

**PRELIMINARY REPORT**  
**U.S. FISH AND WILDLIFE SERVICE – USFWS**  
**Mtcf-Marine Turtle Conservation Fund**

**DATE OF SUBMISSION:** JULY 31, 2021

**I. GRANTEE INFORMATION**

**a. GRANT number:** F22AP01309-00

**b. Organization name:** FUNDACION FUTURO VERDE Y SOCIAL – FUVERDE FOUNDATION

**c. City and country:** SINCELEJO- SUCRE, COLOMBIA.

**d. Contact person and email address:**

• **Contact:** FABIO DAVID CUELLO MERCADO

• **Email:** [admin@fuverde.org](mailto:admin@fuverde.org)

**II. PROGRAM OVERVIEW**

**a. Title of project:** ETHNO-PROGRAM FOR THE SUSTAINABLE CONSERVATION OF THE DAHL'S TOAD-HEADED TURTLE (MESOCLEMMYS DAHLI) IN COLOMBIA

**b. Location of project:** SACANA, Córdoba – COLOMBIA; ZIP: 232007

**i. Include coordinates (latitude and longitude):** 9°17'32.4"N 75°39'13.7"W

**c. Dates of project** (The project date was adjusted due to postponements in the delivery of the first amount of the grant):

• **Starting Date:** June 4, 2022

• **Ending Date:** June 3, 2023

**PRELIMINARY REPORT**

**1. ONE-PARAGRAPH EXECUTIVE SUMMARY STATING PROJECT PURPOSE, RESULTS AND ACHIEVEMENTS.**

This project has had as its objective the community and sustainable conservation of 4 populations of the Carranchina turtle (*Mesoclemmys dahli*), in 144 km<sup>2</sup> of Zenú indigenous territory, on the banks of the Sinú river, in northern Colombia. Through this initiative, we have addressed the 3 main threats to this Colombian endemic reptile:

(i) Poaching: The Zenú indigenous people hunt the Carranchina turtle for food, pets and manufacture of handicrafts with the shell.

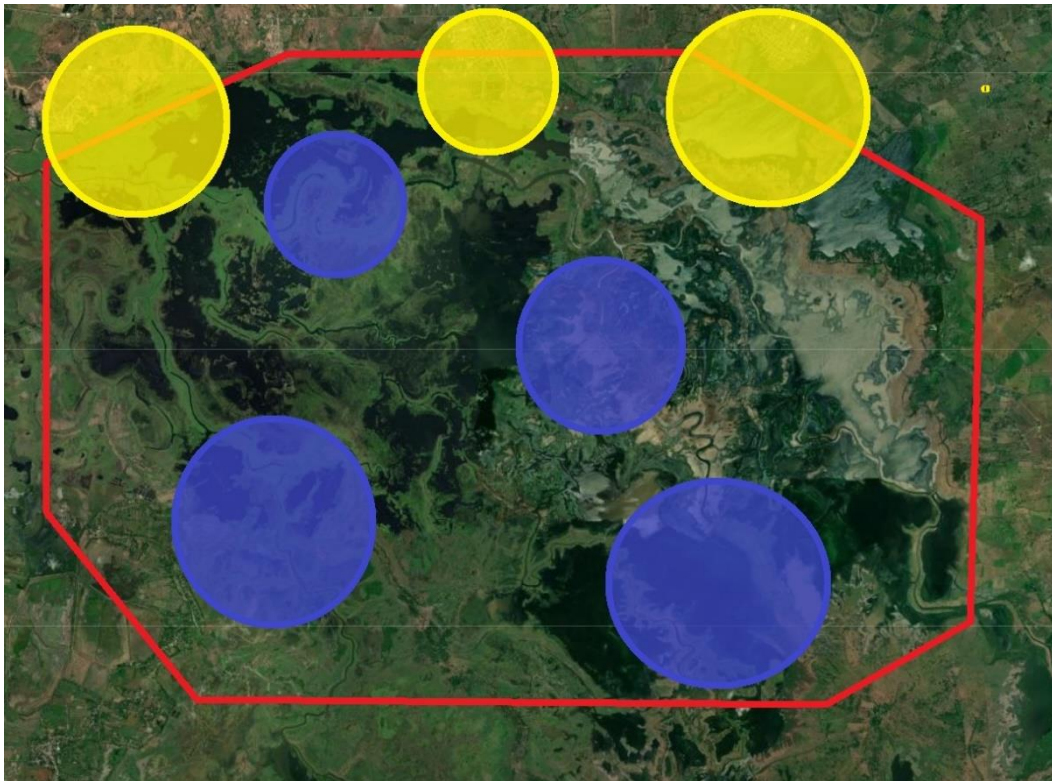
(ii) Habitat destruction: the systematic elimination of wells and streams, for the purposes of livestock, has eliminated 95% of the traditional habitat of the Carranchina turtle.

