1.1 Country: Nigeria

1.2 Project Title: Using Satellite Collars to Provide More Effective Elephant Protection and Reduce Human-Elephant Conflict at Yankari Game Reserve

1.3 Project Location: Yankari Game Reserve

1.4 Overall Project Cost: \$29,860 AMOUNT Requested from African Elephant Fund: \$13,360

1.5 Project Duration: 3 months

1.6 Project Proponents: Federal Ministry of the Environment in collaboration with Bauchi State Government, the Wildlife Conservation Society and the North Carolina Zoo.

1.7 Name of Project Supervisors: (1) Fidelis Omeni (2) Andrew Dunn and (3) Mike Loomis

1.8 Address of Project Supervisors: 1) Federal Ministry of Environment,
Department of Forestry, Plot 393/394 Augustus Aikhomu Way, Utako District,
Abuja, Nigeria; (2) Bishop Moynagh Avenue, Calabar, Cross River State, Nigeria;
(3) North Carolina Zoological Park, 4401 Zoo Parkway, Asheboro NC 27205, USA

1.9 Telephone Numbers: (1) +234 80 53 52 45 27; +234 80 23 19 83 94; (2) +234 80 35 67 96 09; +234 80 90 97 25 21; and (3) 336-879-7631

1.10 Email: fedelodomeni@yahoo.com; adunn@wcs.org; and mike.loomis@nczoo.org

1.11 Fax: NA

1.12 Date proposal submitted: October 2014

2.0 Project Summary: (not more than 250 words)

The project aims to reduce illegal killing of elephants, reduce human-elephant conflict and improve local knowledge and monitoring of elephants by placing satellite collars on two elephants in Yankari Game Reserve. This will have a number of benefits for conservation: (1) since there are only sufficient resources for a limited number of patrols each month, by always knowing their location more focused protection on Yankari's remaining elephants will be possible; (2) it will act as an early-warning system whenever elephants leave the reserve to raid surrounding farms, and (3) by understanding elephant movement patterns within the reserve, rangers will be able to more easily locate elephants and can take tourists directly to see elephants by tracking them with VHF receivers.

Yankari contains what is probably Nigeria's last viable elephant population. The protection and management of Yankari has been neglected and under-funded in recent years. As a result there has been an upsurge in elephant poaching and the ivory trade. It is suspected that the population has declined from the 348 counted by an aerial census in 2006 and will continue to decline without urgent intervention. Satellite collars were placed on two elephants in October 2013 and March 2014 by North Carolina Zoo and have helped focus limited resources on the main elephant herd since there are insufficient resources available to protect the entire reserve. Since that time rates of elephant poaching have declined.

3.0 Which Priority Objectives and Activities (there may be more than one) in the African Elephant Action Plan does this project fall under? (For ease of reference, Priority Objectives are attached under Appendix 1)

This project addresses three different AEAP Priority Objectives and three activities:

Priority Objective 1: Reduce Illegal Killing of Elephants and Illegal Trade in Elephant Products

Activity 1.1.3: Equip wildlife authority staff on the frontline of enforcement with appropriate tools to carry out their mission as safely and as effectively as possible.

Priority Objective 3: Reduce Human-Elephant Conflict Activity 3.1.2 Research and pilot different mitigation strategies to reduce HEC and develop guidelines accordingly.

Priority Objective 5: Strengthen Range States Knowledge on African Elephant Management

Activity 5.3.1 Provide satellite collars to monitor prioritized populations within and amongst range states.

4.0 Project Rationale – why is this project necessary and urgent? What threats face this elephant population (give, for example, what information you have regarding population details, trends in population (downward or upward), ivory seizure information, details about levels of poaching, human/elephant conflict, etc.).

Due to the instability created by Boko Haram and others in northern Nigeria, there has been a major downturn in tourism revenues from the reserve. As a result, Bauchi State Government is increasingly short of funds and appears to lack the political will and financial resources to provide sufficient protection for the reserve. In recent years it has been left to the Wildlife Conservation Society, Nigeria Program to provide most of the funding to support the management and protection of the reserve. These funds are insufficient to protect the whole reserve and it is not certain how much longer the current project can continue.

In recent years as many as 10 elephant carcasses could be recorded annually and from this it has been estimated that as many as 20 elephants could be killed each

year for their ivory. This level of offtake is unsustainable and the elephant population is declining. Human-elephant conflict is also a growing problem in the communities surrounding Yankari, and since no compensation is paid to farmers for crops damaged by elephants, there is increasing hostility towards the reserve and its elephants.

The proposed project will reduce the costs of providing effective protection for Yankari's remaining elephants. By knowing where the elephants are at all times, rangers do not waste time and resources by patrolling in the wrong place. The elephant collars fitted on 2 elephants in October 2013 and March 2014 will soon be approaching the end of their useful lifespan and need to be replaced. The elephant collars have facilitated more focused protection of the elephants, and since October 2013 only 4 elephant carcasses have been recorded – a reduction compared to previous years. Due to the elephant collars we have also been able to react more quickly to cases of crop raiding, reducing the level of damage caused.

5.0 Detailed Proposal – including activities to be carried out, milestones (at least quarterly milestones), timelines, equipment to be purchased, reporting procedures, etc. (not more than 1000 words). It will be helpful in evaluating this Project Proposal if you to divide it into Phases such as Planning; Procurement; Implementation; Evaluation and Reporting

Should include anticipated benefits (including benefits to the conservation and management of elephant populations and communities) and outputs from the project, and how the project will be monitored and evaluated.

