

# Exchange of Innovative Experiences in Control and Surveillance Activities in SAM MPAs

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September 30th, 2025, Punta  
Gorda, Belize



## Objectives

*What we aim to  
achieve today...*

Share Innovative Practices

Promote Knowledge Exchange

Demonstrate Impact

Encourage Collaboration

Inform Policy and Practice

# Background & Context

## 1. Ensuring Compliance with MPA Rules

Control and surveillance activities ensure users **follow the regulations**—such as no-take zones, gear restrictions, or access limits.

## 2. Protecting Biodiversity and Ecosystems

The SCMR contains **critical habitats**, FSA Sites, and endangered species.

Surveillance helps prevent **illegal fishing, poaching, pollution, and habitat destruction**.

## 3. Supporting Scientific Monitoring and Adaptive Management

Surveillance data contributes to understanding **what's happening in the MPA**, allowing for the **adjustment of strategies** if threats change or new risks arise.

Supports **data-driven decision-making**.

## 4. Combating Illegal, Unreported, and Unregulated (IUU) Fishing

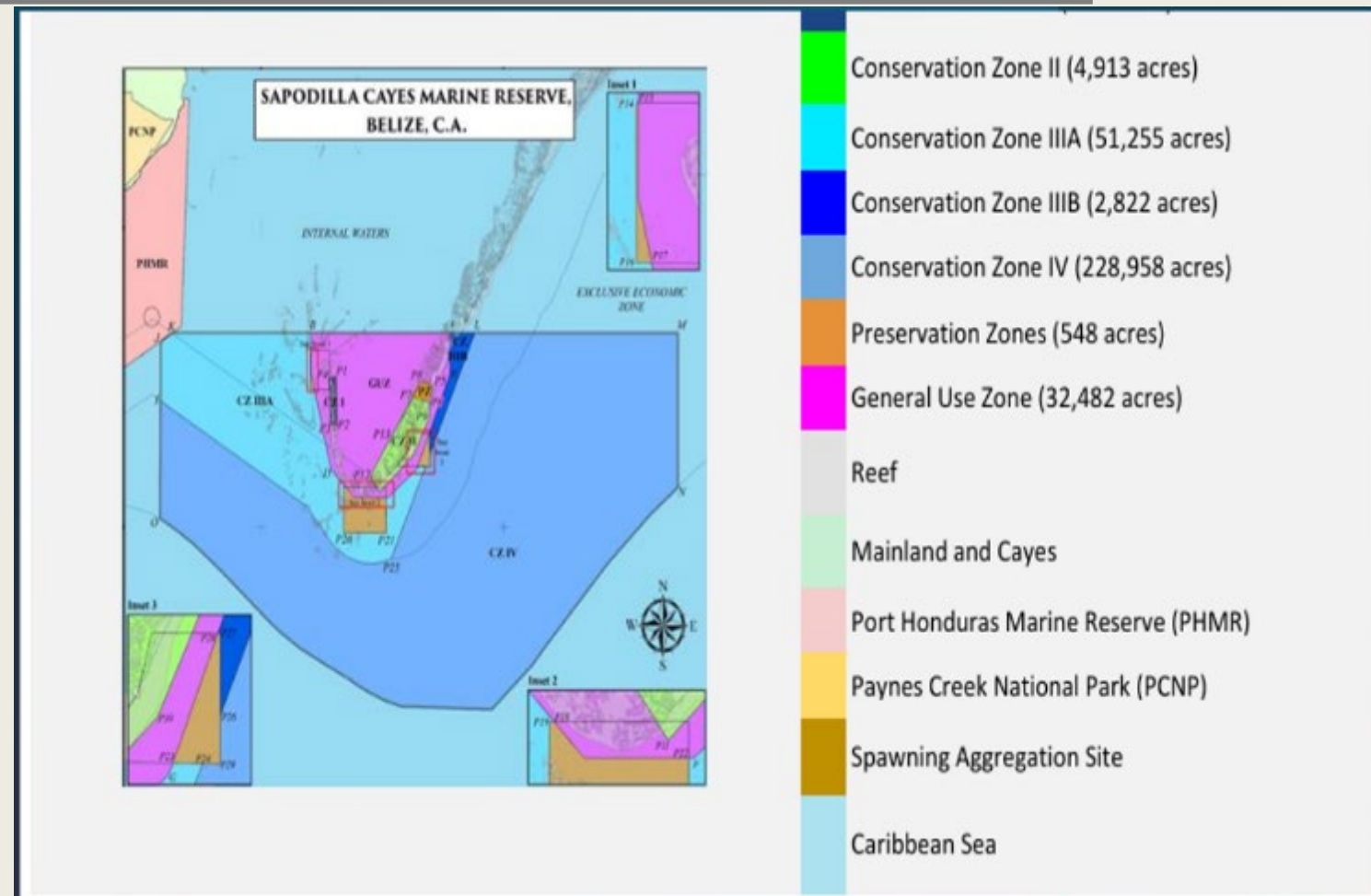
SCMR is a target for IUU fishing due to its rich biodiversity.