(iii) Climate change: torrential rains have generated flooding and water erosion in turtle habitats, generating migrations to areas where food is scarce, and the reptile (mainly carnivorous) dies of starvation.

## PROJECT ACHIEVEMENTS

1. Train and sensitize 1,000 Zenú indigenous people in reptile conservation.
2. Mapping of 98 km<sup>2</sup> of ecological corridors and buffer zones of the Carranchina turtle, in Zenú indigenous territory.
3. 'In situ' reproduction of at least 50 Carranchinas turtles, released to their natural habitats.
4. Restoration of at least 32 km<sup>2</sup> of habitats through the planting of 35,000 trees of fast-growing native species.

## 2. LONGITUDE AND LATITUDE COORDINATES OF THE MAIN LOCATION OF PROJECT WORK.



### PROJECT SITE

- Country: COLOMBIA
- Province: Sucre and Córdoba
- City: Sacana, Momil.
- Geographical coordinates:  
**9°17'32.4"N 75°39'13.7"W**

### SCALE

1cm = 10Km



## 3. DESCRIPTIONS OF ACTIVITIES UNDERTAKEN TO ACHIEVE EACH OBJECTIVE IN THE PROJECT PROPOSAL

Next, we will describe the activities, we will indicate the state of execution, methodology and evidence (photos, link, etc).

### A1.1. 50 MASTER TRAININGS, DIRECTED AT 1,000 INDIGENOUS ZENÚ (50% WOMEN; 18-35 YEARS OLD), IN FRESHWATER TURTLE CONSERVATION.

- STATE: **COMPLETED**

- **METHODOLOGY:** It was created a personalized study plan in the Zenú culture, inclusive and with a gender focus. We executed a Socio-constructivist method of learning. In this activity, 500 women participated. 50 training days of 3 hours; It will be offered refreshments, school kit and attendance certificate, validated by the University of Magdalena. - Drafting of management manual for Carranchina turtle in protected natural areas. Topics: Conservation of freshwater turtles and management of natural areas with turtle habitats.
- **EVIDENCE:** See the training report in the link of the project website here: <https://tortugacarranchina.org/ethnoprogram-for-the-sustainable-conservation-of-dahls-toadhead-turtle-mesoclemmys-dahli-in-colombia/>



### A1.2 SOCIALIZATION OF THE PROJECT IN 5 ZENÚ INDIGENOUS EDUCATIONAL INSTITUTIONS.

- **STATE: COMPLETED**

- **METHODOLOGY:** We used of personalized multimedia content (images, videos, animations) to sensitize the educational community of the project site: 2,500 beneficiaries, including students, teachers, parents and teaching administrators.
- **EVIDENCE:** See the training report in the link of the project website here: <https://tortugacarranchina.org/ethnoprogram-for-the-sustainable-conservation-of-dahls-toadhead-turtle-mesoclemmys-dahli-in-colombia/>





**A1.3. CREATION OF A REGIONAL OFFICE FOR THE CONSERVATION OF CARRANCHINA TURTLES.**

• STATE: **ONGOING**

**A1.4. DEVELOPMENT OF MULTIMEDIA CONTENT FOR EDUCATIONAL AND INFORMATIVE PURPOSES.**

• STATE: **COMPLETED**

• **METHODOLOGY:** Development of 100 images, 25 videos and 5 pedagogical and personalized animations. Personalization of multimedia content with habitats, biodiversity and landscapes of the Sinú river.