Planning: detailed logistical planning for the elephant collaring will be done jointly by project partners including the Federal Ministry of the Environment, Bauchi State Government, WCS and NC Zoo.

Procurement: the satellite collars will be purchased by NC Zoo in the USA and shipped to Nigeria. Veterinary drugs and equipment are available from project partner Dr. Aishatu Abubakar (OC Veterinary, Presidential Villa; and Assistant Commissioner of Police, State House).

Implementation: Yankari rangers will search for and locate suitable elephant herds prior to the arrival of the veterinary team. Two elephants from different herds will be darted and fitted with satellite collars by a veterinary team headed by Mike Loomis of NC Zoo and Aishatu Abubakar of the State House in Abuja. Training will be provided to Yankari rangers in the use of VHF receivers so that the elephant herds can be easily located. When elephants leave the reserve an email is sent to the WCS manager at Yankari who quickly deploys rangers to the affected area. Rangers then drive the elephants back into the reserve using large and noisy muzzle-loaders known locally as Dane guns.

Monitoring and Evaluation: NC Zoo will send a daily map showing the location of both collared elephants to Yankari managers by email. Summary maps will be included in the monthly and quarterly reports produced by WCS. At the end of

the project a representative of the Federal Ministry of Environment will visit Yankari to evaluate the effectiveness of the project.

Reporting: a comprehensive final report will be submitted by the Ministry of Environment in collaboration with project partners: Bauchi State Government, NC Zoo and WCS.

Anticipated Outputs and Benefits

Output 1: two elephants from different herds fitted with satellite collars. *Benefit 1*: improved knowledge of elephant movements improves their protection, acts as an early warning system when they leave the reserve to reduce levels of human-elephant conflict and improves viewing opportunities for tourists.

Output 2: improved knowledge of long-term or seasonal elephant movements. *Benefit 2*: more effective planning and design of improved HEC measures, reduced conflict and economic loss.

Output 3: monthly reports circulated, and quarterly reports posted on <u>www.wcsnigeria.org</u>

Benefit 3: the effectiveness of the project is constantly monitored and all stakeholders fully engaged and committed.

Output 4: an evaluation report produced.

Benefit 4: the impact of the project is known and acknowledged by all project stakeholders.

6.0 Project Timeline – outline the timeline for proposed activities within this project. You may find it helpful to relate the timeline to the Phases identified in Section 5.0 above.

	Month 1	Month 2	Month 3
Purchase of 2 satellite collars	Х		
Darting and fitting of collars in the field		Х	
Training of rangers in use of VHF receiver		Х	Х
Analysis of data			Х
Evaluation & final report			Х
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BUDGET

7.0 Has this project received or been pledged any other sources of funding (external)? Give all relevant details (for example, amount, source of funds, timetable, any restrictions):

Other sources of funding for this project include the North Carolina Zoo (\$1,200), the Wildlife Conservation Society (\$1,800) and Bauchi State Government (\$13,500).

7.1 Please provide a detailed proposed budget for this project (in US\$). You may find it helpful to relate expenditure to the Phases you have set out in Section 5.0

2 satellite collars @ \$3,200 each, total = \$6,400, Satellite time @ \$1,200/year/collar, total = \$2,400, Training for rangers in use of VHF receiver @ \$10 x 30 rangers x 2 days, total \$600, Field rations & supplies @ \$15/person/day x 14 persons x 7 days, total = \$1,470, Vehicle fuel & diesel @ \$230/vehicle x 3 vehicles, total = \$690, Ranger reconnaissance & collaring patrols @ \$60/ranger x 30 rangers, total = \$1,800. **TOTAL = \$13,360**

Details included in Table annexed to the document:

7.2 Please specify the proponents contribution towards the project: Bauchi State Government (in-kind contribution, salaries of 30 rangers): \$13,500; North Carolina Zoo: \$1,200; WCS: \$1,800

Please submit the completed proposal, either by:

Email: Fax:

You should receive acknowledgement of receipt of your proposal within 14 days. If you do not receive such an acknowledgement, please telephone:

Further details on any of the abo	ove details may be requested by the Steering
Committee of the African Elepha	ant Fund.
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Full Proposal Budget					
		Expected source of funds and amounts			
	Budget line	Bauchi State Government	AEF	Other: (NC Zoo & WCS)	
1.	Salaries for rangers @ \$150/ranger/month x 30 rangers x 3 months	\$13,500			
2.	2 satellite collars @ \$3,200 each	φ13,300	\$6,400		
3.	Satellite time @ \$1,200/year/collar		\$2,400		
4.	Training for rangers in use of VHF receiver @ \$10 x 30 rangers x 2 days		\$600		
4.	Return air ticket: USA to Nigeria			\$1,200	
5.	Domestic travel & hotel lodging			\$1,800	
6.	Field rations & supplies @ \$15/person/day x 14 persons x 7 days		\$1,470		
7.	Vehicle fuel & diesel @ \$230/vehicle x 3 vehicles		\$690		
8.	Ranger reconnaissance & collaring patrols @ \$60/ranger x 30 rangers		\$1,800		
		\$13,500	\$13,360	\$3,000	