

PROPOSAL FORMAT/RE-GRANTING PROJECTS

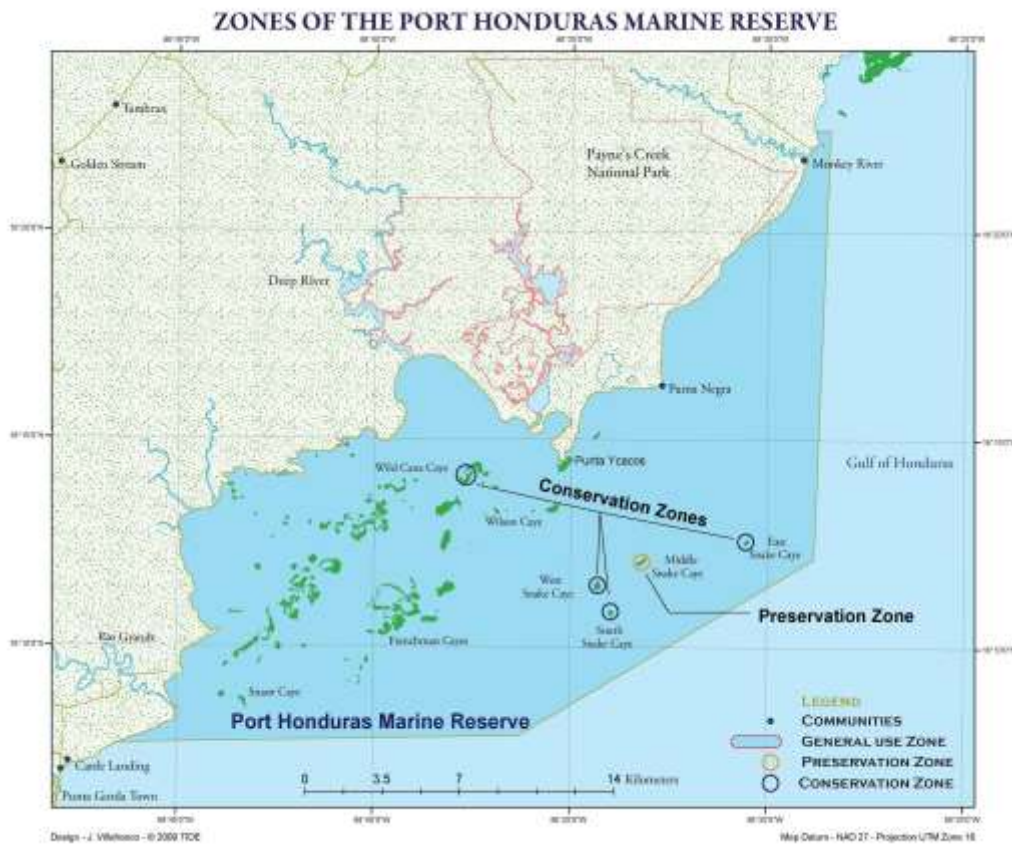
PART I: PROJECT SUMMARY

1. Project name (15 words maximum)

Strengthening financial sustainability initiatives to support management of Port Honduras Marine Reserve (PHMR)

2. Project location (Specify as much as possible: Protected Area, Municipality, town, Village, City)
Include a map of the area where the project will be developed.

Port Honduras Marine Reserve, Toledo District, Belize



3. Beneficiary target group *(Please specify as much as possible: name(s) of organization(s), number of members, age and gender distribution, main economic occupation, etc.)*

The project is focused on Port Honduras Marine Reserve. The main beneficiaries are the resource users of PHMR, which includes commercial Managed Access fishers. TIDE works with about 100 Managed Access fishers ranging from about 18 to 55 years in age including 10 fisher women. These fishers depend on the marine reserve for their livelihoods and are therefore most impacted by the decline in densities of commercial species. There are about 10 subsistence fishers who depend on the MPA to provide basic food for their families; these fishers use small dugout canoes (Called dory) with wooden paddles and homemade sails to travel to and from the MPA to fish. Their catch is to first provide food for their families but surpluses can be sold to provide a small income to their families since they don't have any other means of income. These fishers are not considered commercial fishers so they are not required to obtain Managed Access licenses or abide by the rules of Managed Access, but they must abide by the rules of the MPA. TIDE also works with about 10 recreational fishers who don't depend on the resources for their survival, but they fish only on weekends and about twice per month. Their catch is for home consumption only and they are not allowed to sell. These fishers don't require a Managed Access license but must abide by the rules of the MPA. Additional beneficiaries include the immediate families of the fishers; an average family in Belize is 4 so the immediate beneficiaries of commercial fishers are around 400 plus another 100 from the subsistence fishers. By extension, the communities of the fisher folks also benefit from the income that the fishers gain from fishing.

There are over 50 restaurants in Punta Gorda Town alone that depend on fishers to provide fish for consumers, so restaurant owners and their families are also considered beneficiaries. There are also others involved in the tourism industry within Toledo who will also benefit from this project as PHMR is a huge attraction for tourists and was listed as the most visited tourist attraction in Toledo in the last 5 years. There are about 10 tour operators in Toledo who conduct tours in PHMR. These operators employ at least 30 tour guides, increasing the number of dependents by 30 guides and 10-15 owners. It is estimated that PHMR provides upwards of \$1.5M of yearly profits for tourism providers in Toledo. Overall, it is estimated that there are over 1,000 people in Toledo that are the direct beneficiaries of this project; it is also estimated that nationally, tourism indirectly benefits 7 out of 10 people and fishing indirectly benefits 5 out of every 10 people, so we can estimate that PHMR provides benefits to over 3,000 persons or about 10% of the population of Toledo.

