

**MESOAMERICAN REEF FUND  
FINAL TECHNICAL REPORT  
MESOAMERICAN REEF FUND**

<b>Project Number</b>	<b>TIDE-OAKMARFUND 2017-19-1-2</b>
<b>Project name</b>	Strengthening financial sustainability initiatives to support management of Port Honduras Marine Reserve (PHMR)
<b>Grantee:</b>	Toledo Institute for Development and Environment
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<b>Period covered in the report and date of presentation</b>	<p>October 10, 2017 to October 31, 2019</p> <p>December 13, 2019</p>

2. **Executive summary to date:** Briefly describes activities and results to date. Complete executive summary for final report.

The project “Strengthening financial sustainability initiatives to support management of Port Honduras Marine Reserve (PHMR)” that began in October of 2017 aimed to strengthen the management of the Port Honduras Marine Reserve through targeted research, enforcement, and implementation of financial sustainability mechanisms.

In summary, this 2-year project contributed significantly to the classification of the Port Honduras Marine Reserve as one of the best managed marine reserves in Belize as stated by Mauro Gongora, senior fisheries officer of the Belize Fisheries Department during a fisher forum held at Punta Gorda Town. Commercial fish species (lobster, conch and sea cucumber) have stabilized. Conch is showing healthy signs of recovery, the annual average increased in the Replenishment Zone (RZ) was 28% from 2018 to 2019 and 71.4% in the Contiguous RZ (proposed expansion zone) from 2018 to 2019. The General Use Zone (GUZ) ~10% decrease in annual average from 2018 to 2019. However, if looking at the percentages from 2017 to 2019, a nine (9)-fold increase in the annual average in the RZ from 6 to 59 conchs/ha and an 81% increase in the GUZ annual means from 21 conch/ha in 2017 to 38 conch/ha in 2019. So though there was a decrease in the GUZ from 2018 to 2019, it still was better than the 2017 annual averages.

Licensed managed-access fishers have increased compliance with fishing and park regulations. Earned income from financial sustainability mechanisms has increased by 10% compared to 2016 income. This was a result of mechanisms implemented from project funds. These investments or mechanisms include training and capacity building for TIDE staff and communities, market campaign both locally and internationally, upgrade of facilities at TIDE protected areas and office, implantation of new packages and expansion of accommodation to host larger groups to name a few. Over 76% TIDE Tours income was reinvested into TIDE operations which includes salaries, maintenances of building at Big Falls and upgrade. This trend is expected to continue, which is anticipated to result in the near future to a reduction of TIDE’s dependence on grant funding by 3-4% for TIDE Tours. More details of these accomplishments are listed below, and further details can be found in various annexed reports.

3. **Objectives:**

The objectives of this project are listed below;

**Objective 1:** To monitor at least 3 finfish species as well as commercially important fisheries, conch, lobster, sea cucumber and map their habitats to inform Adaptive Management Framework (AMF)

**Objective 2:** To reduce Fishing pressure through increased surveillance and enforcement in PHMR.

**Objective 3.** To strength TIDE’s financial sustainability mechanisms through implementation of alternative income generating programs.

**Objective 4:** To develop and implemented an Effective communication strategy in order to communicate TIDE’s impact to stakeholders, donors, and partners.

4. **Project progress:**

- Indicate if the originally planned methodology still applies or if it has been modified. In case of the latter, explain why and what the changes are.
- List the results/advances/outcomes to date by planned activity.

- Indicate the advance of the project in relation to the original timetable and explain the reason for any delays there may have been.

As with most projects, implementing 100% of the activities exactly as planned is hardly ever achieved. Thanks to the flexibility of the MAR Fund's modus operandi, TIDE was able to make changes to the project enabling a true adaptive management approach to obtain the desired results. These changes and rationale are described below;

Changes to objective 1 were minor - TIDE collected data on commercial fish species as planned; however, the 'Adaptive Management Framework' for fisheries management initiative in Belize still lacks adequate national data needed to create fisheries management plans. National fisheries management network that includes several NGOs and Fisheries Department have met several times to plan for the collection and use of data for drafting science-based fisheries management plans for conch and lobster; however, these plans are yet to be developed.

In the case of objective 2, all the activities were implemented as planned except the consistent data collection with Spatial Monitoring and Reporting Tool (SMART). This was mainly due to faulty and inferior tablets used to collect patrol data that many times did not work well in the marine conditions. As a result, rangers had to collect data on paper that was later transferred to a computer. The number of patrols conducted, however, exceeded the number planned.

Changes to objective 3 included the use of funds originally intended for international travel to conduct familiarization tours for travel agents instead. Though this activity was changed, the expected results of developing relationship with international travel agents and increase promotion and bookings were still accomplished.

In the case of objective 4, TIDE experienced delay in hiring the communication officer during the first year of the project. Despite advertising for the position, delays were encountered due to the limited available professionals in this field of work in Belize.

## **Results/advance/outcomes**

### **Results and outcomes for activities in objective 1:**

The first phase of PHMR habitat mapping took place during 2014 – 2016, with mapping being completed for zones 2, 3 and 4. These areas account for approximately 52% of the total area of PHMR. The mapping was completed using a combination of RapidEye Imagery and ground truthing, with over 50 sample sites surveyed (*See Habitat Mapping Assessment Report of PHMR 2014 – 2016 in Annex #1 for more details*). In zone 1, ground truthing data was collected, however the satellite imagery generated was inadequate to complete the mapping exercise for the zone due to high sediment flows at the time which lead to high turbidity. Both zones 1 and 5 pose a challenge in this respect; these areas traditionally have low visibility due to the proximity of river discharge and flood waters from rains, coupled with large areas of mud substrate. Mapping on zones 1 and 5 could not be completed during the project timeframe, due to lack of counterpart funding to complete the project, and insufficient staff within the science department, as the previous science director left and a replacement was not found immediately. A replacement was not hired until late 2018, at which point there was a large backlog of activities for the priority commercial species to complete during 2019. Currently, TIDE does not have funds secured to complete this activity, so the project is on hold until adequate funding and personnel are in place.

TIDE continued with bi-annual fisheries independent monitoring efforts for commercial benthic fish species (conch, lobster and sea cucumber) since 2009 and throughout this project period (*TIDE\_Benthic\_Commercial\_Species Annex#2*). Results of underwater monitoring revealed that though species population vary between the years (some years are better than others) the overall trend has shown a constant decline in population for all commercial benthic species between 2013 and 2017. In the period, between 2009-2013, conch densities were well above the 88-adult conch per hectare as recommended by the Belize Fisheries Department. Between 2013 and 2017, conch density has continuously declined in PHMR reaching as low as 5 conch per hectare in 2017. Since the start of this project, conch densities have begun increasing to an average of 72 conch per hectare in 2019 with some sites recording numbers as high as 94 conch per hectare.

TIDE and other partners are collating data on conch lip-thickness as a proxy indicator of sexual maturity to recommend science-based policy amendments for conch harvesting. The decreasing trend in PHMR is similar to trends in other MPAs in Belize indicating that though fishers are complying with shell length legal size limits the conch fishery is still suffering from overfishing. This could be due to the harvesting of large juvenile conch. The goal of these network meetings is to formulate a case for change in policy for Belize from conch shell length to shell thickness to determine legal harvesting. This will enable large (legal size) juvenile to be protected and mature into adults capable of reproducing and replenishing the stock.

Over the same period, lobster density is showing a similar trend with densities in 2019 recorded as 4 lobster/ha in the General Use Zone and 5/ha in the Replenishment Zone in February (at the closing of the season) and 5/ha in the General Use Zone and 6/ha in the Replenishment Zone at the start of the open season in June. There has been fluctuations with some years seeing an increase in density, but then the population is shown to decrease again. There are many factors that can attribute to fluctuations in lobster density, including gender ratio, sea temperatures and fishing pressure, but continued trend of low population density is of concern with longer periods of lower density and less successful regeneration during times of increase. Lobster shades may also be limiting the number of lobsters seen at survey sites, which is discussed below. The 2019 results show that the population is mostly maintained, except for the population in the General Use Zone which fell to 4/ha during surveys in February.