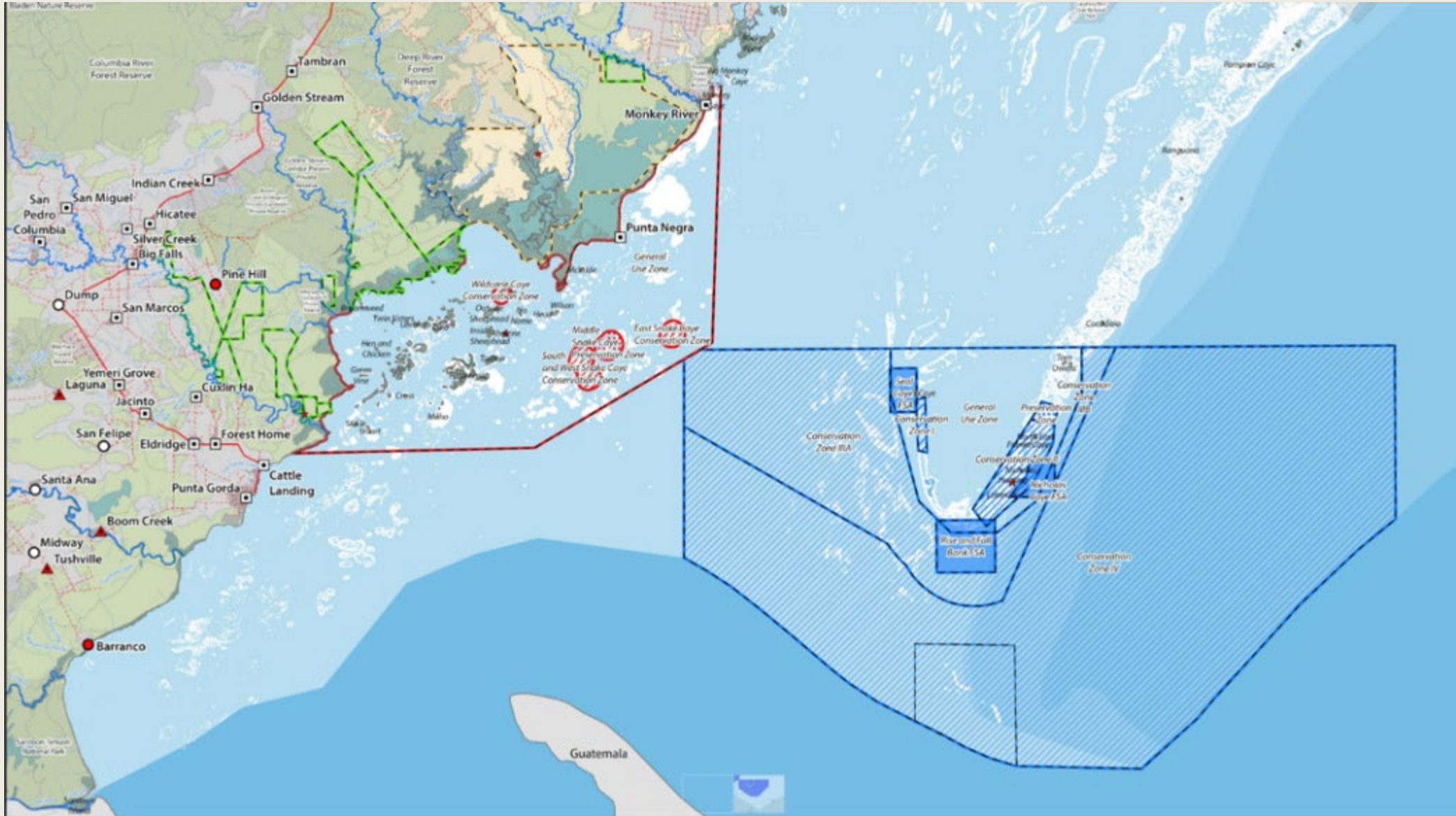
Control and surveillance help identify and reduce IUU activities.