Furthermore, the financial sustainability component of this project, namely the merged Tour Company of TIDE Tours and Ridge to Reef Expeditions, will not be the sole beneficiaries of the tourism industry, but these initiatives will bring in additional tourists to the district expanding visitation and benefits to more families. The financial sustainability component will ultimately strengthen management of the MPA; this increased management

will benefit the district as a whole and especially the MPA buffer communities through food security, increased income and safeguarding natural resources and biodiversity.

4. Summary of project (100 words maximum)

The goal of the project is to strengthen the management of the Port Honduras Marine Reserve through targeted research, enforcement, and implementation of sustainable financial mechanisms. The funding will support TIDE's research and monitoring program, specifically through biodiversity monitoring activities and the completion of a habitat map of the MPA, which will allow TIDE to make better informed management decisions. The funding will also allow TIDE to continue enforcement and targeted surveillance efforts in the MPA to decrease illegal fishing, which threatens the important biodiversity in the MPA. Finally, managing protected areas effectively requires steady financial resources and one of TIDE's weaknesses is its high reliance on grant funding. This project will support TIDE's existing income generating programs, including TIDE Tours and Ridge to Reef, which will be merged into a single business in terms of their operations and financial management by the end of this project. The increased profits from the Tour Company will contribute to the strengthening of the management of the MPA.

5. Applicant organization/contact information

Name of organization applying Toledo Institute for Development and Environment

Summarize your organization's mission (maximum 75 words)

TIDE's vision is for "Toledo's healthy ecosystems support biodiversity, communities and sustainable development," and the specific mission is to "To engage stakeholders in the sustainable management of natural resources within the Maya Mountain Marine Corridor of southern Belize for the benefit of all." TIDE supports both marine and terrestrial conservation efforts and uses solid research and engagement with stakeholders to make protected area management decisions.

6. Duration of project

Two years- August 2017- July 2019

7. Project continuity

- a) Is this proposal a continuity of a previous project granted by Oak Foundation? Yes
- b) What was the previous amount granted? \$581,500
- c) Briefly indicate the specific achievements/results obtained to date with the **previous support**
(Add rows as necessary)

Objective 1: *To increase the cost effectiveness of the management of PHMR.*

Through the support from the previous Oak Foundation grant, cost effectiveness of the management of PHMR has been strengthened. This is shown specifically through TIDE's use of SMART technology, which has allowed it to implement more targeted enforcement patrols thereby reducing fuel costs by 33%. TIDE's strong partnership with the Belize Coast Guard has also contributed to both cost effectiveness and management effectiveness as it has allowed TIDE to lessen the human

resources pressure on the rangers and to improve the efficiency of the patrols. TIDE has also continued its regional partnerships with Honduras and Guatemala, which are incredibly important to protecting the shared ecosystem. These partnerships include information sharing and fisherman exchanges, which contribute to building environmental stewardship throughout the region, which lessens incidences of illegal activity.

Objective 2: To strengthen TIDE's financial sustainability, governance and internal communication. TIDE's financial sustainability initiative, TIDE tours (Now amalgamated with Ridge-to-Reef Expeditions), includes three major services that are categorized as day tours, vacation packages and Ridge to Reef Expeditions. The over twenty day tours feature trips usually for a six to eight-hour duration within the Toledo District. These tours range from reef snorkeling on the coral reef to jungle adventures. The vacation packages highlight the best of Belize and are catered to different target markets. They include packages for birders, fly fishers, and families among others. They range from 4 days to 7 days in duration, which is the average length of stay for vacationers in Belize.

Ridge to Reef expeditions focuses solely on educational themed groups. Visitors such as students groups and individuals coming to Belize to learn about conservation, life skills and study abroad programs would book through this category. Other services offered by TIDE Tours include event planning, charters, equipment rental and booking of local airline tickets and hotels. TIDE Tours has generated a total of US \$800,000 in income the last 5 years. Income from these initiatives has provided TIDE with more than \$60,000 in unrestricted funding in 2016. TIDE is also working with the Board of Directors to be more engaged with fundraising, which has led to the creation of a fundraising sub-committee. This represents a huge cultural shift for the Board, which has traditionally shied away from fundraising.

Objective 3: To maintain the biodiversity and ecosystem health of PHMR.

Densities of commercial species have been declining in PHMR since 2012, which is obviously a concerning trend. TIDE recently completed a research study that looked at indicators for conch maturity and have recommended that lip thickness be included into fisheries policies guiding the harvest of conch. Lobster densities have increased in both general use and replenishment zones, which is believed to be connected to the implementation of Managed Access, which has decreased the number on unlicensed users in the MPA.

Objective 4: To contribute to the effective national implementation of Managed Access.

Managed Access was piloted in PHMR in 2011 and since that initial year fishing licenses have decreased to 117, which is less than half of the pre-2011 number. This is positive because it is allowing fishers that truly derive their livelihoods from the MPA to benefit more fully from the marine resources in the MPA. Approximately 50 illegal fishermen have had their licenses from Port Honduras revoked as well, which has also contributed to an increase in catch for Managed Access licensed fishers. TIDE's Managed Access team has held three Managed Access Forums in 2015 and plans to hold a fourth before the end of 2017. These forums have seen an increase in attendance, which is linked to the Managed Access Director's good relationship with the fisherfolk and fisherfolks' interest in sustainable fishing. This relationship is incredibly important and will help TIDE to implement management decisions in the future.