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- **EVIDENCE:**

- See didactic material in: <https://tortugacarranchina.org/wp-content/uploads/2023/02/Socializacion-de-proyecto-aulas.pdf>

- See project Webpage: <https://tortugacarranchina.org/>

- See Project Instagram: [https://www.instagram.com/tortuga\\_carranchina/](https://www.instagram.com/tortuga_carranchina/)

#### A1.5. PREPARATION OF A CARRANCHINA TURTLE CONSERVATION MANAGEMENT PROTOCOL.

- **STATE: ONGOING**

#### A1.6. WEB PLATFORM FOR THE MULTILATERAL CONSERVATION OF THE CARRANCHINA TURTLE.

- **STATE: COMPLETED**

- **METHODOLOGY:** Creation of a web platform that links conservation entities for the protection of Carranchina turtle throughout the region. Regional experts on Carranchina turtle will be linked to stakeholders interested in the conservation of turtle.

- **EVIDENCE:** See project Webpage: <https://tortugacarranchina.org/>

#### A1.7. 10 'DOOR-TO-DOOR' TRAINING SESSIONS TO SENSITIZE AND TRAIN FISHERMEN IN THE PROJECT AREA

- **STATE: COMPLETED**

- **METHODOLOGY:** Personalized talks to sensitize the fishing and tourist population about the fight against unsustainable fishing techniques (fishermen) and avoid buying river turtle eggs, meat and handicrafts. The 1,000 indigenous people trained in the previous activity will carry out these sensitizations. In this way, we hope to cover about 8,000 people, including fishermen, tourists, and riverside dwellers.

- **EVIDENCE:** See the training report in the link of the project website here: <https://tortugacarranchina.org/ethnoprogram-for-the-sustainable-conservation-of-dahls-toadhead-turtle-mesoclemmys-dahli-in-colombia/>







**A2.1: CREATION AND OPERATION OF 32 KM2 AS PROTECTED NATURAL AREAS, IN PREVIOUSLY PRIORITIZED HABITATS.**

- **STATE: ONGOING**

**A2.2. ISSUANCE AND ENFORCEMENT OF 80 NORMS FOR THE MANAGEMENT, HANDLING AND USE OF THE DREDGED NATURAL PROTECTED AREA.**

- **STATE: ONGOING**

**A2.3. EXCHANGE OF SPINEL HOOKS FOR SUSTAINABLE FISHING KITS TO FISHERMEN FROM THE PROJECT SITE, PREVIOUSLY TRAINED.**

- **STATE: ONGOING**

**A2.4. MONITORING OF 17KM2 OF NESTING, MATING AND FORAGING RIVERSIDE WITH A HIGH THREAT OF POACHING AND ILLEGAL TRAFFICKING.**

- **STATE: COMPLETED**

• **METHODOLOGY:** We designed 98Km2 of ecological corridors and buffer zones, proposed as a measure for the expansion and restoration of the connectivity of the habitat of the endemic species Carranchina turtle (*Mesoclemmys dahli*) in the north-central provinces of Sucre and Córdoba, located to the northwestern Colombia. The methodology used, the result of modifications to the Bentrup (2008) proposal, was based on the analysis of geographic parameters that define areas with the best territorial aptitude for the habitat of the species. Likewise, the study is based on a cost analysis that, through a Geographic Information System, allows defining the potential location of the functional connectors. In this way, the model provides reliable information that makes it possible to accurately propose the layout of corridors and buffer zones.

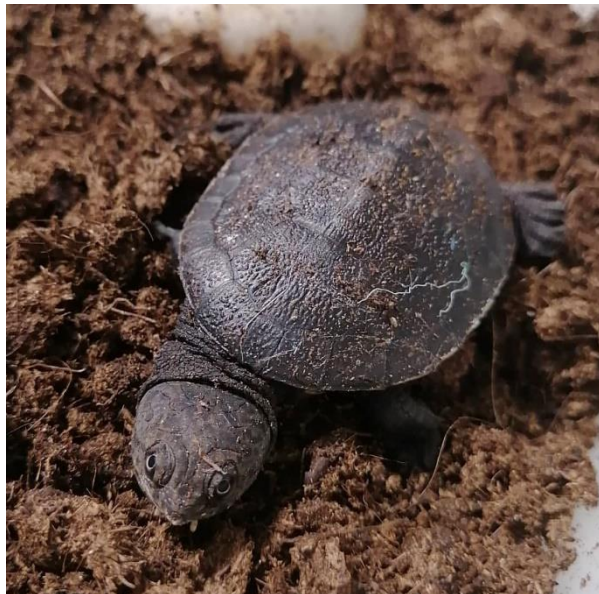
- **EVIDENCE:** See study in: [https://tortugacarranchina.org/wp-content/uploads/2023/02/Ecological-Corridor\\_English.pdf](https://tortugacarranchina.org/wp-content/uploads/2023/02/Ecological-Corridor_English.pdf)