# Sapodilla Cayes Marine Reserve (SCMR)

- SCMR is located approximately 36 miles east of Punta Gorda Town, Toledo District, and encompasses the southernmost tip of the Belize Barrier Reef.
- The eastern and western boundaries of the reserve follow the 100-meter depth contours along the reef.
- The reserve covers an area of 321,623.5 acres (approximately 130,156 ha) and contains fourteen palm-fringed sand or mangrove cayes, fringe reefs, natural lagoons, and key spawning aggregation sites (SPAGs) including the famous Cayman Crown Reef.





# INNOVATIVE PRACTICES

## *Application of the Enforcement Strategy and Plan*

TIDE has collaborated with the Fisheries Department, Immigration Department, Belize Coast Guard, Belize Port Authority, and Coastal Zone Management Authority to create and implement:

1. National Fisheries Enforcement & Conservation Monitoring Strategy & Action Plan (NFECMSAP)
2. Comprehensive SCMR Enforcement Strategy and Plan.





## INNOVATIVE PRACTICES

### *Application of the enforcement Strategy and plan*

- TIDE serves as the Belize Marine Protected Areas Network (BMPAN) representative on the Steering Committee to develop the National Fisheries Enforcement & Conservation Monitoring Strategy & Action Plan (NFECMSAP)
- Development of Comprehensive SCMR Enforcement Strategy and Plan also in progress.

# INNOVATIVE PRACTICES

## *Application of the enforcement Strategy and plan*

FOUR Main Points to the Strategy:

- Interagency Coordination
- Command and Control Systems
- Community Engagement
- Standardization of Training and Equipment



- 1. Establishing Standards for Fisheries Officers***
- 2. Providing Fit-for-Purpose Equipment***
- 3. Establishing a Command and Control Structure***
- 4. Ensuring Sustainable Resources for Enforcement and Monitoring***



# **Key Strategy-To-Action Themes**

# Establishing Standards for Fisheries Officers



## Strategic Direction:

A professionalized enforcement workforce is central to the success of the strategy. The absence of consistent standards for hiring, training, and continuous professional development has been a recurring barrier. Officers enter service with varying levels of preparation, often lacking foundational training in legal procedures, tactical operations, and evidence handling.

## Action Items:

- Develop minimum standards for recruitment, background investigations, and training of all officers designated under the Fisheries Act that perform or assist in enforcement duties
- Establish a basic conservation law enforcement academy, delivered in partnership with the Belize Coast Guard and supported by regional and international partners.
- Institutionalize a Field Training Program (FTP) that provides mentorship, evaluation, and structured on-the-job learning.
- Implement Continuous Professional Training (CPT) programs to ensure that perishable skills such as first aid, defensive tactics, and procedural knowledge remain current.

# Comprehensive SCMR Enforcement Strategy and Plan.

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**Training needs assessment for the enforcement team**