TIDE has begun working on closing the loophole regarding recreational fishers and has developed a project proposal to begin advocating for the Fisheries Resources Bill, which would include specific

policies about the rights of recreational fishers and would more closely align national policy with Managed Access regulations.

Objective 5: To enhance the capacity of teachers in Toledo to teach environmental science.

The Freshwater Cup continues to be one of TIDE's most successful programs and TIDE has recently received funding from the United States Embassy to Belize to continue the program. In 2015, more than thirty schools participated, which resulted in more than 40 environmental projects. TIDE worked with teachers to incorporate environmental education into the curriculum and helped to develop a book of lessons plans to be used by teachers throughout the district and country. A huge accomplishment for TIDE has been winning the Energy Globe Award (Youth Category) for engagement of adolescents in conservation through our Freshwater Cup football tournament.

Objective 6: To provide increased opportunities for fishers and their children to engage in non-extractive economic activities.

In 2015 TIDE worked with three fishing communities to help establish alternative microenterprises to lessen fishing pressure in the MPA. These microenterprises, that included fruit drying, vegetable gardening, craft making, coconut fudge production and conch shell jewelry as well as a restaurant in Punta Negra, were funded by the MAR Fund through KfW as well as the OAK Foundation. TIDE also works with local tour guides to build their capacity and skills within the tourist industry and has organized tour guide trainings for many individuals from Punta Negra and Monkey River. TIDE has also recently won a grant from the US Embassy to Belize to run skill building trainings for the youth of Punta Gorda and the surrounding villages. These trainings will focus on skills that are needed for employment.

PART II: PROJECT DESCRIPTION

8. Introduction (350 words maximum)

The Port Honduras Marine Reserve is a part of the Mesoamerican Reef system and supports important biodiversity and habitats for the reef system as a whole. The ecosystems within PHMR are home to several commercially important species, including the queen conch, Caribbean lobster, and sea cucumber, which makes PHMR not only important ecologically, but economically as well. The Toledo Institute of Development and Environment has been co-managing the MPA with the Fisheries Department since 2000 and led the pilot of Managed Access, which ultimately served as a model of the national roll out in 2015. TIDE uses a holistic approach in managing PHMR, and the management plan includes resource protection, research and monitoring, environmental education and sustainable livelihoods development. The project will support all of these programs in some form, though the focus will be on resource protection, research and monitoring and governance and management in the form of financial sustainability initiatives. TIDE's heavy reliance on grants has the potential to interfere with its successful management of the MPA as funding priorities change often and donor regulations sometimes do not allow funding to be spent on important budget items such as fuel and salaries. The project will significantly strengthen TIDE's financial sustainability initiatives, which will allow TIDE to more effectively and efficiently manage the MPA and provide consistent financing for all crucial management activities, including enforcement and biodiversity monitoring, which are also

components of this project. The TIDE Tours/Ridge to Reef tour company, through the generous support from the Oak Foundation, has been working with NESsT to develop a thorough and achievable business plan, which is being used as a guide for the development of many of the project activities. The project will also strengthen TIDE's communications through the development of a communications strategy and through capacity building for TIDE staff in communication techniques. Communications has so far been neglected by TIDE, which has affected its ability to effectively communicate its impact on the community and the Protected Area Systems as a whole. By strengthening communications TIDE will be able to strengthen its existing partnership and form new partnerships, which will contribute to the sustainable management of the MPA. Effective communications will also strengthen the financial initiatives as TIDE will be able to better communicate to new and existing donors about the organization's strengths and the continuing need for support.

9. Justification

a) Identification of the main threats, needs and/or issues in the area (*200 words maximum*)

Two of TIDE core needs that are currently lacking are financial sustainability and communications. TIDE currently depends on grants for the majority of its funding, and with two major donors pulling out of Belize in the next two years TIDE needs to look for alternative sources of funding. Finding funding for operational costs, including overhead and salaries, is always difficult so TIDE would like to strengthen its financial initiatives in order to develop and maintain a source of unrestricted funding. Finally, communications has been identified as one of TIDE's weaknesses in the most recent institutional assessment. TIDE has accomplished many things in the past year, but has been unable to effectively communicate its impact to donors and stakeholders. Effective communication will help TIDE to engage deeper with stakeholders and develop more positive relationships. Poor communications also has an effect on TIDE's financial initiatives, which have suffered due to lack of marketing and off mark communications.

Climate change and unsustainable fishing practices are the two biggest threats to the Port Honduras Marine Reserve. Important commercial species, such as conch and sea cucumber have been identified as declining despite efforts by the Fisheries Department to limit the catch season. Loopholes in the current fisheries policies have allowed for people to take from the reserve without a fishing license if they are recreational fishing. There is also resistance to the expansion of replenishment zones, which would have a hugely positive impact on the densities of commercial species.

b) Project relevance for addressing these threats, needs and/or issues

The project focuses heavily on strengthening financial sustainability initiatives, which will in turn contribute to strengthening management of the MPA as a whole. TIDE Tours/Ridge to Reef has had major successes in the past years, but needs strategic investments in infrastructure and capacity in order to increase bookings and therefore profits. The merged tour company will provide a steady source of income to TIDE, which will enhance its management of the MPA. Grant funding is often restricted, which limits the human resource and administrative potential of TIDE's activities. The newly merged tour company will help TIDE to overcome this challenge and expand and deepen its conservation efforts. The newly merged tour company is using the business plan that they developed with NESsT to guide the implementation and strengthening of the financial initiatives. Part of this

business plan refers to upgrading infrastructure such as signage, additional botanical and medicinal trails, cabin on TIDE's Private Protected Lands, visitor's facility/TIDE tours office and camping grounds so that the tour company can increase its booking capacity and improve the quality of accommodation being offered. Another important strategy will be building capacity of the tour company staff to better manage the company finances and the capacity of the tour guides to offer innovative tour packages to the growing wildlife and nature enthusiasts market. Marketing is also an important component of the business plan and the project includes networking and marketing opportunities as key activities. These activities will help the tour company staff to make important connections and identify new markets as well as learn about innovative ideas that could increase sales.