It is important to note that the decline in lobster densities in 2013-2014 coincides with the introduction of lobster shades 'casitas' in PHMR. TIDE's monitoring sites are in the traditional lobster habitats, but lobster shades are not monitored. We currently do not know the location of these shades. The Belize Fisheries Department (BFD) conducted a lobster shade study for Belize. In the very least, they were to gather a list of number of shades in each protected area, but this has not been completed by BFD as to date. When TIDE receive information on the location of these shades, then we can conduct lobster shade studies; habitat preference and/or mark and recapture studies.

Lobster fishers often record higher lobster catch from their shades so TIDE's scientists believe that there is a possibility that lobsters may be migrating from their natural habitats to the artificial shades for better protection. The migration of lobster could account for the decrease in sightings in the natural habitats where they are normally monitored. This theory obviously needs to be tested through a mark and recapture study that TIDE hopes to implement in June 2021.

Sea cucumber density fell from an average of 100/ha in 2011 to less than 20/ha in 2015. The continuous low trends in mean sea cucumber density from 2011-2016 indicates that

the closed season is not performing its intended function of protecting adult spawners (i.e. sea cucumber reproduction). By the end of 2019, the sea cucumber population showed no signs of recovery despite the 2017 moratorium. This may be due to a low chance of encountering mates in all zones due to low population levels, poor juvenile recruitment and/or illegal fishing. Continuous monitoring and data analysis of the sites are ongoing. The data gathered gathered will be used as a means of quantifying and predicting the current and future population levels of these important fishery species. With continued collaboration with compliant managed access fishers, stakeholders, continued enforcement presence and continuation of the moratorium the seas cucumber and population trends over time are expected to rise.

Data for conch and lobster will be made available for national science-based fisheries management plans that have yet to be developed by the Belize Fisheries Department. That activity is ongoing with several planning meetings between MPA networks completed. TIDE expect that within the next year, these fisheries management plan will be developed using the Adaptive Management Framework (AMF) approach.

It is clear from the fishermen forums that fishers are concerned about the decrease in conch populations and are willing to take the necessary steps to protect the species even if it means a moratorium for a period of time (*Annex #3 Fisher Forum Reports*). TIDE has approached fisheries department with this recommendation, but due to the difficulty with enforcement for just one site, the department feels it was not yet feasible. They urged us to conduct more national research to find similar trends and revisit the moratorium recommendations once the data has been collected.

As it relates to focal group meetings which were carried out within the villages that buffer the Marine Protected Area; the attendance and participation from licensed fishers is also evident (*focal group report Annex #4*). At these forums and focus group sessions; fishers are given the opportunity to provide information and voice their concerns on issues that are directly affecting them. By doing so TIDE has the opportunity to make informed decisions and actions as it relates to the management of the Port Honduras Marine Reserve as the information gathered from the forums and other outreach activities feeds directly into the enforcement and management system.

Managed Access activities also facilitated the collection of data from the catch logs and the bi-weekly finfish surveys which is conducted at the Punta Gorda Fish Market (*fin fish data Annex #5*) The data shows a steady level of the targeted commercial species for the area. The targeted commercial species include Bar Jack, Barracuda, Black Snapper Crevalle Jack, Sailor Choice, Snook, Spanish Mackerel, White Grunt and Yellow Tail. Data were collected and analyzed for the period February 2018 to January 2019. Approximately 2061 individual fish was measured during the period. The data was collected with assistance from TIDE community researchers and facilitated by the manage access officer. For the above mentioned period a total of 80 different species of fish were recorded during the market survey. The monthly length and weight of fish have been consistent.

#### Results and outcomes for activities in objective 2:

From the most recent data (this number is from a 2018 list from Fisheries Department) PHMR is recorded to have a total of 105 license fishers. During the year 2019, TIDE rangers encountered a total of 10 fishers who were observed conducting illegal activities within the reserve. This amounts to about 90% of fishers complying with managed access or fisheries regulations. Through using SMART technology and data, patrols are now being more strategically planned to cover a greater area of the reserve than previously, so areas of the reserve are not being missed. There are reasons why some areas were not patrolled as frequently, for example when rangers felt that fishers were not seen in certain areas as

often, or natural elements such as weather and the sea state can adjust patrol plans at the last minute, but the data is showing this more clearly and adjustments are being made accordingly.

The use of information collected from Spatial Monitoring and Reporting Tool (SMART) enabled the PHMR enforcement team to conduct targeted and strategic patrols within the marine reserve. Data from SMART shows where most of the fishing encounters are located in addition to the time of year various fishing activities occur (*PHMR Report Activity Annex #6*). This data enables the rangers to patrol certain ‘hotspots’ at various times of year. With the Belize Coast Guard soldiers stationed all year round at the ranger station on Abalone Caye, and conducting patrols with PHMR rangers, the level of compliance with park regulations by licensed managed access fishers continue to increase. For the period October 2017 to July 2019 a total of 930 patrols were conducted. Major infractions were done by illegal transboundary fishers. Highest rates of infraction continue to be from trans-boundary fishing. In 2016 one Belizean and five Guatemala fishers were fined for conducting illegal activities in PHMR; in 2017 six Belizean and seven Guatemalan fishers were fined for conducting illegal fishing in PHMR with 5 Belizean fishers receiving warnings, in 2018 three Guatemalan fishers were fined for conducting illegal activities in PHMR and 3 Belizean fishers receiving warnings and for 2019 one Belizean was arrested with 8 others receiving verbal or written warnings. These illegal activities include fishing without a valid license, use of restricted fishing gears (gillnets), no boat license, engage in commercial fishing, and no distributism boat mark. A total of 13 arrest were made in 2017 and one arrest was made it 2019. This shows a decreasing trend in illegal activities and an increase in compliance from the managed access fishers of PHMR. This trend in trans-boundary illegal fishing highlights the need for environmental education and alternative/supplemental livelihoods program for neighboring fishers. At the time of reporting, managed access fishers were 100% compliant with park regulations.

Results and outcomes from activities in objective 3:

TIDE has expanded infrastructure and improved accommodation facilities at its two terrestrial managed sites (TPPL and PCNP). The improvement will now facilitate bigger groups and overnight stays to TIDE’s Private Protected Lands (TPPL). Three additional cabanas were constructed on TPPL, two cabanas from OAK/MAR-Fund and one from MAR-Fund project titled “Reducing the financial gap for the management of Port Honduras Marine Reserve through income generating activities”. The house and property at Big Falls were renovated and now being advertise on Airbnb since May of 2019. The capacity of TIDE and TIDE Tours staff improved to better deliver service within TIDE managed protected areas. Marketing of these sites are in progress. Compared to 2017, TIDE Tours met its 10% profit target in subsequent years. This trend is expected to continue. The marketing of the Big Falls house on Airbnb came into full effect until April of 2019; compare to 2016 data, the booking has increase 100%. A total \$41,668.21 was reinvested in TIDE’s and TIDE Tour operations and salaries (\$17,417.14 and \$24,251.07) respectively. These funds came from TIDE Tours overall operation. Income from Big Falls house was minimal before project investment. With the investment made, income to TIDE Tours surpassed it 3% target for new markets 2019. While these investments have contributed to increase income, greater impacts are expected in the future.

**TIDE TOURS INCOME STATEMENT**

<b>TIDE Tours</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>
Income	654,894	458,419	354,699	237,192.92
Expense	525,842	405,222	407,614	235,255.22

Profit/(Loss)	129,052	53,197	(52,915)	1,938.70
% increase or decrease	19.71%	12%	-14.92%	0.82%

Included in the TIDE Tours expenses reported above in 2018 and 2019, are contributions to TIDE's operations (particularly to pay salaries) of \$17,417.14 and \$24,251.07, respectively. Not included in TIDE Tours Income above are Funds generated from EPI activities amounting to \$116,903.74 in 2019. The amount reinvested to upgrade facilities at Big Fall (Airbnb) from EPI's revenue in 2019 amounted to \$23,580.88.

