

## PHMR ENFORCEMENT STRATEGY

### **BACKGROUND**

TIDE was founded in 1997 to address serious illegal and over fishing issues between Monkey River Village and Punta Gorda Town in the Gulf of Honduras area. TIDE was able to lobby the Government of Belize with assistance and support of the people of Punta Gorda Town, Punta Negra Village and Monkey River Village for the declaration of the Port Honduras Marine Reserve which it now co-manages with the Belize Fisheries Department. In addition, TIDE co-manages Payne's Creek National Park with the Belize Forest Department and manages its own Private Protected Lands. TIDE does this in close collaboration with communities in the wider Maya Mountain Marine Corridor to involve them in conservation and build capacity for sustainable management.

TIDE is governed by a nine-member board of directors, which appoints an executive director. Board members are selected to represent the interest of stakeholders in buffer communities, local business, and municipal government. TIDE currently has 32 permanent members of staff spread across five departments: terrestrial protected area management; marine protected area management; education and outreach; research and monitoring; and administration. Each department contributes to three program areas; resource protection (protected areas management); environmental education; and research and monitoring. TIDE regularly hires up to five free-lance community researchers, trained by TIDE, to assist with research and monitoring. TIDE also seasonally employs up to 12 community environmental stewards, trained by TIDE, mainly to assist with education and outreach. At any one time, there are between one and six local and international volunteers assisting with research and monitoring, education and fundraising.

The organization is guided by a strategic plan, renewed every five years, and an operational plan, renewed every three years. Each fall, the managers write an annual work plan and budget for the following year, based on the operational plan. This is reviewed and revised by the program director, executive director, and approved by board of governors and accountant.

TIDE's organizational structure is as follows.