The timeline of the project is particularly fortuitous as it is the 20th anniversary of TIDE. TIDE will capitalize on this during the first year of the project and many of the communications efforts will be targeted toward celebrating the 20th anniversary and communicating TIDE two decade long impact in Toledo. By using effective communication techniques TIDE should be able to translate its many successful activities into interested donors and therefore more successful activities. Communications will also help TIDE to strengthen its relationships with its current stakeholders and donors, which will in turn increase support for its conservations efforts and improve the management of the MPA as a whole.

10. Site characterization

- a) Total area of MPA: 100,000 acres
- b) Brief history of conservation efforts regarding the topic of this proposal at this location (5 years), please include key successes and failures, current barriers to conservation and efforts that have been made to overcome these barriers (*350 words maximum*)

TIDE began co-managing the MPA with the Fisheries Department in 2000. TIDE prioritizes holistic landscape level strategies and works to achieve conservation goals through strategic research and engagement with stakeholders and the community. In the past 5 years some key successes include:

1. Managed Access

TIDE piloted Managed Access in 2011 and in 2015 TIDE and its partners worked with the Government of Belize to begin the national roll out of Managed Access, which will go a long way to protect the Mesoamerican Reef and its resources. Managed Access has resulted in increases in lobster and finfish populations, which is believed to be due to the decrease in non-Belizean fishers and non-licensed fishers. During a consultation in late 2015, fisherman expressed overall satisfaction with Managed Access and attendance at Managed Access Forums has continued to increase.

2. Biodiversity Monitoring and Adaptive Management Framework (AMF)

TIDE has continued its biodiversity monitoring of key commercial species, which informs its own management decisions and is shared with key policy makers in order to advocate for adjusted fisheries policies. The data is also shared with the Belize Fisheries Science Working Group, of which TIDE is a member. This group has developed the Adaptive Management Framework, which is a tool that MPA managers can use to aggregate different sources of data and make the best management decision based on the individual scenario. The AMF uses research data from TIDE's research program that are inserted into a computer-based model. Manipulating the different variables such as fishing effort, changes in fish stock, closed season times, fish sizes etc. allow the model to predict impacts on the

fishery and recommend management decisions. TIDE does not yet have this tool, but its Science Director (to be determined by October 2017) will be a part of the team of scientists that will be using this tool across the country of Belize so TIDE will be in the lead with implementation of this new tool.

Despite the roll out of Managed Access, several commercial species, including conch and sea cucumber, are still in decline. Though there are fisheries policies in place, there is a loophole that allows for recreational fishers to fish in the MPA, which could potentially be contributing to the declining commercial species population. TIDE has also determined that conch shell lip thickness is a better indicator of size maturity than the current indicator included in fisheries policy. In order to improve fisheries management at the local level, policies at the national level need to change.

c) Applicant organization history in working at this site (if applicable) (200 words maximum)

TIDE was founded in 1997 by volunteers in Punta Gorda who were passionate about marine life and were looking to protect the resources that many people in the district depended on. TIDE began co-managing PHMR with the Fisheries Department in 2000. TIDE is leading conservation organization both within the Toledo District and nationally. In 2011, TIDE led the pilot of Managed Access in PHMR and many of the successes and lessons learned contributed to the implementation of Managed Access. TIDE has a thriving Research and Monitoring Program, which has led the collection and analysis of biodiversity data for the past ten years. TIDE is a member of the Belize Fisheries Science Working Group, which shares data and makes recommendations for improved fisheries management and policies in Belize. They also developed the management tool, Adaptive Management Framework, which TIDE will begin using as a management tool in 2017.

11. Objectives

State the general and specific objectives.

- **General objective**

TIDE is able to effectively and sustainably manage Port Honduras Marine Reserve through targeted research, engagement with stakeholders in the form of Managed Access, and financial sustainability mechanisms.

- **Specific objectives (300 words maximum)**

Objective 1: Commercially important fisheries, including conch, lobster, sea cucumber, and at least 3 finfish species monitored and their habitats mapped to inform Adaptive Management Framework (AMF)

Objective 2: Fishing pressure in the PHMR is reduced through increased surveillance and enforcement presence in the MPA

Objective 3: To strengthen TIDE's financial sustainability mechanisms through implementation of alternative income generating programs

Objective 4: Effective communication strategy developed and implemented in order to communicate TIDE's impact to stakeholders, donors, and partners.

