

TIDE Report Belize Tropical Conservation Agreement

October 2015 to September 2016



INTRODUCTION

Toledo Institute for Development and Environment is an award-winning organization focused on involving communities in ecosystems management for the benefit of the people of Southern Belize. TIDE co-manages the Port Honduras Marine Reserve with the Fisheries Department; the Payne's Creek National Park with the Forest Department and 20,488 acres of private lands under the Tropical Forest Conservation Agreement. TIDE's private lands are located in several segregated parcels along the banks of the Rio Grande and Deep River in Southern Belize.

The purpose of this report is to highlight the activities and outcomes of the management of the TIDE private lands. Under the TFCA section 4.3 (c) (Authorized Purposes) for this reporting period, TIDE used the funds for conservation, maintenance and restoration of the lands in accordance with the following items; (i) the establishment, protection, and maintenance of parks, protected areas, and reserves and (ii) the development and implementation of scientifically sound systems of natural resources management, including land ecosystems management practices; (iii) training programs to increase the scientific, technical and managerial capacities of individuals and organizations involved in conservation efforts and (iv) the restoration, protection, or sustainable use of diverse animal and plant species.

This report focuses on what has been accomplished during the period 1st October 2015 to 30th September 2016. Each expected result is listed and reported on separately

Strategy 1: EFFECTIVE MANAGEMENT of PROTECTED AREAS.

Expected Outcome 1

Ensure TPPL has an updated, approved management plan.

1.1 The Management Plan will be presented to 7 buffering communities at TIDEs conference room.

The management plan for the Tide Private Protected Lands was done with assistance from Colorado State University students which did consultations with the buffer communities and other relevant stakeholders for their input. The plan was presented in a formal meeting to buffer communities and to the protected area staff by the students.

1.2 Print copies of the management plan for the TPPL field station and community leaders, Forest Department and partners.

- 1 copy of the Management Plan has been delivered to the T.P.P.L. field station. The other copies will be printed and distributed to community leaders and other partners whenever the plan is approved by Forest Dept., DNS oversight committee and PACT.

1.3 Tide Private Protected Lands will be guided by management plan.

The Draft management plan done with assistance from Students from the Colorado State University is presently with The DNS oversight committee and Forest Department for approval. This plan will guide the management and development of the protected Areas over the next five years. For the next DNS budget and workplan the management plan will be used for its development even though the plan has not been fully approved as yet but we believe it's the way forward for the management and development of the protected area.

Expected Outcome 2

Continue to ensure targeted protection of ecosystems and species of national priority that lie within the TIDE protected areas and MMMC.

2.1 Reforest the riparian forest zone adjacent to the PA as buffer on water ways and act as corridor to contribute to biodiversity and habitat on the Middle reaches of Rio Grande.

For this reporting period we have not done any addition to the extent of riparian zone restoration but have continued with the maintenance of the areas reforested over the past year to ensure that trees planted survived. The additional ½ mile we need to do has been identified and some 34 Inga trees have been planted, seeds for other trees species to complete this area have been collected and planted in the nursery but somehow they did not germinate so we are looking for other seeds to plant so we can complete the area.

2.2 Demarcate the riparian zone in the middle reaches of the Rio Grande for communities [San Marcus/Cuxlin Ha] addressing riparian reforestation. Inform the village leaders.

Not started as yet.

2.3 Inform the land owners and farmers to retain 66 feet on the River banks of the Middle reaches of the areas of San Marcus to Jacinto Creek. (Rio Grande)

Dialogue with farmers from San Marcos and Cuxlinha while on house visits in the communities and those encountered at their farms while doing patrol on the Rio Grande on the importance of keeping and adhering to the 66ft. buffer along the river to protect against erosion and as wildlife habitat especially that of the endangered Hicatee and other game species they depend on for their livelihood. Rangers also inform the villagers on the protected area and laws related to hunting and other endangered species.



Rangers on house visits in communities



Strategy 2: EFFECTIVE SURVEILLANCE AND ENFORCEMENT IS IN PLACE

Expected Outcome 3

Develop an integrated enforcement strategy for TIDE managed protected areas.

3.1 108 LAND BASE PATROLS

A total of 121 land patrols conducted for this reporting period, signs of hunting were recorded taking place on the private lands especially through the Orange orchard, 110 Acre block Along the Rio Grande via hunting trails from along the river into the lands and Black Creek area where light from a head lamp was seen but we were not able to catch the person who put out the light and took off into the bushes. Also on these patrols found signs where bicycles were seen on access road from the southern highway into concessions next to Block 123 we believe were the same folks caught by the Forest Department illegally harvesting Rosewood in Deep River Forest Reserve. Also met group of Mennonites logging concession for Rene Pennell next too Blk. 123 as well as members of the Police Department checking on logging operations in the area.

To increase law enforcement effectively the ranger team is using cameras for Surveillance in the hot spots of the protected area. 6 cameras were deployed and being monitored in order to detect and capture images of hunters in the lands. We are monitoring closely the hunting trails using the established satellite camp sites.

Enforcement cameras were installed at six sites scattered over the various blocks to monitor illegal entry into the protected area. For this reporting period 4 persons were caught on camera entering the Black Creek area of the property in the Big Falls Area our first images of humans caught on the cameras. Follow up to identifying these people that include women was not done and so we will need to do so and try to speak with these people to ensure compliance in the protected area. Three of the six cameras were stolen (2 from along Rio Grande and 1 in Black Creek)

To improve access for enforcement activities and properly demarcate the parcels that forms the protected area staff was engaged in the cleaning of the boundary lines and posted signage to deter illegal incursions into the protected area. Some 7 miles of boundary lines on the Morski, Kerns, Blk. 123 and 127 and Starcher blocks were done.