**A.2.5. ADAPTATION AND ENFORCEMENT OF A FIRST AID OFFICE TO CARRANCHINA TURTLES EMBEDDED IN THE PROJECT SITE.**

• **STATE: COMPLETED**

• **METHODOLOGY:** Provision of plastic removal from turtle bodies. Collection and incubation of eggs laid on the nesting riverside. Use of artificial incubation pens for eggs. Release of baby turtles on the riverside of the Sinú river.

• **EVIDENCE**





**A2.6. APPLICATION FOR REGISTRATION IN APPENDIX I OF CITES, TO THE CARRANCHINA TURTLE, AS A VICTIM OF ILLEGAL TRAFFICKING.**

• **STATE: ONGOING**

**A3.1. PLANTING 5,000 FAST-GROWING, NATIVE SPECIES TREES ON TARGET RIVERSIDE.**

• **STATE: COMPLETED**

• **METHODOLOGY:** Use of seeds of fast-growing trees of the region. Use of 1 community nurseries for seedlings in early growth phases; use of solid waste from the community for composting (fertilizer).

• **EVIDENCE:** See HABITATS RESTORATION REPORT in:

<https://tortugacarranchina.org/restauracion-de-habitats/>





### A3.2. 100 SIGNAGE ON FORESTS WITH WARNING NOTICES, PROHIBITIONS AND INFORMATION FENCES; AND INSTALLATION OF 50 GARBAGE CANS

- **STATE: COMPLETED**

- **METHODOLOGY:** -Installation of warning and information warnings about presence of freshwater turtle. Training in situ on the management of the presence of freshwater turtle. Installation of waste sorting container kits to promote recycling. 12 days of garbage collection.

- **EVIDENCE:** See HABITATS RESTORATION REPORT in:

- <https://tortugacarranchina.org/restauracion-de-habitats/>

### A4.1. OPENING, PUBLICATIONS AND UPDATES OF SOCIAL NETWORKS, WEBSITE OF THE PROJECT.

- **STATE: COMPLETED**

- **METHODOLOGY:** Opening and filling accounts in social networks: Instagram. Web page of the program. Publication of activity reports. Publication of campaigns, activities, interviews and results of the program. The target community will be: ecotourists, tourists, outdoor enthusiasts, conservationists and personnel related to the conservation of biodiversity.

- **EVIDENCE**

- See project Webpage: <https://tortugacarranchina.org/>

- See Project Instagram: [https://www.instagram.com/tortuga\\_carranchina/](https://www.instagram.com/tortuga_carranchina/)

### A4.2. PREPARATION OF A VIDEO-DOCUMENTARY OF THE PROGRAM.

- **STATE: ONGOING**

### A4.3. CELEBRATION OF 2 FAIRS: OPENING AND CLOSING OF THE PROJECT.

- **STATE: ONGOING**

### A4.4. PROJECT CASE STUDY: COMPREHENSIVE CARRANCHINA TURTLE CONSERVATION STRATEGY ON THE SINÚ RIVER OF COLOMBIA.

- **STATE: COMPLETED**

- **METHODOLOGY:** Scientific article of the project, peer-reviewed for publication in environmental journals. Strategy aimed at the scientific and conservation community of the world. Agreement with the University of Magdalena for the writing.