EPI partners with TIDE rather than TIDE Tours as it is not a tour service that is being provided, it is a conservation field experience, where EPI utilizes TIDE's equipment and research expertise.

Based on the figures in the table above, for the year 2018, there is a loss due to infrastructure investment especially for repairs on Big Falls house and purchases of TIDE Tours equipment. Moreover there was a decrease in TIDE TOURS sales.

## RESERVATIONS REPORT

Year	Agency	Number of bookings
2019	Discover corp	4
	Drake University	1
	EPI	9
	Darah Travel	2
	Alabama University	1
	Colorado University	1
	POD	1
	POD Sea Cadets	1
	<b>Total</b>	<b>20</b>
2018	EPI	2
	Discover Corp	3
	Drake University	2
	Darah Travel	7
	POD	5
	Walter Peyton	1
	Alabama University	1
	<b>Total</b>	<b>21</b>
2017	Discover Corp	3
	Darah Travel	2
	POD	3
	Drake	1
	<b>Total</b>	<b>7</b>

## INCOME FROM MARINE TOURS

Year	Income	% increase or decrease	% of total tour income
2019	\$5,672.25	-55.85%	1.88%
2018	\$12,845.40	48.84%	3.62%
2017	\$8,630.00		2.39%

PLEASE NOTE THAT THE MARINE TOUR IS INCLUDED IN THE OVERALL TIDE TOURS INCOME

Overall tour income decreased by 48.26% between 2017 and 2019, so increasing income from marine tours was not really feasible, however marine day tour income only dropped by 34.28% so were more resistant than other tour categories. Overall, the target indicator of a 5% increase in tour income from marine day tours was not achieved, however local competition from marine tour operators has increased in recent years, with two new specialised marine tour operators in the Punta Gorda area that are undoubtedly reducing income to TIDE Tours. Taking into account income from EPI marine programs to TIDE, which in 2019 was significant at \$116,903.74, then the investment in equipment has provided results that are above and beyond the target indicator. For large groups, where two boats are required, there is still a need to outsource one vessel, but TIDE has the security of having one available boat for all



trips, which significantly reduces costs. As an example, the cost to outsource a boat for a 4 day trip costs on average \$2700, whereas the cost for TIDE’s boat is approximately \$1700, which gives a saving of \$1,000, or a 37% saving in operating costs. So whilst marine day tours did not meet the indicator, educational marine programs contributed significantly to income. With new marine tour operators in the area, TIDE plans to specialise and promote more of the educational programs and partnerships, which overall have higher profitability and are more in line with TIDE’s unique product.

**INCOME FROM TIDE TOURS NEW MARKETS**

<b>New Market</b>		<b>Income to date</b>	<b>Expense</b>	<b>Profits</b>	<b>%</b>
TIDE Tours	POD Sea Cadets	\$22,146.93	\$7,272.00	14,874.93	67.17%
TIDE	EPI	\$138,627.67	\$79,468.87	\$59,158.80	43%

In 2019 TIDE welcomed two new partners through it’s educational program. POD Sea Cadets was a group that took part in a range of tour and activities that included research and monitoring. EPI is a new partner that focusses on research programs only, where participants get hands on with marine research, which has positive impacts for TIDE’s financial sustainability as well as the marine research and monitoring program.

Activities under this objective include training of 7 individuals including TIDE staff and tour guides for better delivery of service to visitors of TIDE managed protected areas. One such training was bird identification and wildlife tracking course (*Bird training Report Annex #7*). TIDE is in the process of developing the tours for bird watching at the Rio Grande River and TIDE Private Protected Lands (TPPL). The package will be completed in 2020.

The training consisted of 7 participants, three tour guides and four park rangers. Whilst many guides in Belize can identify birds from sight or by listening to their calls, being able to identify the language being used and the conversations happening in the tree tops, adds an exciting new dimension to tours. TIDE has identified that the Rio Grande field station location in the TIDE Private Protected Lands, will be the perfect location from which to operate these tours. This field site is due for completion in the spring of 2020, so packages will be developed that are based from that site and will be marketed on the TIDE Tours website early 2020. The full benefits of this training are still pending. One trainee now has a full-time tour guide employment at Copal Tree Resort, but not specifically in birding. Another participant is working within the tourism industry with Mayan Sky Canopy Cruise. Two of TIDE’s staff are presently using some skills learnt in their regular work with TIDE Tours. Additional training and capacity building were identified necessary for two ranger staff. TIDE is providing additional funds for these two staff to build their capacity.

International online press release can be found here: <https://www.naturalistventures.com/single-post/2018/06/06/Belize-Tracking-Bird-Language-Training>

Funds were also used to upgrade and construct new accommodation facilities at TIDE TPPL, Paynes Creek National Park (PCNP) and Port Honduras Marine Reserve (PHMR). The matrix below describes the upgrade and site where each activity was accomplished.

UPGRADE	FACILITY
Renovate bathroom at PHMR to allow for increase in visitation	Port Honduras Marine Reserve (PHMR) Ranger Station on Abalone Caye
Constructed two 2 new cabanas at to increase accommodation and raise its standard	TIDE Private Protected Lands (TPPL)
Construct outdoor bathroom with lights.	Payne's Creek National Park (PCNP)
Purchase one set of furniture (1 table and 8 chairs)	Payne's Creek National Park (PCNP)
Purchase and install 10 solar lights for outdoor structures.	Payne's Creek National Park (PCNP)
Purchase and install 1 solar freezer	Payne's Creek National Park (PCNP)
Upgrade and improve trails	TIDE Private Protected Lands (TPPL)
Purchase 4 outdoor picnic tables furniture	TIDE Private Protected Lands (TPPL)
Renovate dining area with a partition for kitchen for overnight visitors	TIDE Private Protected Lands (TPPL)
Construct bunkhouse for overnight visitors	TIDE Private Protected Lands (TPPL)
Construct storage unit	TIDE office
Purchase health and safety equipment (10 life vests, 10 storage boxes and 10 brackets, dive boat mats)	TIDE's offices, PHMR, PCNP and TPPL
Purchase 1 desktop computer	TIDE Office
Purchase 1 computer desk	TIDE Private Protected Lands (TPPL)
Visitor accommodation compound in landscaped and maintained.	Big Falls Retreat Center
Renovate downstairs bathroom and bedroom accommodation	Big Falls
Upgrade road, entrance and parking area at	TIDE's property and Retreat Center in Big Falls
Upgrade indoor and outdoor furniture	TIDE's property and Retreat Center in Big Falls
Upgrade shower, sink and sewerage	TIDE's property and Retreat Center in Big Falls

These sites are now being promoted through TIDE's Tours (*Marketing information & video Annex #8*). The newly renovated house and grounds at Big Falls property is now being marketed on Airbnb (*Airbnb post Annex #9*).

Also link to this objective was familiarization tours to TIDE area of work for domestic and international agencies (*Fam Tour reports Annex #10*). Through these fam Tours, TIDE has secured long-term commitment with Ecology Project International (EPI) groups to conduct educational and research tours at TIDE managed protected areas (*EPI contract Annex #11*). The upgrade and capacity building have allowed TIDE Tours to not only maintained income but now shows positive signs for increase income and better delivery of service in the future.

The marketing strategy for TIDE Tours was created in 2015 (*see Annex #21*), and the social media strategy which supplements that (*see Annex #22*), was revised and updated at the start of 2018.

- **Trip Advisor:** TIDE Tours has had a Trip Advisor account since 2011, and during the period 2011 – 2017 the page received 75 reviews, an average of 10.7 reviews per year. Between January 2018 – December 2019, the page received 39 reviews, an average of 19.5 per year. This was an increase of 82%. Of the 114 reviews on the site, 112 rated TIDE Tours as 'excellent' (the highest rating) and 1 review was 'very good' (the second highest rating). One reviewer did not leave a score rating.