# TIDE's Organizational Structure. 2014

Board of Directors

Executive Director

Programme Director

Development Director

Accountant

Operations Manager

Media Manager

Volunteers

Financial Administrator

Security Officers

Janitor

Receptionist

Marine Manager

Managed Access Officer

TIDE Park Rangers

Accounts Clerk

Terrestrial Manager

Asst' Terrestrial Manager

Environmental & Education Manager

Env. & Education Outreach Coordinator

Science Director

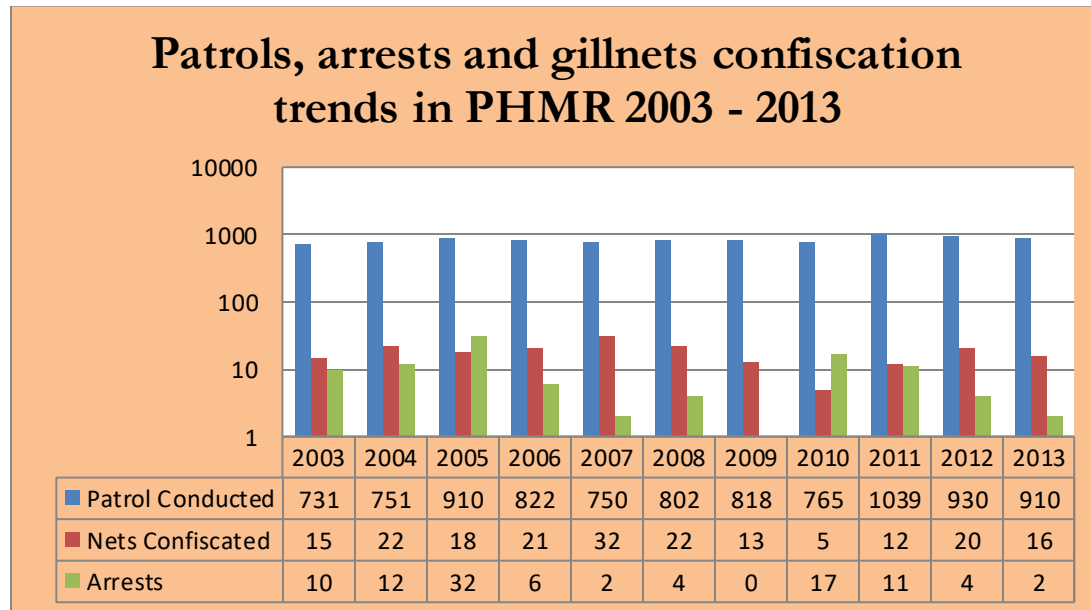
Marine Biologist

Terrestrial Biologist

Research Assistant

## ILLEGAL ACTIVITIES IN PHMR

Traditionally the most popular activity in the area now known as PHMR has been manatee poaching. Since the declaration of the Port Honduras Marine Reserve in 2000 and TIDE's management of the area our documentation of illegal activities is showing that setting of gillnets continue to be the number one illegal activity conducted in the reserve. As a result we have documented the trend of nets confiscated and number of patrols conducted annually for an 11-year period from 2003 to 2013. The results in a chart are presented below.



As can be seen, as patrols increased the number of illegal gillnets confiscated and arrests made seemed to also increase; however the number of patrols conducted relative to the number of nets confiscated and arrests made is very high signifying a high cost of removing gillnets from the reserve. Given this fact, it is imperative that we define strategies to decrease cost and increase output to become more effective.

Our marine resource monitoring reports also suggest a number of issues that can be linked to enforcement, these are;

1. Monitoring of replenishment (No-take) zones shows variances in commercial species populations between seasons indicating that these areas may be fished.
2. There is no significant increase of commercial species populations in the replenishment zones.
3. During times of good compliance commercial species in the allowable fishing areas were able to recover during off season periods.

## SITUATION ANALYSIS

Various meetings between Park Managers, Education and Outreach Coordinator, Scientists, Program Manager, Executive Director and Development Director were held to discuss the issues we are facing with regards to compliance with applicable protected areas laws and policies. Some of the main issues highlighted are listed here for reference;

- There are various social and economic factors that influence whether or not someone follows a particular law. We listed the main factors as:
  - Awareness – do they know it’s illegal?
  - Moral – do they consider the law to be morally legitimate/the crime to be immoral?
  - Risk and reward – how likely do they think it is that they will be caught? How big do they consider the reward? How serious do they consider the cost of being caught (economically, socially)?
  - God given rights – some people think that the resources are placed there by God for us to use as we please.
- Perception of rangers as police hinders education efforts of the Education and Outreach Coordinator, but TIDE does not have enough staff in education so rangers have to assist the Coordinator. Many stakeholders perceive the rangers as police and that, as such, they are not open to education and outreach by the rangers themselves.
- There are a lot of misconceptions about what TIDE is trying to achieve. For example, many people think we are trying to prevent *all* fishing.
- Some enforcement staff thinks senior management has occasionally intervened to prevent prosecution of people who have committed infractions and that this undermines the enforcement officers’ confidence and their authority in the eyes of the public.
- Records of infractions are not readily available to rangers in the field. Hence, it is hard for rangers to know how many times a particular individual have been apprehended and therefore how to proceed.
- Culprits sometimes give false names.
- Fishers from across the borders sometimes carry guns and so rangers do not feel secure in attempting to apprehend them.
- Sometimes commitments to other duties prevent rangers from focusing on enforcement .
- Lack of Standard Operations Procedures for enforcement.

## SWOT ANALYSIS

Determining Strengths, Weakness, Opportunities, and Threats of PHMR is a formative way of detailing a general overview of its enforcement program. Below is a SWOT analysis of PHMR’s enforcement program as determined by Jayson Horadam from MPA Enforcement International from Florida, USA.