- **EVIDENCE:** Studies carried out during the project:

-PROPOSAL FOR ECOLOGICAL CORRIDORS AND BUFFER ZONES AS MEASURES TO RESTORE CONNECTIVITY TO THE HABITAT OF THE CARRANCHINA TURTLE, IN COLOMBIA, See in: [https://tortugacarranchina.org/wp-content/uploads/2023/02/Ecological-Corridor\\_English.pdf](https://tortugacarranchina.org/wp-content/uploads/2023/02/Ecological-Corridor_English.pdf)

-PROGRAM FOR THE SUSTAINABLE CONSERVATION OF THE DAHL'S TOAD-HEADED TURTLE (*mesoclemmys dahli*), IN COLOMBIAN, See in: <https://tortugacarranchina.org/wp-content/uploads/2023/02/CONSERVATION-PROGRAM.pdf>

**A4.5. IMPLEMENTATION OF 5 DIGITAL CAMPAIGNS, WITH LOBBYING AND SOCIAL MARKETING TECHNIQUES, TO DISCOURAGE THE PURCHASE / SALE OF PRODUCTS FROM THE CARRANCHINA TURTLE.**

• STATE: **ONGOING**

**4. EXPLANATION OF THE PROBLEMS ENCOUNTERED FOR ANY OBJECTIVES NOT MET.**

Our project is facing some difficulties that have prevented the fluidity of some specific activities:

**(i) Conflicts with indigenous landowners:** In some areas, there are tensions between indigenous communities over land disputes, such as farmers or ranchers. These conflicts make it difficult to mark the forests and wells, habitats of the Carranchina turtle, and the implementation of monitoring activities.

**(ii) External and internal pressures on ecosystems:** The processes of deforestation, agricultural expansion, extraction of natural resources and climate change are some examples of external pressures that occur in the Zenú indigenous territory; negatively affect conservation progress and compromise conservation efforts. On the other hand, the traditional cultural practices of indigenous communities, such as subsistence hunting and fishing, generate internal pressures on the turtles' ecosystems.

**(iii) Lack of institutional capacity:** The lack of solid institutions in the Zenú indigenous community, capable of supporting biodiversity conservation efforts in the indigenous communities in the long term, results in a lack of leadership, coordination and monitoring of activities. This has generated inefficiencies in the allocation of resources, a lack of accountability and low effectiveness of the projects.

**(iv) Social and political conflicts:** Our conservation project has generated social and political tensions and conflicts in the Zenú indigenous communities, especially because it is perceived as imposed from abroad or if the rights and autonomy of the communities are not respected. This has generated resistance, lack of cooperation.



## 5. ASSESSMENT OF THE PROJECT'S IMPACT, INCLUDING MEASURABLE AND VERIFIABLE OUTCOMES SUCH AS QUANTITIES OF THE TARGET SPECIES, LAND AREA, OR PEOPLE AFFECTED BY YOUR PROJECT'S WORK.