- **Facebook:** TIDE Tours has had a Facebook account since 2009, and during the period between 25<sup>th</sup> June 2018 – 30<sup>th</sup> December 2019, the page received 236 new likes, which was an increase of 11.7%. Whilst this did not reach the 20% performance indicator, through continued engagement with previous guests and partners, one previous traveler referred TIDE Tours to a colleague and we received a booking for a five day vacation package for six guests. We consider word of mouth to be the most effective form of marketing, and will continue to engage previous guests as a means of benefitting from this.

Project funds were also used to purchase several pieces of equipment and build capacity for TIDE financial sustainability and communication programs. Purchase of health and safety equipment contributed to enhancing visitor's facilities, achieving license requirements, expanding TIDE's abilities to market sites to a bigger local, national and international audience. Additionally, outdoor and indoor furniture purchases enhanced facilities and the ambience of Big Fall retreat center, TPPL and PCNP. Project funds also contributed to the purchase of a 100hp Yamaha engine and retrofitting of TIDE's research and monitoring boat. The boat and engine are being used to transport groups and resources to sites. TIDE Tours is now retaining higher earnings as some of these transportations were outsourced in the past. Equipment purchased also contributed to TIDE's enforcement and biodiversity monitoring. (*Inventory Annex #12*)

#### Results and outcomes from activities in Objective 4:

Despite the delay in hiring the communication officer during the first year of the project, we are happy to announce that the objective was fully achieved during the project cycle. The communication strategy was developed (*Communication Strategy Annex #13*) and approved and is being implemented. Examples of activities being implemented are information sharing to external audiences which include local residents, resource users (families, hunters, fishers, business and those benefiting or impacted by TIDE protected areas). Information is also shared to schools, donors, government agencies and policy makers. TIDE is presently seeing an increase in the number of individuals reached through our social media as explained below. This has been evaluated on a monthly basis during the year 2019.

Surveys to determine the role and importance of communication within TIDE were also conducted to assess the effectiveness of internal communication. A hundred percent of participants agreed that communication plays an important role in achieving goals, while most were able to correctly identify the basic process of communication. Participants also revealed that 60% of them were comfortable initiating communication. Further analysis of responses also showed that assumptions and consistent, timely communication were areas that can be strengthened within the organization. There is also a need for clearer understanding and appreciation of the organizational chart and associated responsibilities, stressing the importance of all roles. Of the responses given, 40% shared that they were more likely to communicate in a more mindful manner when doing so with supervisors/managers while 40% claimed that their manner of communication remained the same for all. Developing empathy was also deduced as a topic that needed to be covered in training. Individually, 80% of respondents determined themselves to have good communication practices. On an optimistic front, 90% of participants believed that in the area of communication, engrained patterns of behavior can be changed through training, commitment and reinforcement. Opinions were a bit split on whether the onus was on the individual, to set healthy communication precedence; 40% strongly agreed, 30% agreed and 30% disagreed on who had the most responsibility to set healthy communication precedence. The communication strategy was presented to TIDE's staff and board and went through several revisions before being approved by the board in mid-2019. TIDE's board of directors appointed one of its members Mr. Jerry Enriquez to lead the revision and final drafting of the strategy. Further staff training on effective internal communication was

done in November 2019. In addition, TIDE's board member, Jerry Enriquez also started a mindfulness program with the TIDE staff. Mindfulness has been scientifically proven to cleanse the mind of negativity and allow individuals to become a better version of themselves. This is important for NGOs that provide public services interacts with the public often as conflicts often arise between them.

As a part of the communication strategy, and in line with this project's activities, a number of communication materials were purchased. These items are meant to increase the visibility of TIDE locally as well as internationally (*Promotional items Annex #14*). The purchases include, an official TIDE banner, water bottles, calendars, brochures, coin pouches, bottle openers, keychains, pens, tote bags and cinch bags and a 2020 TIDE calendar. Distribution of the promotional items had been divided amongst donors/sponsors of TIDE, media houses that host TIDE employees as guests, community members, students (national and international), staff, board of directors, project partners and volunteers/interns.

Media Campaigns have also played a key role in promoting and garnering support for the organization and its work (*Media Campaigns Annex #15*). In addition to monthly radio appearances during the Rising TIDE Talk Show, monthly television advertisements have been and continue to focus on either an environmental issue of concern and possible solutions or updates on TIDE's latest initiatives and accomplishments, all of which spread awareness.

TIDE's website was also revamped to reflect a more attractive, engaging means of information dissemination, funding source and or action-prompting mechanism ([www.tidebelize.org](http://www.tidebelize.org)). Both the Communications Manager and the IT Manager worked in conjunction with managerial staff, board members and the executive director to gather feedback that influenced the current website's layout and interaction. Since its launch in February of 2019, the website has been performing well, as is proven by some comparison of the numbers of users in late November 2017-early 2018 and two months of the most recent quarter (*Social Media performance Annex#16*). Taking stock of users in these time periods, users from the 1st period assessed numbered at 487, and the top ten countries visiting were: United States of America, Belize, United Kingdom, South Korea, Canada, China, Germany, India, Colombia, and France. During the more recent period analyzed, the website users were numbered at 903 and were of the following nationalities: Belize, United States of America, United Kingdom, China, South Korea, Canada, Australia, Guatemala, Mexico and Netherlands. Due to malfunctions and glitches with the previously used website, it was not possible to get figures from correlating dates. With the previously used site, there were periods where it was not accessible to users so data gathered from analysis, was blank. Through the current website TIDE has mostly been contacted for internship and volunteer opportunities but funding continues to be a challenge, since several volunteers are seeking to volunteer but asking TIDE to fund their internship, along with a relatively high bounce rate, though the duration of time spent on the website has seen some increase.

To prompt better information sharing internally, an official TIDE WhatsApp group was established. This means of information sharing was borne of department meetings, to address communication short comings, prior to the 1st communication training on helpful tips to address said short comings. The TIDE WhatsApp group has proven to be a great tool that gives all of the participatory staff members an opportunity to receive general information and also for them to give input.

Since the hiring of TIDE Communications Manager (July 1<sup>st</sup> 2018), TIDE's Instagram follower base has increased by approximately 50%, its current count is 542 (an ever-increasing number). Through this medium, the organization has been approached about opportunities it has/was offering and also about opportunities to purchase items at discounted prices. It has also been a great platform for TIDE to connect with international audiences. Most Instagram followers are from foreign countries, and TIDE has received spotlight for partnerships it's undertaken with

international universities and volunteers/interns. A major issue that hampered the proper utilization of Instagram was the lack of a social media cellphone with good picture taking capabilities. Since receiving a cellphone, postings have been more frequent and support and approval has definitely grown, compared to performance in those same areas, in previous years.

As it relates to Facebook, TIDE's page has seen significant growth. In the course of a year, the organization has seen an increase of almost a 900 new likes and followers, and by the end of this year, it is projected to have over 6,000 likes, if the current rate of growth continues. As it pertains to the performance of posts, and their reach, the numbers are constantly influx, but the trend is generally toward an increased reach. The reach figure for the period of August 22<sup>nd</sup> 2018 through to September 2019, for posts made is currently 18,667. That figure depicts an 8% decrease from the previous month's reach figure. There is a direct correlation between the reach of a post and the type/content of the post. Generally, posts that highlight some feature or biodiversity of the protected areas, resource protection activities and accomplishments or projects that impact the Toledo District and the country of Belize, generate more interest, circulation and engagement. The Facebook platform has also given various target audiences a chance to message TIDE personnel about concerns, to make inquiries, to seek assistance, inform of opportunities and to make reports, in addition to being a great sensitization and promotional tool.

#### Train all TIDE staff in communications techniques

On March 15th 2019, representative of all departments took part in evaluation sessions, centered on communication relations and team building. Through the joint effort of Mr. Jeremy Enriquez (a board member) and the Communications Manager, the departments and representatives were interviewed and encouraged to share on various issues and perceptions they had surrounding communication and its impact on the organization. Approximately 17 individuals took part in the exercise and the information gathered was utilized to create concrete plans of action to address immediate, medium- and long-term priority issues.