**Enforcement training plan**

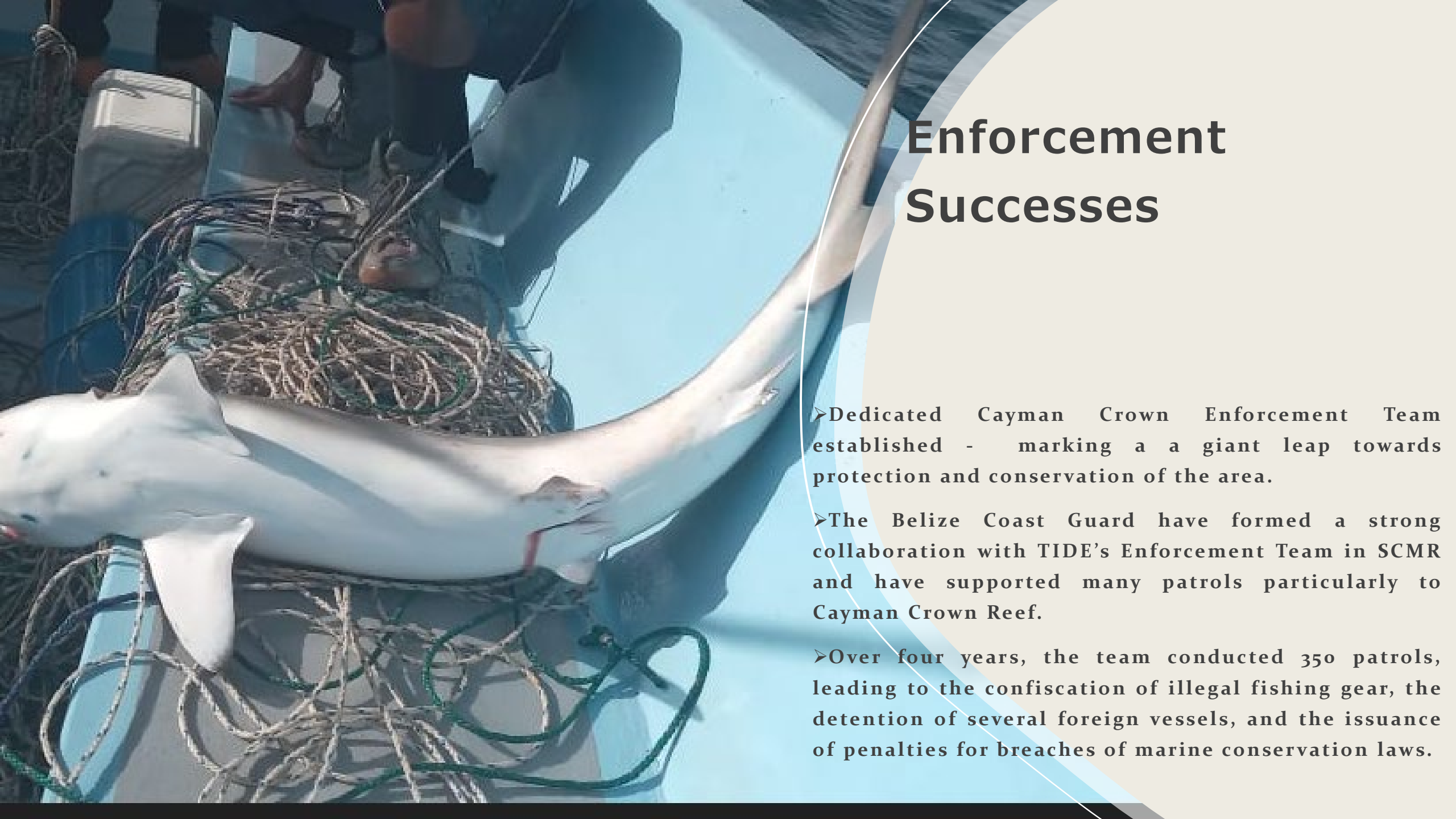
**Ranger training manual**

- ❑ Develop a training needs assessment for the enforcement team, an enforcement training plan and produce a ranger training manual for joint training on enforcement and monitoring across the Belize Marine Protected Areas Network.

# Use of Technological Tools

- TWO Long Range Surveillance Cameras at TIDE Ranger Station.
- Night Vision Equipment for Rangers.
- Bullet Proof Vests & Body Cameras
- **SMART (Spatial Monitoring and Reporting Tool) - Marine**





# Enforcement Successes

- **Dedicated Cayman Crown Enforcement Team established - marking a a giant leap towards protection and conservation of the area.**
- **The Belize Coast Guard have formed a strong collaboration with TIDE's Enforcement Team in SCMR and have supported many patrols particularly to Cayman Crown Reef.**
- **Over four years, the team conducted 350 patrols, leading to the confiscation of illegal fishing gear, the detention of several foreign vessels, and the issuance of penalties for breaches of marine conservation laws.**

