Ocean Country Partnership Programme

Belize

Achievement Report

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Programme:

The Ocean Country Partnership Programme (OCPP) is a 5 year (2021-2026) technical assistance and capacity building programme that provides tailored support to countries to manage the marine environment more sustainably, including by strengthening marine science expertise, developing science-based policy, management tools and creating educational resources for coastal communities. The OCPP delivers work under three thematic areas: biodiversity, marine pollution, and sustainable seafood. OCPP was delivered by three British Government Arm's Length Bodies (ALBs): the Centre for the Environment, Fisheries and Aquaculture Science (Cefas), the Joint Nature Conservation Committee (JNCC), and the Marine Management Organisation (MMO). Other components of OCPP were delivered by the Global Ocean Accounts Partnership (GOAP) and the Friends of Ocean Action (FOA) and those elements are not covered in this report. More information on OCPP can be found at: DevTracker Programme GB-GOV-7-BPFOCPP Documents

Document Purpose:

This Achievement Report presents a summary of the activities undertaken and the achievements obtained as a result of cooperation between countries for this partnership. This document does not cover the multilateral components of the programme and this report only covers achievements by the end of the programme. A range of further achievements are expected as recommendations from the OCPP are adopted by partner countries in the preceding period post-programme closure.

All OCPP Achievement Reports have been authored by the ALBs and therefore key achievements and impacts of collaboration reflects individuals own perspectives. Independent evaluation by the OCPP MEL provider verifies outputs and outcomes against the programme logframe, the findings of which can be viewed in the programme's annual reviews and closure report on Dev Tracker.

Funding Acknowledgement:

Funding for OCPP was provided through the overarching Blue Planet Fund (BPF) by the Department for the Environment, Food and Rural Affairs (Defra). The authors would like to thank and acknowledge Defra on behalf of the UK Government for the funding: project number GB-GOV-7-BPFOCPP has funded this work.

Contents

Acronyms

AI	Artificial Intelligence
ACU	Association of Commonwealth Universities
BAHA	Belize Agricultural Health Authority
BFiD	Belize Fisheries Department
BCMR	Bacalar Chico Marine Reserve
Cefas	Centre for Environment, Fisheries and Aquaculture Science
CZMAI	Coastal Zone Management Authority and Institute
CRFM	Caribbean Regional Fisheries Mechanism
C&E	Compliance & Enforcement
DOE	Department of Environment
EAGL	Expert Advisory Group for Green Listing
EMS	Early Mortality Syndrome
FAO	Food and Agriculture Organization of the United Nations
GIS	Geographic Information System
GBV	Gender-based violence
GDP	Gross Domestic Product
GEDSI	Gender Equality, Disability and Social Inclusion
IBEX (assessment)	IUCN Green List Improvement Benchmarking and Evaluation Index.
ICOMA	Integrated Coastal and Ocean Management Act
IUCN	International Union for the Conservation of Nature
IUU	Illegal Unreported Unregulated (fisheries)
JNCC	Joint Nature Conservation Committee
MAR	Meso-American Reef
MBEMC	Ministry of Blue Economy and Marine Conservation
MSDCC	Ministry of Sustainable Development and Climate Change
MAFSNGI	Ministry of Agriculture, Food Security and New Growth Industries
MEF	Ministry of Economic Transformation
MEE	Management Effectiveness Evaluations
MMO	Marine Management Organisation
MOU	Memorandum of Understanding
MPA	Marine Protected Area
MSP	Marine spatial planning
MPhil	Master of Philosophy
NBIO	National Biodiversity Office
NGO	Non-Government organisation
NPASMEA	National Protected Areas System Management Effectiveness Assessment
OCPP	Ocean Country Partnership Programme
PAME	Protected Area Management Effectiveness
RSS	Regional Security System
SEAH	sexual exploitation, abuse, and harassment
SDG 14	Sustainable Development Goal 14: Life Below Water,
SDDirect	Social Development Direct
THC	Tilapia Hatchery Centre
UoB	University of Belize
VAC	violence against children
WOAH	World Organisation for Animal Health

Executive Summary

The Ocean Country Partnership Programme (OCPP) in Belize has delivered a transformative, nationally led partnership that strengthened the governance, evidence base, and technical capability needed to help protect and sustainably manage Belize's marine environment. Between 2022 and 2026, the programme supported Belizean ministries, agencies, co-managers, academia, youth groups, and community partners through coordinated action across marine pollution, sustainable seafood, and marine biodiversity. The result is a more resilient, informed, and collaborative national system for environmental management, rooted in Belize's priorities and strengthened through a deep, trust-based partnership.