Following those meetings, on March 21st, 16 members of staff collectively met with the facilitators and the concerns aired by departments and representatives were summarized along with suggested means of addressing the concerns and the correlating plans of action. Root communication challenges were highlighted and the audience was given a presentation on how to improve their internal communication practices along with a minor focus on communicating and interacting with public audiences. Staff was given a detailed explanation of how unhealthy communication practices harm the connectivity and advancement of the organization, along with preventative measures that could minimize communication challenges. The information shared was also emailed to participants to serve as a guide and reminder, to practicing healthy communication.

Rather than communication training taking place on a quarterly basis as is scheduled in the communication strategy, said training would instead be more feasible twice a year during staff meetings that mandate the attendance of all staff. Scheduling for maximum attendance and participation has proven to be a negative factor in conducting training, particularly so for field staff. During the evaluation exercise and through responses given via the questionnaire, the staff, board representative and Communications Manager discussed ideas suggested that could serve to improve the effectiveness and efficiency of internal communications.

#### Conduct radio shows and TV spots

In the interest of getting more "bang for buck" as it relates to having more exposure and to a wider audience, funds for these activities were combined and used to facilitate monthly campaigns that sensitized on issues of environmental concern and also on the work of TIDE. The budget allocation of 70 USD for 24 months did not allow for costs to be covered, so that amount

was combined with the budget for televised appearances and used to launch TIDE’s monthly campaigns. Initially, Toledo’s sole television channel was selected to feature the campaigns, but due to technical issues, the decision was made to work with a more centrally located television channel, with countrywide broadcasting. Since premiering in October of 2018, a total of 10 campaigns have been aired, and continue to be aired. Through this initiative, the organization hopes to further garner support and increase opportunities for networking, partnerships and funding, all while sensitizing on the importance of conservation. The ads and recording of radio shows were also post on TIDE Facebook page and website. The communication officer review reports on number of likes, reach, actions, preview, post engagement. The local radio station reaches rural communities in the Toledo District. The TV station reaches national and international audiences. With the increase media coverage from 2016, our 2019 results are showing a larger audience being reached via social media. *Annex #23* shows the data from Facebook insights for 2018 and 2019, and it shows an increase in both post reach and engagement during the project timeframe. Unfortunately, we found that we are unable to track historical information on the number of page likes as the data is only shown for the previous 30 days. In 2018, TIDE developed and launched a new website, which has improved the visitor experience, but has decreased the numbers of individuals visiting the site. This is an expected result of a new website, and the data is discussed in more detail in *Annex #24*.

**Design and launch individual donor program**

The composition of TIDE’s individual donor program has been an ongoing exercise, with the collaboration of the Communications Manager, Executive Director and assisted by the Operations Manager. Information on donors and funding streams was compiled to reflect amounts collected over the years of 2016 – 2019, and is shown in the table below:

	2016	2017	2018	2019
<b>Total donations</b>	\$30,912.25	\$55,050.46	\$46,482.70	\$51,081.50
<b>Number of donors</b>	59	83	73	87
<b>% Increase in # of donors</b>		41	-12	19
<b>New donors</b>		34	19	22

Since 2016, the number of annual donors and the total amount has increased, with an increase in the number of donors of 47% overall between 2016 – 2019, far surpassing the target increase of a 10% increase. The financial sum of donations increased by 65% during the same period. However TIDE notes that whilst each year has seen new donors supporting TIDE, some donors have also been lost during this time. Pertinent information such as the contact information, frequency of donations, year, affiliated business and location, were all a part of the information gathering process. The proposed plan for the donor program, is being influenced to some degree by the communications strategy, as all donors would be identified, categorized, and looped into synchronized communications dealing with the accomplishments of the organization, reported via a quarterly newsletter, the annual report and also be recipients of an annual expression of appreciation. It is anticipated that through these actions, funding and support will be retained and increased, as communication will become routine and not limited to primarily, times of need. Improved communication with donors should increase donor retention rates, increasing total donations further. With the project ending in September TIDE implemented the final donor activities during the TIDE conservation festival. This familiarization tour allowed donors to participate in the annual festivities, and garner relationship with TIDE staff at this special event, learning more about how donations help to support the work TIDE does. The conservation

festival is a two days activity filled with information sharing of TIDE work in Southern Belize. Outcomes from this activity are highlighted in the section below.

#### Complete familiarization tour for high priority donors

All-inclusive events which consisted of tours to the Port Honduras Marine Reserve, TIDE Private Protected Lands and Payne’s Creek National Park took place in 2018 and 2019, during the week of the TIDE Conservation Festival. In 2018, there were seven (7) entities in attendance, and in 2019 there were 13 entities present for the tour. For both years, participants were either current donors, past donors or potential donors. All guests for the tours were provided with meals, snacks and beverages for the day, were gifted with expressions of appreciation and accommodations (if needed). All participants expressed their thanks and seemed genuinely appreciative of the opportunity to experience areas of Belize; most had not been fortunate to. They were able to question the staff that engaged and made presentations during their visits and some were even able to really immerse themselves in the tours by swimming in the waters off West Snake Cayes (2019 participants). These tours have proven to be positive undertakings that encourage authentic connections with donors. Of the seven entities that attended the familiarization tour in 2018, two have not yet donated to TIDE, however five have continued to donate and increased the value of their donation in 2019. The table below shows these results:

	Donor 1	Donor 2	Donor 3	Donor 4	Donor 5
<b>2018 donation</b>	\$0	\$750	\$1,500	\$750	\$1,500
<b>2019 donation</b>	\$1,000	\$1,000	\$2,500	\$1,750	\$2,500
<b>% Increase</b>	n/a	33%	67%	133%	67%

As displayed in the table, the increase in donations in 2019 from donors who attended the familiarization tour in 2018 was significant, with an overall increase of 94% compared to 2018 donations.

Results from the 2019 trip are not expected to be realised until TIDE begins its 2020 fundraising campaign.

While the trips have been yielding positive results, coordinating the trips prove to be challenging because more than half of those invited, for 2018 and 2019, declined the invitation due to either prior commitments or due to schedules not permitting. A few did express some issue with the travel distance, that would be a necessary undertaking to participate.

- 5. Obstacles:** Indicate if there have been any obstacles to the development of the project that have prevented achieving the planned goals or complying with the timetable, and how you have solved or plan to solve the situation.

During the first quarter of the project there were delays in hiring of the communications officer and science director. Although we encountered delays in hiring staff, the individuals hired became fully engaged. Project activities and goal were completed and most activities were back on schedule within the second quarter of project implementation. There were two major requests for reallocation of funds during the project cycle. One such request was to conduct new marketing activities to promote and market TIDE Tours activities. The reallocation was made to achieve project objectives by focusing on direct targeted national and international groups with higher probability of participating in our program.

The other was for reallocation of fund to assist with the renovation of the docking wharf at Abalone Caye. Due to the busy schedule of the science team in the last quarter of project cycle the habitat mapping was not completed. The information is necessary and plan to be gathered in the upcoming year.

We had one incident that contributed to delays in the completion of the kitchen on TIDE Private Protected Lands (TPPL). Management decided to cancel the contract for the construction of the kitchen on TPPL, due to an incident that resulted in the contractor incarceration. Management saw the continuation of his service and presence of the individual on TIDE property a safety issue to TIDE staff and resources. The first disbursement was made to the contractor. TIDE inherited a small loss and the kitchen was completed in the upcoming quarter of project implementation. TIDE donor program was not completed as stipulated in the proposal. The plan was incorporated into the communications strategy. A donor list was identified and categorizing. These donors were provided with communications updates of TIDE accomplishments, reports via quarterly newsletter and annual report. the donors were also recipients of an annual expression of appreciation. It is anticipated that through these actions, funding and support will be retained and increased.

