.

Dead Storage, by virtue of being below the intakes, cannot enter the intakes and hence cannot be used for power generation, while Live Storage, by virtue of being above the intakes, enters the power stations through the intakes and hence can be used for power generation. It is possible to have a scenario where Live Storage can be completely exhausted while Dead Storage continues to be available in the reservoir.

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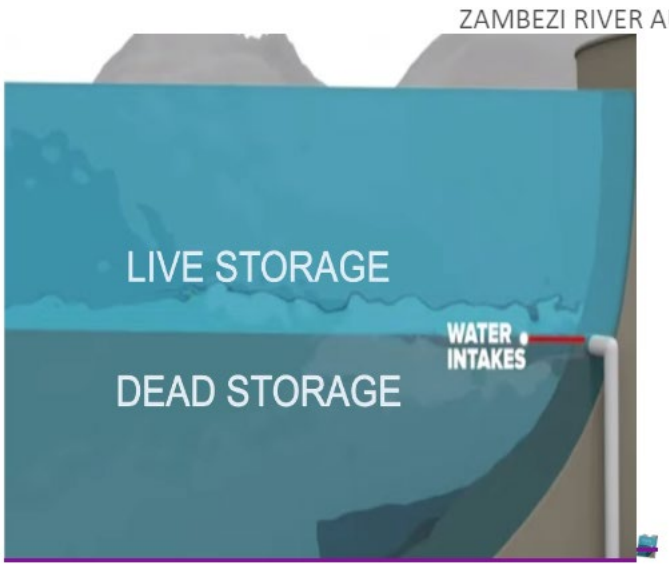

The Kariba Dam Reservoir at full capacity can store 181 Billion Cubic Meters (BCM) of water. Of this total amount, 116 BCM would be Dead Storage while 65 BCM would be Live Storage. The Dead Storage remains constant while the maximum possible Live Storage is 65 BCM. However, the actual Live Storage amount may be less depending on several factors including the occurrence of rainfall which influences the level and volume of Zambezi River Inflows into the Lake, evaporation from the Lake and utilization of the obtaining Live Storage by the two Power Stations. These factors influence the volume of available Live Storage in the Kariba Dam's Reservoir (Lake Kariba). Currently, the Reservoir at the obtaining lake level of 477.54 meters above Mean Sea Level has a Live Storage of 9.17 BCM which represents 14.16% of the possible 65 BCM of water. Note that weekly lake levels data can be obtained from the Authority's website. (https://www.zambezira.org/hydrology/lake-levels)

The Authority will continue monitoring the Hydrological Outlook of the Kariba Catchment and inform the public accordingly so as to ensure that stakeholders are kept apprised of the situation.

The Zambezi River Authority is a Bi-National organization mandated to contribute to the economic, industrial, and social development of the Republics of Zambia and Zimbabwe by obtaining the greatest possible benefits from the natural advantages offered by the waters of the Zambezi River (between Zambia and Zimbabwe) through the most economical and effective means of providing water for generation of electricity and for other purposes which the Contracting States may decide upon.

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CHIEF EXECUTIVE

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