12. Project description

One of the most recent fisheries management tool to be implemented in Belize is the Adaptive Management Framework (AMF). The tool was in development for the past couple of years and plans are in place to start implementation in 2017. The Belize Fisheries Department (BFD) along with international partners Environmental Defense Fund, Wildlife Conservation Society and The Nature Conservancy as well as local partners TIDE, Belize Audubon Society and Southern Environmental Alliance (To a lesser extent) are leading this initiative. Within the scope of this project, TIDE will contribute to the AMF in Belize by completing a habitat map for PHMR that was started in 2015 through the KfW funded MAR Fund project. Only a portion of the MPA was mapped under the KfW project, but for AMF to work effectively the entire MAP should be mapped. The various habitats in PHMR will be mapped using remote sensing satellite images and further ground verification exercises to determine what the various types of habitats are that show on the satellite image. Based on the completed portion of the MPA habitat map, TIDE was able to identify coral reefs, sand, sea grass, mud and mixed habitats. Having a completed map will allow TIDE to determine the area of the various habitats that can support various fisheries. This can also be used to establish sustainable catch limits as well. Community researchers will conduct at least 20 dives to verify the habitats, these dives will be done over a period of about 1 week. In addition to the habitat map, community researchers led by TIDE's Biologist will collect data on 3 major commercial fish stocks – conch, lobster and sea cucumber underwater (Fisheries independent) as well as at landing sites (Fisheries dependent). The AMF will be able to make management recommendations and projections based on the information it receives and is meant to be an interactive tool where fishers can create various scenarios and query the tool to determine the management recommendations based on the various scenarios created. Currently, the fisheries department is leading some training sessions on the AMF tool with the intention to start implementation by the end of 2017. Management of the site would have to be open to adapt to the various recommendations made by the tool to ensure effective management of the site. Information collected by the tool will be shared with fishers via fishers' forums.

TIDE will continue to conduct patrols and surveillance in the PHMR to deter illegal activities and to protect the resources by making necessary arrests etc. Rangers will conduct at least 600 patrols per year inside and outside of the marine reserve, during the daytime and also at night. Over the years, majority of the arrests in PHMR occurred late at night or before daybreak in the mornings. Using the Spatial Monitoring And Reporting Tool (SMART), this type of information is captured and allows rangers to plan more effective patrols resulting in being more cost effective. In this project, rangers will be equipped with GPS, flashlights, spotlights, raincoats, fuel containers, uniforms and supplies (Rations) to better conduct their very important duties. Information from the SMART will be stored in a database on a specific computer where that data will be analyzed and reported back to the rangers. The Managed Access Officer, who will also perform GIS work will analyze the data and generate such reports.

Financial sustainability is quickly becoming one of TIDE's most important programs and makes up a large portion of this project. In 2006 TIDE formulated its first business plan,

unfortunately, TIDE could not raise the necessary funds to immediately implement the plan in its entirety; however, TIDE continued to gradually invest in TIDE Tours over the years. The investments thus far included purchasing a used mini van and hiring an in-house tour guide in 2008 to earn higher income from terrestrial tours and started the Ridge-to-Reef (R2R) expedition program in 2012 with feasibility studies, business plans, international marketing, investment in equipment and infrastructure and hiring a marketing manager for R2R. The first expedition was done in 2014 with a group of 8 international students from the UK, USA and Belize. In 2016, the OAK Foundation funded a consultancy to develop business plans for several organizations in Belize including TIDE. One of the main recommendations in the plan is to continue investment in TIDE Tours combining TIDE Tours and R2R into one company to maximize marketing opportunities and tours. In 2016, TIDE Tours and R2R together earned a total profit of over US \$60,000, equivalent to about 10% of TIDE's annual budgetary needs. There is great potential to increase this income to at least 20% of TIDE's annual budget through additional investments in the following areas;

- Targeted international and local marketing through social media platforms, travel shows, road shows and familiarization tours for booking agents. TIDE Tours marketing manager and a volunteer from the USA will participate in 2 annual international educational travel shows/conferences in the USA including the annual Educational Travel Conference and the World Youth Student and Education conference to market both TIDE Tours and R2R expedition. These shows require traveling to the USA, setting up booth displays, talking to and meeting with booking agents and following up with emails. In Belize, the managers will participate in the annual Belize Tourism Expo (BTEX) and the annual tourism conference hosted by the Belize Tourism Board (BTB). The BTB conducts 4 road shows per year in various countries in Europe, North and South America. The Marketing Manager along with a past volunteer from the USA will participate in the Canada Road Show, BTB funds the ground transportation and venue costs, but participants are expected to cover their flights, hotels and per diem. TIDE will fund the marketing manager's flight from Belize, the flight for the volunteer from the USA and hotel and per diem for both participants. TIDE will not attend any of the other road shows with BTB; however, TIDE will pay the BTB to market TIDE Tours at the other 3 annual shows.
- Investment in equipment and infrastructure (Based on recommendations from expedition groups). These investments are necessary to upgrade all of TIDE's visitor's facilities not only to keep existing customers, but also to tap into new markets. TIDE's property in Big Falls, a 4-bedrooms 2-bathrooms structure has great potential to become listed on Airbnb as a destination for birders and nature-based tourism, but it needs to meet certain standards in order to be listed. TIDE will invest in upgrading the structure and the compound around it by properly landscaping the area, repairing 2 bathrooms including sink and sewerage, upgrading the access road to the site and procuring indoor and outdoor furniture. TIDE's ranger station on Abalone Caye needs a second bathroom facility to accommodate visitors. Currently, there is only one bathroom designated for rangers and TIDE staff; however, visitors also have to use this bathroom making it overcrowded many times. A second bathroom will relieve the overcrowding but will also provide space for the Belize Coast Guard officers who will occupy the