Boundary line cleaning and signage

3.2 144 WATER BASED PATROL;

A total of 210 water based patrols were conducted; (Rio Grande, 7 Hills Creek, Middle River, Golden Stream, Deep River and along the coast.) Signs of hunting were mainly seen on the Rio Grande and Middle River. One camp was found on the Rio Grande at (PORTO LA GARTO). No one was arrested for this reporting period. Six gill nets were confiscated from within the boundaries of the Port Honduras Marine Reserve on a joint patrol with PCNP along the coast between Rio Grande River mouth and Pork and Doughboy point and one gill net was confiscated from the Rio Grande due to it being set illegally [no tag and set across the entire width of the river]. Gillnets nets from the marine reserve were passed over to the PHMR Rangers for them to be given to the Fisheries Department, the one from the Rio Grande was destroyed by TPPL Rangers. Rangers also destroyed a camping site found along the east bank of the Rio Grande we believe is used when accessing the lands from the river.



3.4 SUPPORTING RESOURCES FOR CAMPING WHILE CONDUCTING PATROLS.

- Rangers have been getting their rations on a weekly basis to do the necessary land patrols and to do data collection etc.

Expected Outcome 4

Ensure all three protected areas have functioning equipment for.

4.1 Attend inter-agency meetings (TIDE, YCT, BDF, FD, BFD, CUSTOMS, IMMIGRATION).

Assistant Terrestrial Manager attended 4 inter agency meetings for this year where we share information on activities occurring in the protected area. The purpose of these meetings is to ensure resources can be pooled to address illegal activities impacting the areas under our supervision and management. If needed, we can request assistance from BDF to address illegal issues impacting the TPPL when needed. No meeting was held for the second half of this year we believe due to issues on borders here in the south that had the BDF who organizes these meetings busy.

4.2 Acquire equipment for surveillance, enforcement and maintenance.

All equipment from the list in the workplan have been acquired, they include; 4 Hennessy Hammock Expedition Asym, 4 Ultimate Survival Technologies Deluze Map Compass, 4 Sea to Summit Mosquito Head Net with Insect Shield, 1 UTM Using your GPS with the Universal Transverse Mercator Coordinate System, John and 3 Energizer Power plus NiMH AA Rechargeable Batteries, 8-count 2300 mAh, Pre-Charged, rubber boots, machete and machete files and the weed trimmer.

Expected Outcome 5

Increase cost-effectiveness of enforcement.

5.1 Integrate use of SMART across all 4 protected areas.

Delbert Pop participated in a 4 days session with the Forest Department in December focusing on Research and Monitoring and integration of SMART as the tool for data collection and storage (BIOPAMA) while Assistant Terrestrial Manager participated in sessions with Forest Department focusing on designing the modules for the implementation of SMART at Terrestrial Protected Areas across the Protected Areas system. Once this is finalized we will then proceed with the training and implementation of SMART at TPPL. We have the equipment needed for implementation of SMART and awaits Forest Department's decision in terms of the implementation of the module developed for terrestrial protected areas.

5.2 Developed maps each year to look at changes on lands over time.

Strategy 3: Promote sustainable tourism best practices within the MMMC.

Expected Outcome 6

Increase presence in TPPL through ecotourism, including Ridge to Reef Expeditions.

6.1 Maintenance of trail systems

The trail from the Ranger Station to the Coast has been maintained by the rangers on a regular basis.

6.2 Complete compound platforms

Three camp platforms have been built and camp ground maintained increasing our capacity to host overnight campers at the protected area.

6.3 Train 5 rangers in tour guiding

Victor Bonilla, one of the protected area staff is currently completing his tour guide training course with the Belize Tourism Board.

6.4 Package and sell 'A day with the rangers' tour

Not started

6.5 Work with Ridge to Reef Expedition and volunteers

Park staff hosted Group of R2R volunteers that include a group of Students from Drake University in January where they were given presentation and a tour of the protected area and other individual placements that assisted with various activities at the protected areas. Activities the volunteers were engaged in include; signage, boundary line and transect line cleaning, biodiversity monitoring and nursery work. In order to increase presence to the area especially for the R2R expedition and volunteers some improvement to the protected area's infrastructure is needed.

Strategy 4: MANAGEMENT IS INFORMED BY EFFICTIVE BIODIVERSITY MONOTRING AND RESEARCH.

Expected Outcome 7

7.1 Data collection on Bio-diversity at TPPL:

Bio-diversity data collections have been recorded from all 5 transects in TPPL. An increase in mammals and migratory bird species are being notice in the data. Camera trapping was done at 4 sites in the protected area focusing on Jaguar and Jaguar prey. Pictures of Jaguars, Pumas, Ocelot, and White lipped Peccary and other game species such as Great Curassow were caught on the cameras thus confirming the increase we are seeing from the data collected on the line transects.

7.2 Annually meet with rangers during international biodiversity day to view data analyzed/be informed.

This activity depended on the analysis of the data collected which has not been done so this activity was not completed. Data collected over the past few years needs to be analyzed so we can share that info with the rangers.

TIDE Proposed DNS budget for the period October 2015 to September 2016

Category	% of budget	October 2015 to March 2016	April 2016 to September 2016	Subtotal
Park Management	58%	\$38,884.36	\$38,884.36	\$77,768.72
Transportation	9%	\$6,033.78	\$6,033.78	\$12,067.56
Maintenance and Upgrade	5%	\$3,352.10	\$3,352.10	\$6,704.20
Equipment	3%	\$2,011.26	\$2,011.26	\$4,022.52
Program Coordination	25%	\$16,760.50	\$16,760.50	\$33,521.00
Total	100%	\$67,042.00	\$67,042.00	\$134,084.00