**Strengths:** TIDE and Port Honduras Marine Reserve is an established program which is supported by a vast majority of the local population and has strong ties to the local government and business. TIDE

understands the need for stakeholder support as well as the value of education and outreach. It is a very structured program working towards obtainable goals and objectives. Funding for the program appears secure and able to support operations into the near future. TIDE has a comprehensive policy manual in place which deals with almost all areas that need to be addressed in any organization. Manager S. Chan has a professional and valuable working relationship with the local police prosecutor, various police officers and the Belize Fisheries Officer assigned to the area. A one hour meeting with the local magistrate established he is pro natural resource protection and will not hesitate to fine and or jail violators. He made it clear on numerous occasions that if the PHMR enforcement officers present the court with a case that contains all elements necessary for a conviction, he will convict. Enforcement personnel appear competent and know their area of patrol. They are good with vessel handling and know the vessel's limitations while conducting water patrol duties. The procedures and paperwork required to make a fisheries violation arrest, though somewhat cumbersome, are sound and cover all elements necessary for successful prosecution. TIDE's protection of the Port Honduras Marine Reserve is ahead of the curve and proactive. Enforcement regulations and management practices have been put in place before the natural resources have suffered severe damage. However, after spending time with a local resident (naturalist) who has observed the area for over 40 years, there has been a decline in the wildlife and habitat ecosystem in general.

**Weaknesses:** The enforcement officers are lacking on basic enforcement procedures and especially in maritime law enforcement. Despite obstacles such as a lack of training or experience they would like to become more effective. Recruitment, training, job descriptions and "hands on" experiences are needed in order to create a proactive and efficient enforcement program. The following specific areas need improvement: officer safety and authority presence, detecting violations, controlling the boarding and inspection of a vessel, interviewing potential violators, focus on vessel safety and reducing liability issues, report writing and narrative, case package preparation, testifying in court, appearance and uniform care (dress code), identifying all of the elements necessary for successful prosecution, searching and safely transporting prisoners and the ability to understand human body language.

The enforcement officers have no way to defend themselves and should be trained on basic self-defense tactics. In addition, it is recommended they be issued and trained in the use of a collapsible baton. They should also receive training on basic human behavior issues and be given a course on "Verbal Judo"; the ability to control a given situation and to de-escalate a confrontation when necessary through the proper use of verbal and nonverbal communication.

Management needs to start thinking more about safety and liability issues program-wide but especially within the enforcement program. While some areas are referenced and outlined in the TIDE Policy Manual, they are not adequate to protect the organization from liability damages. Regarding the enforcement officers, they need to receive clear and concise directions on how to react to various situations. One example would be the transport of people arrested for a violation to the police center. There should be SOP on detaining the suspect, searching the suspect for contraband/weapons and transporting the individual to land (a life vest should always be secured to the person anytime the person is on the water in a TIDE vessel). This is pointed out due to the fact that these issues tend to accelerate at a dramatic rate for an organization after the first incident. For on the water safety, every

vessel should be equipped with a throw ring, day and night flairs, a small marine fire extinguisher and a first aid kit.

**Opportunities:** The alliance with the local police is strong, but it could be stronger. A good starting point would be to create training opportunities conducted by police instructors. Similar efforts should be made with the Coast Guard. There may be opportunities for the rangers to “ride along” with police in order to get more exposure to standard law enforcement procedures they can apply to their own program. There may be opportunities to receive training in small vessel operations from police or other agencies as well; if an area in Belize has specific Marine Police Units, there would be merit in establishing contact with them. On another note, while they are used for educational outreach, it appears the enforcement officers can be further utilized in education efforts within the local community and especially within the school system. We recommend a Junior Ranger Program be established if it does not already exist. Needless to say, Belize Fisheries Division should be offering training to the individuals they convey the powers of enforcement and arrest upon.

There are opportunities to receive grants for the specialized enforcement training mentioned. National Fish & Wildlife Federation is one while The Nature Conservancy Caribbean program is another. We can provide additional information on these programs on request.

**Threats:** From an enforcement perspective, it is the violators originating from adjacent countries and waters that are capable of doing the most damage to the environment. While the local population does violate various rules and regulations, they generally appear to be from small vessels doing minor damage compared to the larger vessels entering from the outside of Belize. As time goes by, the local citizens’ violations will decrease as the education and outreach efforts take effect. However, those from outside of Belize will continue to reap the benefits from the MPA and these intrusions will most likely increase in frequency and sophistication as time goes by. Basic human psychology prevails in this situation. The violator is rewarded by harvesting salt water products which is then turned into profit. If nothing is in place to stop this reward, the activity will continue and increase as others start to discover the profit potential without penalty. PHMR will need to ramp up enforcement efforts to combat this threat with larger, faster vessels, an effective training program for the enforcement team in addition to some technical advancement in GPS, night vision capability and superior communication systems. This recommendation will be difficult to accept for most people not trained in law enforcement at the professional level. Effective enforcement programs are by nature time consuming, costly compared to other projects in the program and difficult to establish and maintain. In almost all situations, the organization responsible for the MPA will vastly underestimate what is required to produce a program that will deter unwanted, destructive activity in their MPA. This is normal, understood and somewhat expected.