**6. Links with other organizations:** *Describe any alliances established as a result of the project development.*

TIDE works with several organizations and stakeholders in the accomplishment of its wider mission. During project implementation TIDE collaborated with the Belize Fisheries Department and the Belize Coast Guard in law enforcement activities. TIDE Tours also continue business linkages with local restaurants, tour operators, tour guides, local community businesses and several other stakeholders involved in the tourism industry.

TIDE Tours has a vendor listing of approximately 150 stakeholders. Some of the local restaurants which TIDE Tours use includes Punta Negra Grill & Tavern, Waluco's Restaurant, Asha's Culture Kitchen and Gomiers Restaurant. Tour operators we partner with include Garbutt's Marine, PG Tours, Monkey Bay and Big Falls Extreme adventures, among others. We employ local part time guides, most of whom received some form of training from TIDE, like Alex Leonardo, Dan Castellanos Jr. and Neville Smith. Local vendors such as Quality Poultry, Southern Grocers Supplies all benefit from the expeditions which TIDE Tours coordinate. The contact made from attending Canada Road Show gave TIDE Tours over 50 direct linkages to business with tourism connection to Belize. Collaboration continued with Discover Corp. One group arrive in December of 2018. The next group is schedule to arrive in the month of May of 2019.

TIDE is also working with Ecology Project International (EPI) through a special marketing agreement to facilitate cooperation of the two parties in promoting educational programs operated at TIDE through EPI.

Another worthy alliance during project implementation was the bond between TIDE and resource users of PHMR generated through manage access program. Throughout the last two years, managed access has allowed for more enforcement and a notable decrease in illegal activities within the area. Managed Access has also provided some restriction of access to other non-traditional commercial fishers to the Port Honduras Marine Reserve. Managed Access has furthermore allowed better identification of PHMR users by more properly marked commercial fishing vessels within the area. TIDE will continue its networking and linkages with all stakeholders for improve communication and partnership to best serve the people within our managed protected areas.



7. **Description of activities for next period:** *Briefly describe the activities that will be undertaken in the next period:*

Not Applicable.

8. **Project development table:** *Complete the project development table for the period being reported by indicating percentage of accomplishment of indicators/products. Please add any new activities and their indicators/products (Separate Attachment)*

9. **Lessons learned:** *Emphasize, besides the technical issues, the social and administrative aspects that may be useful in future projects regarding the same topic or developed under similar conditions.*

- Throughout project implementation, project manager, team members and leadership participated in the project monitoring and evaluation. This was done during three of the existing communication processes established at TIDE.
- Administration Meeting: These meetings are held at least three time per year. At these meetings administrative issues affecting projects implementation are discussed. These includes staffing, disbursements, updates on contracts, and project implementation issues or challenges.
- Finance Meeting: These meetings are held quarterly. At these meeting financial updates are provided by the institution finance team. The information provides project managers with a budget performance report.
- Managers Meeting: These meetings are held bi-weekly. At these meeting Managers of projects and park managers provide updates on activities implemented in the field. Because TIDE implement several projects, with multiple donors, in three different protected areas these meeting assist with linkages and provide all manager with general information occurring at the institution. These meetings continue, for they are proven useful for future project and help to facilitate better communication and improve project implementation.
- One of the major goals of the project was to reduce TIDE reliance on grant funds. The lesson learnt is that the more different sources of funds an NGO has the more financially self-sufficient and sustainable we are. So financial sustainability depends on TIDE ability to diversify income and access new funds. Presently management is taking the following actions that will contribute to financial sustainability.
  - Promoting, market and renting of the facilities
  - Improve management of organization overhead cost.
  - Continue investigating and obtain different funding source especially unrestricted funds.
  - Build financial reserve
  - Implement communication plans as it relates to developing and maintaining donor relations, supporters, volunteers, staff, and other stakeholders.
- A major lesson learnt in relations to TIDE's financial sustainability mechanisms and alternative income generating programs is in the area of direct marketing. TIDE is now focusing on opportunities to promote our Tours and services directly to the customers who most need them. Our relationship with EPI and Universities are showing more appeal to our services. Today TIDE and TIDE Tours is fostering these relationships and expanding to get new customers for increase sales.

10. **Effects of the project:** *Have the results of the project promoted environmental, social or economic changes? How was this determined/measured?*

Environmental/ecological benefits/results of the project:

Measurable environmental benefits of the project include the effective protection and management of marine ecosystems and commercial fisheries. Throughout the life of the project there has been no loss of key marine flora such as mangroves or sea grass, coral reef health and live cover in the southern Belize Reef Complex increased from and HRI index of 2.5 in 2015 to 3.8 in 2018 – the highest in the MAR region. Also, as indicated, commercial fish species in PHMR are stable with conch showing signs of recovery for the past 2 years. There is also a measurable increase in compliance among managed access fishers of PHMR within the past 3 years. This could be attributed to the presence of Belize Coast Guards and TIDE rangers on daily patrols as well as night patrols.

Socioeconomic benefits/results of the project:

The investment in TIDE's financial sustainability program has enabled TIDE to directly employ community members from Toledo. Aside from its fulltime staff, employment of at least 2 tour guides, 2 cooks, 16 community researchers and 2 boat captains annually and at various times throughout the year, and investments in supplemental livelihood programs are all ways in which TIDE contributes financially to communities (*Part-time employees by gender Annex: #17*). With a projected increase in participation in TIDE's educational travel program, the direct employment as well as indirect benefits will also increase. In addition, our communication, education and awareness programs reach at least 20 of 50 communities in Toledo. TIDE's award-winning freshwater cup engages over 1,000 children and 100 adults in 16 communities annually, our scholarship program has provided books and tuition to over 400 high school students in the past 10 years, training and capacity building programs in the past 5 years included small business management, conflict resolution, sewing for women, house repair, gardening, electrical and plumbing among other training for youth. Though this project did not make a direct investment in these social programs, it supported TIDE through funding for salaries for staff, administration and utilities so that TIDE can maintain its operations required for social and economic support to communities.

TIDE's work in environmental protection supported by this project provides direct benefits to the fishing and tourism community, from fisherfolks to tour operators, hotels and restaurants as well as the transportation industry. According to study by the Belize Tourism Board, the Port Honduras Marine Reserve is the most visited tourist destination in Toledo.

**11. Communication of results:** *What mechanisms have been used or will be used to communicate the results, and to what audiences?*

The project as the title states is aimed to strengthening financial sustainability initiatives that will help to support management of Port Honduras Marine Reserve and will also extend to TIDE other two managed protected areas. TIDE's approved communication strategy has and will continue to be the main document use to communicate the organizations works and achievements. The document is also intended to improve the internal communication practices of the organization. The aims are; to engage stakeholders that they understand and appreciate the importance of maintaining natural resources, ecosystems services and assist in the protection, preservation, of TIDE managed protected areas and environment.

The strategy is geared towards sharing TIDE's success stories locally and internationally, to inform and garner practical and financial support so the organization's mission can be brought to fruition. Similarly, TIDE's missions and works need the input and cooperation of a number of communities adjacent to the three managed protected areas.

Current mechanisms for communication are web-based, social media, printed reports, national and local radio and TV shows, community meetings, house-to-house visits, fisher's forum and

board and advisory council meetings. While these mechanisms are effective in reaching a wide variety of audiences, TIDE realized that there is still room for improvements. In the past, TIDE hosted weekly technical presentations on the work it is doing as well as related work, these were called Friday Informal Seminar Hour (FISH). These seminars were effective in reaching the professionals and university students; however, due to changes in staff, FISH ceased to exist. TIDE plans to start hosting FISH again and ensure that it is institutionalized through becoming an activity in the Science Director's terms of reference. Similarly, in the past TIDE published a quarterly newsletter via WordPress that would go to key supporters and donors, again, due to changes in staff the newsletter is no longer being published. TIDE plans to restart this important means of communication and once again institutionalize it through staff contracts and employment terms.

