Project Title: Sustainable Luangwa: Securing Luangwa's water resources for shared socioeconomic and environmental benefits through integrated catchment management

Date: 03/12/21

Project Location and salient physical characteristics relevant to the safeguard analysis:

The project scope is the Luangwa Upper Sub-catchment, concentrated in Mafinga, Isoka, Nakonde and Chama Districts, in eastern Zambia, given the importance of the upper catchment to the long-term water flow and quality of the river and the associated ecosystems and ecosystem services of the downstream. Within that area, on-ground interventions will be concentrated around the source of the Luangwa River, in the Mafinga Hills National Forest Reserve and the surrounding agricultural land, in Mafinga District, in the north-east of Zambia, near the Malawi border. The rich forest habitats of the headwaters provide rural communities with critical ecosystem goods and services, including wood fuel and non-timber forest products (NTFPs).

The Luangwa River is one of the major tributaries of the Zambezi River, and is one the four major rivers of the country. The Luangwa river - one of the last long free-flowing rivers in Zambia and one of the largest unaltered river systems in southern Africa - is an essential source of water for adjacent populations (~1.8 million people reside in the Luangwa Catchment), providing water for irrigated agriculture, household use and hydropower in the downstream area of the catchment. The Luangwa Catchment has globally important biodiversity assets and natural resources: the Luangwa Floodplains (designated Wetlands of International Importance and Ramsar site), six National Parks, eight Game Management Areas, and National Forest Reserves. In all, these protected areas cover 68,812 km² - around 50% of the total catchment area. The catchment includes large areas of Miombo Woodland, designated by Conservation International as one of five High Biodiversity Wilderness Areas and by WWF as one of the Global 200 Ecoregions. These ecosystems support important terrestrial and aquatic species, including the endangered marsh mongoose (*Herpestes palustris*), African clawless otter (*Aonyx capensis*), spotted necked otter (*Lutra maculicollis*), hippopotamus (*Hippopotamus amphibious*), African wild dog (*Lycaon pictus*) and the critically endangered hook-lipped (black) rhino (*Diceros bicornis*).

The Mafinga Hills NFR, a Category VI protected area is an area rich in biodiversity and forms part of the Eastern Afromontane biodiversity hotspot. Due to its rich variety of endemic flora and fauna species, Mafinga Mountains, in which the NFR is contained, is a listed as a Key Biodiversity Area of Zambia (http://www.keybiodiversityareas.org/site/factsheet/24247).

Mafinga District has a projected population of 103,877 as at 2018. Of this population, 50,193 are male (representing 48.3%), while 53,684 are female (representing 51.7%) with an annual growth rate of 4.6%. The district has a total number of 12,648 households and a population density of 16.0/Km².

The majority of people in Mafinga are tribal peoples. Mafinga has three (3) chiefdoms namely Mwenechifungwe, Muyombe and Mwenewisi. The district has a number of tribes who have settled in Mafinga, however, the most predominant tribes are the Tumbuka, Lambiya, Fungwe and Nyika.

Most of the land in Mafinga is under customary control. The district has village committees that assist the chiefs in allocation and administration of land. The district is predominantly rural and most of the land is not used for commercial purposes. Despite having plenty of virgin land, a significant part of it is mountainous and not suitable for use. However, the larger part of Mafinga can be utilized for farming and other developmental activities.

The main livelihood of the people of Mafinga is the agricultural crop production on a small scale. About ninety percent (90%) of the rural communities of Mafinga depends on farming as their source of the livelihood. The crops include maize, beans, millet, sorghum and soya beans, whilst most farmers in the valley areas and plateau depends on pastoral farming and small livestock production. Gardening and Horticultural farming is also another source of the farmer's livelihood which is practiced along the river banks. Brick moulding is

Project Categorization (A,B,C, Special Consideration):

В

are other sources of livelihood.	
are other sources of livelihood.	
Bark hive beekeeping and honey production, Charcoal production, timber production, Carpentry workshops	
practiced as a source of income. Some still depends on the grocery shop businesses and mobile markets.	·

Project Description:

Project Objective:

To reduce forest and land degradation of the Luangwa Upper Sub-Catchment for enhanced protection of water resources, biodiversity and associated community livelihoods

Component 1: Protected area management and establishment in the Luangwa headwaters. Component 1 will lead to improved participatory management of the key protected area within the headwaters, Mafinga Hills National Forest Reserve, which includes important river source areas. It will also support the development and designation of a Water Resource Protection Area that will provide a model for improved protection and community-based management of the upper subcatchment.