## STRATEGIC INTERVENTION AND MONITORING

STRATEGY	ACTIVITIES	MEANS OF MEASUREMENT	SCHEDULE
Strengthening of governance structure	Develop Standard Operations Manual for enforcement	Rangers are operating using international standards	2014
	Revision of TIDE's Policy Manual to include more details of enforcement procedures such as report writing, vessel pursuit, detention, searching and transportation of prisoners, chain of custody of non-perishable items seized as evidence/exhibits, equipment inspections, case package preparation, court appearances, uniforms and appearance, code of ethics, oath of office, use of force, etc., as well as Human Resource management for patrol team.	Revised and approved policy manual incorporating enforcement procedures.	2014
	Establish decision tree to make arrest	Reduced confusion when making arrest	2014 - 2018
Investment in patrol equipment	As recommended by MPA Enforcement International, TIDE will purchase a larger patrol vessel for PHMR equip with communications, GPS, night visions, spotlights, etc.	<ul style="list-style-type: none"> <li>Registration of vessel in Belize.</li> <li>Increase in number of arrests for illegal activities</li> </ul>	2014 - 2018
	Ensure ranger team is equip for day and night patrols as well as rainy and sunny weather with items such as flashlights, raincoats, life vests, night vision goggles, binoculars, police batons, bullet proof vests, etc	<ul style="list-style-type: none"> <li>Inventory of items</li> <li>Increase in number of arrests for illegal activities</li> </ul>	2014 - 2018

	Complete demarcation of PHMR boundaries and zones including installation of mooring buoys	Users are adhering to the established boundaries and using mooring buoys to secure vessels.	2014 - 2018
Re-establish community ranger program	Identify community members to participate	<ul style="list-style-type: none"> <li>Participants list</li> </ul>	2014
	Train participants in marine laws, public relations and conflict resolution	<ul style="list-style-type: none"> <li>Certificate of trainings administered</li> </ul>	2014
	Conduct joint patrols with participants	<ul style="list-style-type: none"> <li>Patrols logs</li> <li>Liability waiver</li> </ul>	2014 - 2018
Use intelligence to better target patrols. TIDE will use multiple methods to improve targeting of patrols and maximize the value of fuel use and ranger time	Analyze existing patrol data to determine the location and timing of enforcement and fishing activities	<ul style="list-style-type: none"> <li>Analysis report</li> <li>Targeted patrols conducted as documented on patrols logs</li> </ul>	2014 - 2018
	Make greater use of the lookout tower using more powerful binoculars	Patrols are launched during spotting of vessels from lookout tower as documented in patrol logs	2014 - 2018
	Employ novel enforcement tactics such as use of SMART technology during patrols to capture data on patrol routes, timing, duration, location etc. to determine 'hot spots' at various times during the year to better target patrols and reduce resources needed to do effective patrols	Targeted patrols conducted as documented on patrols logs	2014
Ranger team streamlining	TIDE will reduce the number of full-time rangers at PHMR from six to five. A part-time marine ranger and terrestrial rangers will provide support at times of need	Employment records	2014
Design a system of ranger training and advancement	TIDE will design a ranger pay scale that sets out training, experience and performance requirements for	Employment records	2014



	advancement to each stage		
Make use of rangers to collect catch data	TIDE's science director will train rangers in catch monitoring techniques. Rangers will then measure catch parameters during regular patrols	Rangers understanding of catch landings aid with enforcement through meeting with users regularly during collection of data	2014 - 2018