downstairs of the ranger station in the future. The bathroom will be constructed with treated wood and connected to the existing treatment facility that was designed for 2 bathrooms. At the Payne's Creek National Park, TIDE will invest in upgrading bathrooms, provide outdoor solar lights, outdoor furniture and purchase a solar freezer, these investments will be done with counterpart funds. TIDE also owns and manages over 9,000 hectares of private protected lands that it obtained through a Debt for Nature Swap program with the government of Belize and the US Government. The lands are located in Toledo District along the Rio Grande River and are held in perpetual trust for the government and people of Belize. A Debt for Nature Swap agreement exists that provides guidelines on the use to the lands, these guidelines include some restrictions. At TIDE's Private Protected Lands (TPPL), TIDE will invest in a kitchen attached to an existing screened dining area, construction of 2 cabanas that will sleep 8 people, enhancing the existing hiking trail by widening the path and filling low-lying areas, outdoor and indoor furniture and a bunk house that can sleep an additional 8 people, the bunkhouse will be funded by counterpart funds, but the other investments will be funded by this project. The proposed investments are within the recommended guidelines of the DNS agreement. At the TIDE office, there is a need to invest in a storage unit for TIDE Tours in addition to purchasing storage boxes, life vests, brackets, dive mat, a desktop computer and a computer desk.

- Capacity building for TIDE Tours management staff will be done in financial management through the use of quick books software as counterpart. TIDE Tours will also hire an expert to train 10 tour guides in Toledo in bird identification and tracking. This will allow TIDE Tours to tap into new markets for serious birders. From past research and monitoring TIDE has identified over 200 bird species in the protected areas TIDE manages in the Toledo District, many of these birds are migratory species that travel from North America to spend winter in the Payne's Creek National Park and other parts of the district. This new tour package will be marketed not just for TIDE's protected areas, but also for other parts of the district. The benefits will not be for TIDE only, but other tour operators can also use the trained tour guides to sell their own products bringing economic opportunities for the entire district and by extension the country.
- The addition of a marine tour package hosted entirely by TIDE Tours. Currently, TIDE Tours outsource all of its marine tours to other marine tour operators that have boats and marine tour guides. Outsourcing this product is resulting in loss of revenues of over USD \$10,000/year coupled with current profits of another USD \$10,000, TIDE Tours can be earning up to \$20,000 in profits per year if the marine tours were done in-house. For TIDE to retain the full earnings, it will need to invest in a boat, an engine and some dive gears. This project will fund the repair of an existing boat owned by TIDE, purchasing of a new boat engine and licensing and insurance of the boat. Counterpart funds will be used to purchase the dive tanks and TIDE has enough snorkeling gears already.

Finally, TIDE must make a conscious effort to enhance its communications program. TIDE does a vast amount of great work; however, it does very little in communicating its work. Communication is extremely important, not only to share information with the public, but also

in fundraising. With investments from this project, TIDE will hire the services of a communications expert to develop a communications strategy and action plan. TIDE will also hire a communications manager to set up a structure for the implementation of the plan as well as lead the implementation. New communications and promotional materials will be developed, an Individual-donor program strategy will be created as well as radio and TV clips to be aired throughout the year. Once these are completed, the communications strategy will be officially launched during a public event such as the TIDE's annual fish festival.

The details of the objectives and specific activities are outlined below and are tied to the budget using the same activity numbers for ease of reference.

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)

Results:

- Report on status of commercial species generated with specific management recommendations.
- AMF tool contributes to improved fisheries management decisions for PHMR.

Activities:

- 1.1. Complete quadrant 3 of 4 of the habitat maps for the PHMR by dives.
- 1.2. Geo-reference points from different zones of the PHMR
- 1.3. Collect data to complete 8 biodiversity monitoring dives from commercial species (lobster, conch, sea cucumber and 5 fin fish species)
- 1.4. Organize 4 Managed access forums

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

Results:

- Fishing pressures in PHMR are reduced through increased surveillance and enforcement presence in the MPA

Activities:

- 2.1. Conduct at least 600 daily patrols in PHMR
- 2.2. Purchase equipment required for used of SMART technology and ranger patrols including: Food and cleaning supplies for ranger house, boat spotlights, flashlights, fuel containers, ranger uniforms, raincoats, life vests and night vision binoculars.
- 2.3. Collect and analyze SMART data for the PHMR

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

Results:

- Financial sustainability mechanisms strengthened through implementation of alternative income generating programs
- TIDE Tours/Ridge to Reef accommodations expanded and improved to be able to host larger groups and host more diverse event
- Travel agents market and recommend TIDE tours enthusiastically and consistently
- TIDE is exposed to new and innovative ideas in travel companies and is able to implement in its own business
- Social media campaign is reenergized and market base is expanded through the implementation of a social media strategy.
- The profits from marine tour packages increase by acquiring equipment needed

Activities:

- 3.1 Bird identification and wildlife tracking course completed for 10 tour guides, including 4 TIDE tour guides and 6 community guides.
- 3.1.1. 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
- 3.2. Upgrade accommodation facility and compound at TIDE's property in Big Falls so that it can be marketed on Airbnb (<https://www.airbnb.com>).
- 3.2.1. Visitor accommodation compound in Big Falls is properly landscaped and maintained.
- 3.2.2. Renovate downstairs bathroom and bedroom at Big Falls accommodation site
- 3.2.3. Upgrade road, entrance and parking area at TIDE's property in Big Falls
- 3.2.4. Upgrade furniture inside and outside TIDE's property in Big Falls
- 3.2.5. Upgrade 1 of 2 shower, sink and sewerage at TIDE's property in Big Falls.
- 3.2.6. Promote the facility on Airbnb
- 3.3. Promote the facility on Airbnb in (<https://www.airbnb.com>)
- 3.4. Upgrade accommodation facilities and equipment 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
- 3.4.2. Complete 2 new cabanas at TPPL to increase accommodation and raise its standard
- 3.4.3. Construct outdoor bathroom with lights at PCNP
- 3.4.4. Purchase one set of furniture (1 table and 8 chairs) for PCNP
- 3.4.5. Purchase and install 10 solar lights for outdoor structures at PCNP
- 3.4.6. Purchase and install 1 solar freezer at PCNP