# Use of Technological Tools



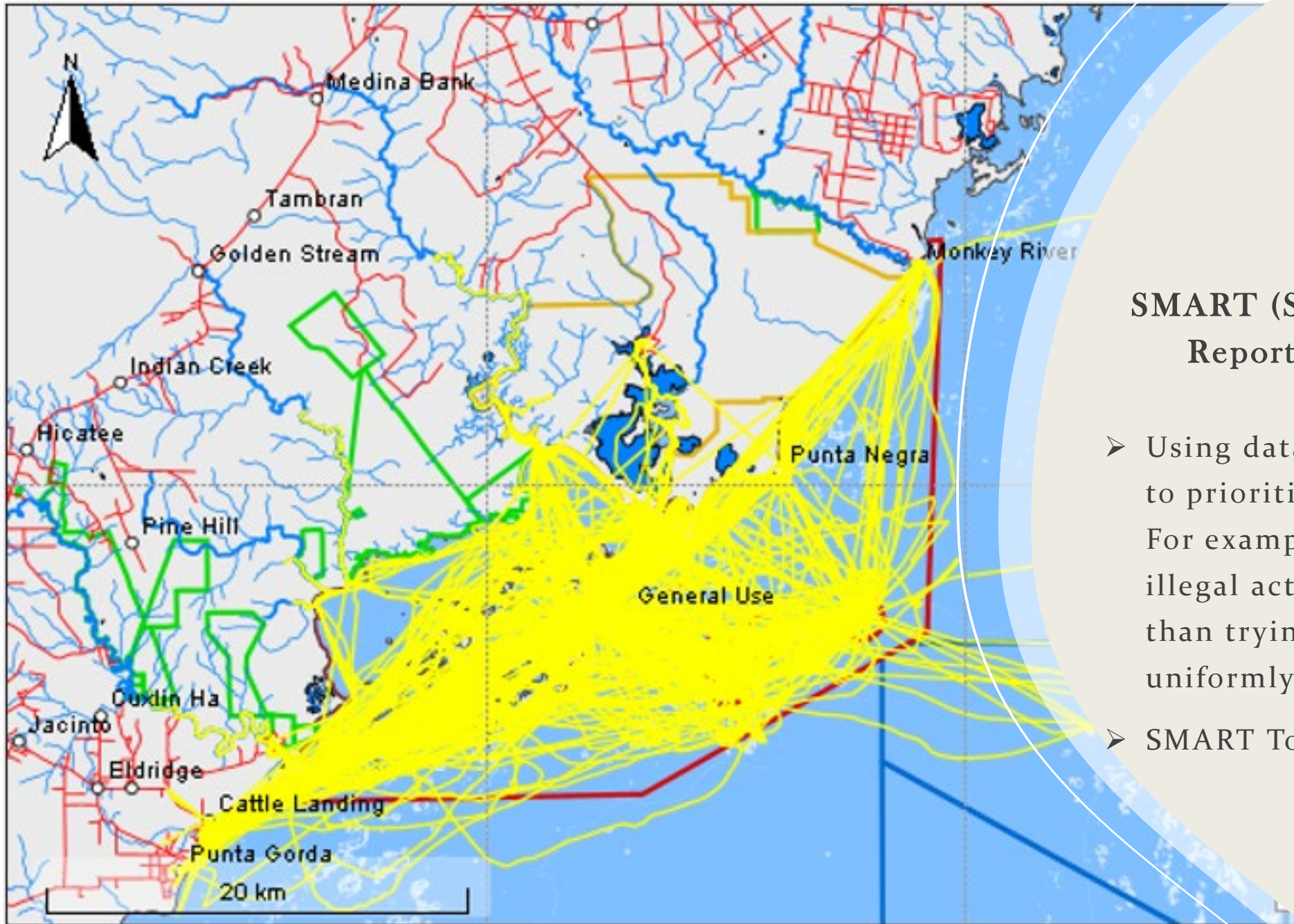
## Long Range Surveillance Cameras at SCMR Ranger Station

- The introduction of innovative technology for enhanced enforcement such as the strategic installation of surveillance equipment, including long-range surveillance cameras have improved coverage of critical areas, enabled remote monitoring of illegal activities and reduced the need for fuel-intensive patrols.
- 15 Km Range, Equipped with Night Vision





# Night Vision Equipment for Rangers



## SMART (Spatial Monitoring and Reporting Tool) - Marine

- Using data and risk-based approaches to prioritize where patrols are sent. For example, identifying “hotspots” of illegal activity or vulnerability, rather than trying to cover everywhere uniformly.
- SMART Tool is helping with this.

**Map Showing a Heat Map of the Patrols done by the Ranger Team**

# Stakeholder Engagement and Community Involvement

- Throughout the project, TIDE has prioritized building strong relationships with local communities, fishers, and other key stakeholders.
- Engagement involves regular stakeholder meetings, media outreach, and community forums designed to raise awareness of marine conservation issues and the importance of the Cayman Crown as a spawning aggregation site.
- TIDE's collaboration with fishers from Belize, Guatemala and Honduras through **Tri-National Fisher Forums** brought together over 40 fishers (2024), marine managers, and policymakers to discuss the Cayman Crown's ecological value and practical strategies for reducing illegal fishing activities in the area.
- Attendees identified shared challenges and best practices, fostering a cooperative regional approach to conservation.
- In 2024, a Tri-national Fisher Forum was held in Puerto Cortez Honduras through **TRIGOH** to share threats and opportunities impacting the fishing industry in each country. This forum had representation from all the stakeholders communities of Cayman Crown and the Gulf of Honduras.



# Belize – Guatemala: Exchange Visit to Honduras

- Education and Outreach personnel to Conduct exchange visits among three countries to share strategies, experiences and success stories in each country.
- First visit completed in August 2025



# Lessons Learned

- ✓ Need for **multi-level collaboration** (government, NGOs, communities).
- ✓ **Capacity building** for enforcement agencies.
- ✓ **Sustainability** of technology adoption (training, maintenance, funding).
- ✓ Importance of **data sharing and transparency**.

# **Q&A and Discussion**





**THANK YOU**