**12. Project continuity:** *Will the processes established by this project continue operating? How will it be done? Who will provide follow-up?*

The targeted research, enforcement, and implementation of sustainable financial mechanisms will continue for TIDE through continued marketing and promotion of its programs. The profits from the investments made by the project will support TIDE's research and monitoring program, specifically through biodiversity monitoring activities and the completion of a habitat map of the MPA. A percentage of the profits from TIDE Tours will also be used to assist in continued enforcement and surveillance efforts. The investment will contribute to decrease illegal fishing, which threatens the important biodiversity in the MPA. While the investment has been concluded, the impact is not immediate. From preliminary information gathered TIDE will still depend on grant funding, but this grant has helped TIDE lower this dependence. Today TIDE Tours has a strengthened and improved their operations and financial management and the company has seen increase sales. The increased profits from the Tour Company will contribute to the strengthening of the management of the MPA and reduce some dependency on grant funds.

## ANNEXES

Research and monitoring reports	_____	Annex: #1
PHMR zone maps	_____	Annex: #2
Fisher Forum Report	_____	Annex: #3
Focal group report	_____	Annex: #4
Fin fish data	_____	Annex: #5
SMART report	_____	Annex: #6
Training Report	_____	Annex: #7
Marketing information & video	_____	Annex: #8
Airbnb post	_____	Annex: #9
Familiarization Tour reports	_____	Annex: #10
Ecology Project International Contract	_____	Annex: #11
Inventory	_____	Annex: #12
Communication Strategy	_____	Annex: #13
Promotional items	_____	Annex: #14
Media Campaigns	_____	Annex: #15
Social Media performance	_____	Annex: #16
Part-time employees by gender	_____	Annex: #17
Due diligence Documents	_____	Annex: #18
Financial Report	_____	Annex: #19
Development Table	_____	Annex: #20
TIDE Tours Marketing Strategy	_____	Annex: #21

**TIDE Tours Social Media Strategy** \_\_\_\_\_ **Annex: #22**

**TIDE Social Media Insights Report** \_\_\_\_\_ **Annex: #23**

**TIDE Website Insights** \_\_\_\_\_ **Annex: #24**

Annex 1

PROJECT DEVELOPMENT TABLE

Project title: Strengthening financial sustainability initiatives to support the management of PHMR

Objectives	Output / Expected Result	Activity	Sub-activity	Time Unit- Quarters								Performance indicator	Sources and means of verification	Impact Indicator	Assumptions & risks	% of Completion	
				Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8						
<b>Objective 1. Monitor at least 3 finfish species as well as commercially important fisheries, conch, lobster, sea cucumber and map their habitats to inform Adaptive Management Framework (AMF)</b>	Report on status of commercial species generated with specific management recommendations.	1.1 Complete quadrant 3 of 4 of the habitat maps for the PHMR by dives.		X	X								1.1 20 dives in 5 days to collect data from incomplete zones in the PHMR and to complete GIS work for habitat map	1.1 Miscellaneous Habitat map	1.1 – 1.4 Commercially important species populations maintained or improved from baseline for conch (10/ha) lobster (5/hr) and sea cucumber (45/ha)	1.1 – 1.3 Assumption: Weather, visibility and water conditions permit the habitat mapping to be completed	100% completed (Missing the maps)
		1.2 Geo-reference points from different zones of the PHMR				X						1.2 20 dives in 5 days to collect data from incomplete zones in the PHMR and to complete GIS work for habitat map.	1.2 Miscellaneous Habitat Map	100%			
		1.3 Collect data to complete 8 biodiversity monitoring dives from commercial species (lobster, conch, sea cucumber and 5 fin fish species).		X	X	X	X					1.3 Complete at least 2 biodiversity monitoring dives per commercial species per year for at least 8 species	1.3 Annual report on status of commercial species	100%			
	AMF tool contributes to improved fisheries management decisions for PHMR	1.4 Organize 4 Managed access forums				X		X		X	X	1.4 At least three Managed Access Forums of 1 day each with the participation of at least 50 fishermen/forum, completed per year.	1.4 Minutes, photos, activity report, feedback	1.4 Fishers actively participate in forums and provide solid recommendations for management		100% completed	
<b>Objective 2. To reduce Fishing pressure through increased surveillance and enforcement in PHMR.</b>	Fishing pressures in PHMR are reduced through increased surveillance and enforcement presence in the MPA	2.1 Conduct at least 600 daily patrols in PHMR		X	X	X	X	X	X	X	X	2.1 At least 90% or 50 managed access fishers are complying with regulations of the MPA	2.1 Patrol logs indicate at least 600 patrols completed.	At least 80% of the licensed fishers are complying with the rules and regulations of the MPA.	2.1 – 2.3 Assumption: Staff is able to collect and analyze SMART data	100%	
		2.2 Purchase equipment required for used of SMART technology		X	X							2.2. Purchase equipment (1 laptop, 5 GPS) required for data collection with SMART technology	2.2 – 2.3 SMART data that includes number of commercial, recreational and sports fishers as well as number of patrols and number and types of illegal activities recorded.			100% completed. Its a learning process for the PHMR rangers so	
		2.3 Collect and analyze SMART data for the PHMR		X	X	X	X	X	X	X	X	2.3. With the use of tablets SMART data analyzed and used to guide management decisions					
<b>Objective 3. Strengthen financial sustainability mechanisms through implementation of alternative income generating programs</b>	Financial sustainability mechanisms strengthened through implementation of alternative income generating programs	3.1 Bird identification and wildlife tracking course completed for 10 tour guides, including 4 TIDE tour guides and 6 community guides.	3.1 Train 10 guides, 4 TIDE staff and 6 community guides in birding and wildlife tracking in order to allow the TIDE Tours/Ridge to Reef tour company to offer more tours for bird and wildlife enthusiasts									3.1 5 days training workshops are completed and 10 tour guides trained in Bird identification and wild life tracking by Birding Trainer in Belize and Earth Natives representative.	3.1 Attendance sheets, exams, photos, certificate	3.1 At least eight of ten guides complete training and hired in 3 birding group tours annually as measured by certificate of completion and registration with Tour Operator	3.1 Economic climate, Brexit, and US travel policy negatively impact travel and tourism originating from the US	100%	

Objectives	Output / Expected Result	Activity	Sub-activity	Time Unit- Quarters								Performance indicator	Sources and means of verification	Impact Indicator	Assumptions & risks	% of Completion	
				Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8						
<b>Objective 3. To strength TIDE's financial sustainability mechanisms through implementation of alternative income generating programs.</b>	TIDE Tours/Ridge to Reef accommodations expanded and improved to be able to host larger groups and host more diverse events	3.2 Upgrade accommodation facility and compound at TIDE's property in Big Falls so that it can be marketed on Airbnb.	3.2.1. Visitor accommodation compound in Big Falls is properly landscaped and maintained.	X	X								3.2. A person will be hired to renovate downstairs bathroom and bedroom, upgrade furniture inside and outside, 1 of 2 shower, sink and sewerage at TIDE's property in Big Falls as well as the road, entrance and parking area, to have the accommodation facility up to standard to be advertised as an Airbnb.	3.2 – 3.5 Contract, photos, quotations, Booking agents include the accommodation in their package to their customers	3.2 – 3.5 TIDE's income increased by 10% through booking of the Air B&B as recorded by financial audit	3.2 – 3.5 Assumption: weather permits the construction, hurricanes do not destroy facilities	100%
			3.2.2. Renovate downstairs bathroom and bedroom at Big Falls accommodation site	X	X												100%
			3.2.3. Upgrade road, entrance and parking area at TIDE's property in Big Falls	X	X												100%
			3.2.4. Upgrade furniture inside and outside TIDE's property in Big Falls	X	X												100%
			3.2.5. Upgrade 1 of 2 shower, sink and sewerage at TIDE's property in Big Falls.	X	X												100%
		3.3 Promote the facility on Airbnb	3.3.1 Promote the facility on Airbnb		X								3.3. Facility of TIDE registered on Airbnb as a hotel and follow up of subsequent registration and listing.				100%
		3.4 Upgrade accommodation facilities at TIDE's offices and protected areas - PHMR, PCNP and TPPL for visitors	3.4.1. Renovate bathroom at PHMR to allow for increase in visitation	X									3.4. A person will be hired to renovate bathroom at PHMR, complete 2 new cabañas, upgrade trails, purchase outdoor furniture (4 picnic tables), construct kitchen and bunkhouse at TPPL, construct outdoor bathroom with lights, purchase one set of furniture (1 table and 8 chairs), purchase and install 10 solar lights for outdoor structures, and 1 solar freezer for PCNP, Construct storage unit at TIDE office, to upgrade accommodation facilities and equipment to improve management at PHMR, PCNP and TPPL protected areas.				100%
			3.4.2. Complete 2 new cabanas at TPPL to increase accommodation and raise its standard	X				X									100%
			3.4.3. Construct outdoor bathroom with lights at PCNP	X													100%
			3.4.4. Purchase one set of furniture (1 table and 8 chairs) for PCNP	X													100%
			3.4.5. Purchase and install 10 solar lights for outdoor structures at PCNP	X													100%
			3.4.6. Purchase and install 1 solar freezer at PCNP	X													100%
			3.4.7. Upgrade trails on TIDE's Private Protected Lands (TPPL)					X									100%
			3.4.8. Purchase outdoor furniture (4 picnic tables) for TPPL	X													100%
			3.4.9. Construct kitchen at TPPL for overnight visitors	X													100%
			3.4.10. Construct bunkhouse at TPPL							X							100%
			3.4.11. Construct storage unit at TIDE office		X												100%
		3.5 Upgrade accommodation equipment at TIDE's offices and protected areas - PHMR, PCNP and TPPL for visitors	3.5.1. Purchase health and safety equipment		X								Purchase health and safety equipment				100%
			3.5.2. Purchase 10 life vests, 10 storage boxes and 10 brackets		X								Purchase 10 life vests, 10 storage boxes and 10 brackets				100%
			3.5.3. Purchase 1 set of dive boat mats		X								Purchase 1 set of dive boat mats				100%
3.5.4. Purchase 1 desktop computer	X										Purchase 1 desktop computer	100%					
3.5.5. Purchase 1 computer desk	X										Purchase 1 computer desk	100%					