- 3.4.7. Upgrade trails on TIDE's Private Protected Lands (TPPL)
- 3.4.8. Purchase outdoor furniture (4 picnic tables) for TPPL
- 3.4.9. Construct kitchen at TPPL for overnight visitors
- 3.4.10. Construct bunkhouse at TPPL
- 3.4.11. Construct storage unit at TIDE office
- 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
 - 3.5.2. Purchase 10 life vests, 10 storage boxes and 10 brackets
 - 3.5.3. Purchase 1 set of dive boat mats
 - 3.5.4. Purchase 1 desktop computer
 - 3.5.5. Purchase 1 computer desk
- 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
 - 3.6.2. International familiarization tour (Company to be determined)
 - 3.6.3. Conduct Discover Corps familiarization tour
 - 3.6.4. Familiarization tour for Belizean Tour Operators
- 3.7. Participate in national and international travel conferences
 - 3.7.1. Attend two international students travel shows to conduct marketing. One each year.
 - 3.7.2. Attend 1 Educational Travel Conference
 - 3.7.3. Participate in Belize Tourism Expo
 - 3.7.4. Attend BTB conference in Belize
 - 3.7.5. Attend Canada road show with BTB
 - 3.7.6. Participate in BTB road shows
- 3.8. Implement social media strategy
 - 3.8.1. Purchase smart phone
 - 3.8.2. Implement online marketing training
- 3.9. Implement new marine tour packages
 - 3.9.1. Repair boat
 - 3.9.2. Purchase new boat engine
 - 3.9.3. Purchase dive tanks
- 4. **Objective 4:** To develop and implemented an Effective communication strategy in order to communicate TIDE's impact to stakeholders, donors, and partners.

Results:

- Effective communication strategy developed and implemented in order to communicate TIDE's impact to stakeholders, donors, and partners.
- TIDE's donor base is expanded and donors remain committed
- High priority donors are supporting TIDE's work

Activities

- 4.1. Develop Terms of Reference (TOR) and hire Communications Manager
 - 4.1.1. Advertise vacancy for communications manager
- 4.2. Complete communication strategy through consultations
- 4.3. Launch communications strategy
- 4.4. Develop new communications materials, including website and social media presence
- 4.5. Train all TIDE staff in communications techniques
- 4.6. Conduct radio shows and TV spots
- 4.7. Design and launch individual donor program
- 4.8. Complete familiarization tour for high priority donors

13. Project description Project Development Table

See Attached

14. Monitoring and evaluation (500 words maximum)

Each objective and accompanying activity has monitoring and evaluation mechanisms that are included in the logical framework/development table as means of verification and an indication of the percentage completion of each activity. The Executive Director will work with the project manager to ensure that the activities are being implemented on schedule. Since this is a two-year project there will also be a mid-project review in order to assess whether the project is on track and what adjustments need to be made, if any.

The **first objective** will be measured against a biological indicator. The indicator is as follows: by the end of the project commercial species densities will at least be maintained at pre-project levels or have increased due to targeted research and increased compliance. In 2016 conch density average 10 conch per hectare which is well below the recommended 88 conch per hectare; lobsters were recorded at 5 lobster/hour at the end of 2016 signifying a decrease from over 10/hour in the previous 2 years. Preliminary results of 2017 indicate that this has significantly increased but a full report will be done later in 2017. Mean sea cucumber density in 2016 was at 45 individuals per hectare. This low density has been the same since 2014 (two years after the sea cucumber fishery officially opened). The AMF will also be useful in monitoring this objective. The **second objective** will be measured using a social indicator. The indicator is as follows: the project will be successful if there is an observed increase in compliance with MPA regulations. This will be verified by decrease in ranger observations of illegal activity, decrease in seizure of illegal equipment, and observations from the Managed Access Forums. The use of the spatial monitoring tool will provide critical information on recurrent illegalities. Since the number of licensed fishers is known, TIDE can easily calculate compliance based on the number of licensed fishers that are arrested or warned for engaging in illegal activities. The number of arrests cannot be used to measure the effectiveness of law enforcement, but the percentage of compliant fishers with legitimate licenses can. The **third objective** is focused on financial sustainability and the indicator used for this objective is increased number of bookings and increased profits. The **final objective** is focused on TIDE's communication strategy. The indicator for this will be increased individual donors, increased income, and increased visibility for TIDE as a whole. In order to measure the increased visibility the project manager will analyze the number of new views and shares of the website, blog posts, Facebook posts, other social media posts, and marketing campaigns. In order to measure increased individual donors the project manager will track both the number of donations from new individual donors. The project manager will also track donations from current and former donors in order to assess whether the current donors are donating larger amounts and if more former donors are donating again. At the end of the first year the project manager will send a survey out to all donors in order to better understand what motivated their donation and donation amount. The data from this survey will help TIDE to tailor its fundraising campaigns. The number of existing donors will be used as a baseline to measure success.

Finally, at the end of each year the project manager will review all project activities in order to identify whether they were completed and what were the lessons learned that could be used in future projects to strengthen implementation. This will be especially important to the continuation of the financial sustainability initiatives. The tour company will also continue to get feedback from their tourism clients and Ridge to Reef participants in order to better understand how the consumer is benefiting from the investments.