Component 2: Community management of the upper Luangwa Sub-Catchment (Mafinga District). Component 2 will establish sustainable community management as well as environmentally sustainable and climate resilient livelihoods through prioritized interventions focused on the headwaters to reduce land and forest degradation that contribute towards the loss of biodiversity and ecosystem services.

Component 3: Knowledge management and Monitoring and Evaluation. Component 3 will ensure that the increased knowledge of sustainable catchment management from lessons learned and best practices supports replication of the approach in other headwater areas at local and national levels, as well as being disseminated at Zambezi River Basin level and globally. M&E will be carried out to inform project decision-making and adaptive management.

In addition to the safeguards standards triggered below, the following four safeguards standards apply to all WWF projects:

- Environmental and Social Risk Management
- Public Consultation and Disclosure
- Stakeholder Engagement
- Accountability and Grievance Mechanism

Safeguard Standards Triggered	Yes	No
Natural Habitats	X	
Pest Management		X
Indigenous Peoples	X	

Involuntary Resettlement	X		
Cultural Resources		X	
Community Health and Safety		X	

Summary of Key Safeguard Issues:

The proposed project has been screened according to the Standard on Environmental and Social Risk Management and has been categorized as a Category "B" project, given that it is essentially a conservation initiative expected to generate significant positive and durable social, economic and environmental benefits. Any adverse environmental and social impacts are site specific and can be mitigated. Since the exact location and/or nature of potential investments have not yet been determined, an Environmental and Social Management Framework (including a Process Framework) will be prepared to conform to WWF's Environment and Social Safeguards Framework.

Standard on Natural Habitat: Overall, activities of the project will produce significant conservation benefits and any potential adverse environmental impacts on human populations or environmentally important areas are expected to be very limited. While there shall be no conversion or degradation of natural habitats, this Standard has been triggered as a precaution since there will be site-specific activities relating to productive landscapes under Component 2.

Standard on Involuntary Resettlement: There will be no land acquisition or involuntary resettlement of individuals and/or families under the proposed project. While the proposed project will not cause displacement of people from their homes, the Standard is triggered because regeneration activities and management plans for MHNFR and community lands may restrict or prohibit the extraction of resources in certain areas, thereby restricting access to resources required for the subsistence and cultural maintenance of the affected populations. A Process Framework will be prepared as part of the ESMF to conform to WWF's Environment and Social Safeguards Framework.

Standard on Indigenous People: As a precautionary approach, this Standard is triggered are various tribal groups located in the target project areas. These include the chiefdoms of Mwenechifungwe, Muyombe, and Mwenewisi, in addition to other tribes who have settled in Mafinga including the Tumbuka, Lambiya, Fungwe, and Nyika. An initial assessment points out that their social and cultural identity, although distinct, does not make them vulnerable or disadvantaged, as all Zambians belong to a tribe. Therefore, although this safeguards standard is triggered, a separate Indigenous Peoples Planning Framework will not be prepared.

Standard on Pest Management: The activities are not expected to trigger the Standard on Pest Management. While the project might support community woodlots (under Component 2), it will not support the procurement or use of pesticides or other agricultural chemicals, or lead to the increased use of such chemicals. The ESMF will include guidance to this effect.

Standard on Cultural Resources: This Standard is not triggered as the project is highly unlikely to have an impact on cultural resources.

Standard on Community Health, Safety and Security: This Standard is not triggered as the project is highly unlikely to have an impact on community health, safety, and security.

Describe any potential indirect and/or long term impacts due to anticipated future activities in the project area:

The project expects to achieve improved conservation and sustainable use of natural resources as its long-term impact of project interventions, which will be both environmentally and socially positive.

Required actions: (type of ESIA, ESMP, IPP, IPMP, RAP, consultations, disclosure)

Environmental and Social Management Framework, including a Process Framework

Stakeholder Engagement Plan

DocuSigned by:

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3/24/2021

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