Objectives	Output / Expected Result	Activity	Sub-activity	Time Unit- Quarters								Performance indicator	Sources and means of verification	Impact Indicator	Assumptions & risks	% of Completion	
				Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8						
	Travel agents market and recommend TIDE tours enthusiastically and consistently	3.6 Plan and implement familiarization tours for at least three different booking agencies, both domestic and international	3.6.1. Invest in reliable transportation for visitors by purchasing a mini bus	X									3.6. At least 3 familiarization tours to TIDE protected areas and tour sites in Toledo for 2 persons per tour completed per year resulting in 10% increase in reservations	3.6. Photos, materials, agenda, program, list of new contacts added to database	3.6. TIDE Tours' income is maintained based on 2016 audit or increased by 10%	3.6. Assumption: Travel agents attend familiarization tours	100%
			3.6.2. International familiarization tour (Company to be determined)		X	X						50%					
			3.6.3. Conduct Discover Corps familiarization tour		X							100%					
			3.6.4. Familiarization tour for Belizean Tour Operators		X							50%					
	TIDE is exposed to new and innovative ideas in travel companies and is able to implement in its own business	3.7 Participate in national and international travel conferences	3.7.1. Attend two international students travel shows to conduct marketing. One each year.	X		X		X					3.7. Staff attends at least 5 national and international tourism conferences per year (two international students travel shows, one each year; one educational travel conference; one in Belize Tourism Expo; BTB conference in Belize; Canada road show with BTB).	3.7 Conference agenda, notes, photos, business plan with new ideas learned from conferences	3.7 The number of reservations from booking agents increase by 20% resulting in 10% increase in income.	3.7 Booking agents make reservations for visitation within 6 months of attending conferences	completed(funds reallocated)
			3.7.2. Attend 1 Educational Travel Conference	X	X							100%					
			3.7.3. Participate in Belize Tourism Expo			X						100%					
			3.7.4. Attend BTB conference in Belize				X					100%					
			3.7.5. Attend Canada road show with BTB	X								100%					
			3.7.6. Participate in BTB road shows					X				N/A(reallocated)					
	Social media campaign is reenergized and market base is expanded through the implementation of a social media strategy.	3.8 Implement a social media strategy	3.8.1. Purchase smart phone	X								3.8 Likes and followers on social media platforms increased by 20% at the end of the project resulting in an additional 5% in bookings	3.8 Number of likes and followers on social media; number of increased bookings	3.8 Income to TIDE Tours increases by 3% from new markets	3.8 Potential customers follow TIDE Tours on social media and make reservations	100%	
			3.8.2. Implement online marketing training			X										100%	
	The profits from marine tour packages increase by acquiring equipment needed	3.9 Implement new marine tour packages	3.9.1. Repair boat					X				3.9 new equipment (boat engine, dive tanks and repair boat) allows TIDE Tours to keep marine tours in-house thereby retaining the income that would have been outsourced	3.9 new marine tour package added to marketing media; inventory of fixed assets includes boat, engine and dive tanks	3.9 Income from marine tours increased by at least 5%	3.9 Assumption: customers book marine tours; weather permits marine tours	100%	
			3.9.2. Purchase new boat engine				X				100%						
			3.9.3. Purchase dive tanks	X												100%	
Effective communication strategy developed and implemented in order to		4.1 Develop Terms of Reference (TOR) and hire Communications Manager		X							4.1 Communications Manager secured	4.1 Employment contract signed with Communications Manager	4.1 – 4.6 Number of individuals reached via social media is increased by 10% more, than the current most-reached social media post (11,300 reached) (4,000 clicks). Number of local stakeholders'	4.1 – 4.4 Assumption: Communications Manager is qualified to fill role.	100%		
		4.2 Complete communication strategy through consultations			X						4.2 At least 8 meetings to organize and completed with all TIDE staff, Management, and Board of Directors.	4.2 meeting minutes, pictures, sign in sheets			100%		
		4.3 launch communications strategy				X					4.3 Communication strategy presented to the Board of Directors for approval	4.3 Strategy document approved by the Board of directors			100%		



Objectives	Output / Expected Result	Activity	Sub-activity	Time Unit- Quarters								Performance indicator	Sources and means of verification	Impact Indicator	Assumptions & risks	% of Completion
				Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8					
<b>Objective 4: To develop and implemented an Effective communication strategy in order to communicate TIDE's impact to stakeholders, donors, and partners.</b>	implemented in order to communicate TIDE's impact to stakeholders, donors, and partners.	4.4 Develop new communications materials, including website and social media presence										4.4 Website and social media campaign launched with new website 200 copies of a new publication and 1 radio/TV show spots .	4.4 Website, social media, Communication materials	knowledge of TIDE increased by 10% as measured through before and after surveys.		100%
		4.5 Train all TIDE staff in communications techniques			X	X						4.5 Communications training completed and at least 15 staff trained	4.5 Attendance, agenda, minutes, photos	Number of individuals that visit TIDE's website or searched for TIDE increased by 15% from 2017 figures as measured using google analytics.	4.5 Staff is open to training	100%
		4.6 Conduct radio shows and TV spots.										4.6 At least 2 TV spots per year and 5 radio spots per year based on themes identify by the strategy	4.6 TV and radio receipts, activity reports		4.6 Target audience act on information received and are willing to change attitudes.	100%
	TIDE's donor base is expanded and donors remain committed	4.7 Design and launch individual donor program										4.7 Individual program launched with initial campaign and at least 2 focused campaigns per year	4.7 Campaigns, reports, donor income, donor database	4.7 number of committed individual donors increase by 10%	4.7 Assumption: Donors are committed to TIDE	50%
	High priority donors are supporting TIDE's work	4.8 Complete familiarization tour for high priority donors										4.8 At least 1 familiarization tour of TIDE's 3 protected areas per year.	4.8 Tour agenda, reports, photos	4.8 TIDE's funding sources are diversified	4.8 Assumptions: Donors are willing to participate in familiarization tour; weather permits tour	50%