15. Project Sustainability (300 words maximum)

Sustainability is required for all aspects of the management and can be divided as follows: capacity building for staff and board to excel in their performance and become more effective, the sustainable exploitation of natural resources using sustainable harvesting and management plans, protection of ecosystems and species that sustain commercial fisheries through mechanisms such as replenishment zones, closed seasons, size limits and gear management, raising awareness of the importance of sustainable management, building stewardship of the resources by resource users and of course financial sustainability. Currently, TIDE is 90% reliant on grants from donors and generates only about 10% of what it needs to operate; this project seeks to increase earned income to 20% thereby decreasing donor dependence. Earned income provides the necessary unrestricted funds needed for optimum operational and administrative costs including management staff salaries that are extremely difficult to fundraise for. The scope of this project focuses heavily on financial sustainability, which will contribute to the successful management of the MPA and the continuation of the activities included in this project proposal. Biodiversity monitoring and enforcement and surveillance of the MPA will always be a part of managing the MPA and as such TIDE needs a steady income in order to avoid an over reliance on grants, which can be unpredictable and dependent on the political and economic climate. TIDE is also conscious of its spending and is looking for way to decrease costs and run the MPA more efficiently so to be able to use its funding wisely. Some ways that TIDE does this specifically is through the use of SMART data, which ensures that patrols are targeting areas that are known to have illegal activity. TIDE's commitment to building partnerships is another sustainability mechanism that TIDE relies on. TIDE currently has an agreement with the Belize Coast Guard and four Coast Guards members are at the TIDE ranger stations at all times. TIDE also works with the Ministry of Education and the Toledo school principals as part of the Environmental Education program. By working with these groups TIDE is able to lessen the human resources burden of TIDE's Education Program and ensure the sustainability of TIDE's successful environmental education programs. These programs have been shown to be effective in increasing responsible stewardship of the MPA. Finally, the fourth objective of the project, which is focused on communications, will be incredibly important to the sustainability of the project as a whole. The communications strategy will help TIDE to more effectively communicate the impact of its programs to potential donors. The communication strategy will also strengthen TIDE's relationship with community stakeholders whose support is crucial for continued sustainability of all of TIDE's programs.

16. National and/or Regional relation/linkage (300 words maximum)

Please indicate with what national and/or regional priorities, strategies, policies and/or plans this project aligns with or responds to.

Objective 1 and 2 of the project are aligned with the National Protected Areas Policy and System Plan (NPAPSP, 2005), which has the overall goal of "*promot[ing] the sustainable use of Belize's protected areas by educating and encouraging resource users and the general public to properly conserve the biological diversity contained in these areas in order to maintain and enhance the quality of life for all*" (NPAPSP, 2005). Enforcement efforts are an important mechanism that TIDE uses to encourage resource users and the general public are properly adhering to all policies governing the use of the

MPA. Biodiversity monitoring also contributes to this goal as it allows TIDE to make recommendations and improved management decisions that maintain the commercial species in the MPA, which are an important source of livelihoods.

Objective 1 and 2 are also aligned with the following conventions: Convention on Biological Biodiversity and the Convention for the Protection and Development of the Marine Environment of the Wider Caribbean Region. PHMR is an important part of the national protected area system and TIDE's conservation efforts contribute to Belize's commitments to both of these conventions.

Financial sustainability has been identified in TIDE's institutional assessment as an area that needs to be strengthened. It is also included in both the organizational strategic plan as a priority area and the PHMR management plan. TIDE currently depends on outside grants to fund the majority of its activities and financial initiatives will go a long way to improve the efficiency and effectiveness of managing the MPA. Other protected areas nationally face similar challenges and financial sustainability is a main priority of the Protected Areas Conservation Trust, which collects the protected areas fees from all foreigners exiting Belize. The PACT fees are insufficient to support all of the Protected Areas and as such protected area managers need to search out other sources of income that will sustain these important PAs.

17. Cooperation (max 350 words)

TIDE has a close working relationship with both the Belize Fisheries Department and the Belize Coast Guard and these relationships will be strengthened throughout the project. The relationship with the Belize Coast Guard is especially important for this project as it allows the TIDE rangers to do patrols more efficiently and effectively and to make arrests should they find a non-compliant fisherman. The Belize Fisheries Department is also an incredibly important partner as they co-manage PHMR with TIDE and are involved in the development of the management plan for the MPA. Related to TIDE's Science Program TIDE also is a member of the Belize Fisheries Science Working Group, which shares research and exchanges lessons learned in order to inform fisheries management nationally. Membership in this program strengthens TIDE Science Program as it allows the Science Director to frame TIDE's research priorities with regional and national priorities. Since PHMR is a part of the larger Mesoamerican reef, another important partnership is the TRIGOH group, which is comprised of fishermen from Belize, Honduras and Guatemala. This group meets periodically and is an important part of the Managed Access program as it helps to address the concerns Belize fishermen have about unlicensed foreign fisherman from Guatemala encroaching on their livelihoods.

Ridge to Reef/TIDE Tours is a member of the Belize Tourism Industry Association and attends BTIA meetings and conferences. This allows the Tour Company to stay abreast of developments in the tourist industry in Belize and specifically in the Toledo District. Ridge to Reef/TIDE Tours also partners with the Belize Tourism Board to market its products through road shows and expositions that introduce the different tourism products in Belize to new and continuing booking agents. It is also an opportunity to strengthen partnerships with existing tourist products and develop new ones in order to enhance the tourism industry as a whole.