OUTCOMES	INDICATORS	MONITORING METHOD	CURRENT	DESIRED
<b>O1:</b> Strengthen the conservation capacities of the Zenú indigenous communities, through the training of 1,000 indigenous people, in the conservation of freshwater turtles, in the 6 months of the project.	Number of indigenous people trained in freshwater turtle conservation	Signed attendance record; photographic and video record of the trainings.	<b>1000</b>	<b>1000</b>
	Number of fishermen trained in sustainable fishing.	Electronic logbook of fishermen's registry managed by regional office.	<b>0</b>	<b>600</b>
	Number of indigenous people who are linked to the regional freshwater turtle conservation office created.	Copy of the certificate of legal existence from the regional office.	<b>0</b>	<b>10</b>
	% Of indigenous population that recognize the importance of conserving freshwater turtles	Questionnaire survey	<b>95%</b>	<b>&gt;60%</b>
<b>O2:</b> Mitigate at least 80% poaching and illegal trafficking; and UUI fishing of Carranchina turtles, at the project site, in the 12 months of the project.	Number of reports of cases of illegal, unreported and unregulated fishing, and records at the project site.	Bimonthly bulletins of the Colombian environmental police.	<b>5/year</b>	<b>&lt;36/year</b>
	Number of fishers switching to sustainable fishing tools and methods.	Register of signatures of fishermen receiving sustainable fishing kits from this project.	<b>0</b>	<b>600</b>
	Number of Carranchina turtle catches by incidental and accidental fishing	CORPOMAGDALENA semi-annual management report (regional state environmental entity).	<b>5/year</b>	<b>&lt;19/year</b>
	Number of Km2 of natural protected area declared and operational.	Registration web link on the IUCN web platform	<b>0</b>	<b>45 (32+13)</b>
	Number of pockets of illegal freshwater turtle trafficking dismantled during the project	Bimonthly bulletins of the Colombian environmental police.	<b>36</b>	<b>45</b>
	Number of baby turtles released after retrieval and incubation of eggs on nesting riverside.	Humboldt Environmental Observatory Biodiversity Report	<b>49</b>	<b>&gt;450</b>
	Number of km2 of nesting riverside, mating and foraging areas, monitored.	Monitoring log filled out and signed by ranger personnel.	<b>98</b>	<b>12Km2</b>
<b>O3:</b> Restore 12Km2 net of nesting riverside, mating areas and foraging zones, of Carranchina turtles, to mitigate the habitat destruction, in the 12 months of the project.	Number of trees planted during the project.	Humboldt Environmental Observatory Biodiversity Report	<b>5,000</b>	<b>5,000</b>
	Number of signs installed on nesting riverside and, mating and foraging areas.	Photographic record and purchase invoice.	<b>100</b>	<b>100</b>
	Number of green spots installed on town frequented by tourists.	Photographic record and purchase invoice.	<b>5</b>	<b>50</b>
	Number of tourists sensitized on the conservation of freshwater turtles.	Photographic and video record.	<b>2,500</b>	<b>1,000</b>
<b>O4:</b> Stimulate conservation in the Zenú indigenous territory by informing at least 25,000 people about the activities and results of the project.	Number of people informed about the activities and results of the project.	Social media interaction statistics center and website.	<b>35,000</b>	<b>25,000</b>
	Number of people who reject the purchase / sale of Carranchina turtle eggs, meat and crafts.	Virtual surveys through social networks.	<b>&lt;8,000</b>	<b>10,000</b>
	Number of entities interested in participating in the conservation of Carranchina turtles on the north of Colombia.	Copy of communications requesting an agreement with the newly created regional office.	<b>3</b>	<b>5</b>
	Number of people who see the project documentary	Copy of record of views in social networks.	<b>0</b>	<b>10,000</b>

## 6. DESCRIPTION OF ANY COOPERATION OR COLLABORATION AMONG LOCAL ORGANIZATIONS THAT WAS DIRECTLY ASSOCIATED WITH THIS PROJECT.

This project has received the support of the Zenú indigenous community and the University of Magdalena. The optimal collaboration of these entities has been an active, informed and significant participation in all stages of the project, in collaboration with the external actors involved. Some actions that stand out are:

(i) Establishment of fluid and respectful communication between the community, the University and our organization, ensuring the existence of an open and transparent dialogue so that reptile conservation knowledge can be shared.

(ii) Prior consultations to obtain the free and informed consent of the Zenú indigenous community before implementing any action in their territory, in order to respect their rights and guarantee their active participation.

(iii) Design and planning of the project in a participatory manner, so that the Zenú indigenous community is involved in decision-making and adapts the project to the needs and priorities of the community, respecting their knowledge and cultural practices.

(iv) Developing and implementing the project jointly, ensuring that the indigenous community participates actively in the execution of conservation, monitoring and management actions of natural resources.

(v) Strengthen the capacities and knowledge of the community in terms of conservation and management of natural resources, through training and the exchange of knowledge and experiences.

## 7. THE COST AND PURCHASE DATE OF ANY EQUIPMENT PURCHASED UNDER THIS AWARD.

EQUIPMENT	COST	PURCHASE DATE
Camera canon m50ii 15-45 black	USD 450	August 27, 2022
Victus HP Gamer Laptop 15.6" Inches fb0102la - AMD Ryzen 5 - RAM 8GB- SSD 512 GB	USD 480	August 27, 2022
<b>TOTAL</b>	<b>USD 930</b>	

## 8. FUTURE

As shown in the description of the activities in item 3, some activities are listed as 'ONGOING', whose completion is scheduled within the approved project schedule.