Key achievements include major advances in policy, regulation, and institutional capacity, from upgraded laboratory systems and nationwide water quality monitoring, to strengthened aquatic animal health and biosecurity, modernised management of MPAs, and improved national data systems that now underpin cross-government decision-making. The programme enabled Belize to generate its first comprehensive pesticide screening in over a decade, complete whole-genome sequencing of aquatic pathogens, undertake national MPA management effectiveness assessments, and build foundational AI, GIS, and drone-based monitoring capability across more than 30 organisations.

OCPP's collaborative approach was a defining strength of the partnership. Quarterly cross-government meetings, joint field delivery, co-produced technical guidance, and the 2026 Belize OCPP Forum helped align ministries, co-managers, communities, and young professionals around shared priorities. These platforms supported a national shift towards the proposed One System approach integrating biodiversity, pollution, fisheries, and coastal planning into more coherent, evidence-driven governance. The establishment of the Belize Solid Waste Recyclers Association, south–south learning exchanges, and extensive MPhil research undertaken by Belizean scholars further demonstrate the breadth and inclusivity of the collaboration.

Across all thematic areas, the programme has delivered measurable impact. Belize now benefits from stronger biosecurity systems, improved disease preparedness enabling its progress towards the export market of tilapia to Guatemala, enhanced environmental monitoring and data management, more effective MPA governance aligned with global standards, and strengthened community level waste management models ready for national scaleup. These achievements directly support long-term blue economy resilience, improved public health, and strengthened environmental stewardship.

The partnership's legacy is not only in its technical outputs, but in the strengthened relationships, improved coordination, and nationally owned pathways developed to sustain progress beyond OCPP. Together, Belize and the OCPP delivery partners have demonstrated what is possible through genuine collaboration, helping secure healthier oceans, more resilient livelihoods, and a stronger foundation for Belize's ambitious blue economy and conservation goals.

Context

Belize is a Caribbean nation of ~420,000 people, uniquely positioned within the ~1,000km long Mesoamerican Reef (MAR) which is a globally significant ecosystem spanning Mexico, Guatemala, Belize and Honduras.

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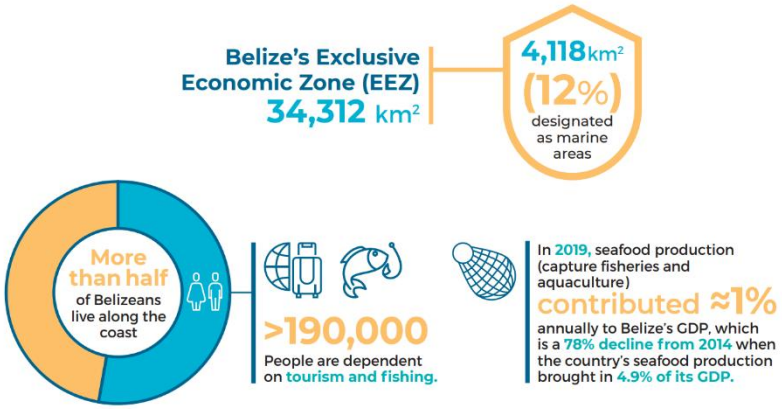
Belize's section of this system includes the 300km Belize Barrier Reef, part of the second largest coral reef in the world, home to over 60 species of hard corals, more than 500 fish species, and five species of marine turtles. Its wider coastal environment is equally diverse, supporting fringing mangrove forests, extensive seagrass beds, estuaries, and approximately 450 offshore islands.



...home to over 60 species of hard corals, more than 500 fish species, and five species of marine turtles...

Figure 1: Belize facts taken from NIRAS interim evaluation report

This extraordinary network of habitats underpins the country's biodiversity and plays a vital role in sustaining local communities. Belize's marine and coastal ecosystems are central to major national industries, including tourism, agriculture and fisheries. Tourism alone accounted for 12% of GDP in 2024 and, in 2019, provided one in every seven jobs. Fisheries remain a critical livelihood for many coastal households: in 2023, 3,507 licensed fishers contributed US $14.3 million to the national economy through commercial fishing. Beyond supporting human wellbeing, these ecosystems provide essential climate services such as carbon sequestration and shoreline stabilisation, which help protect Belize from coastal erosion and climate related impacts.

Despite being one of the smallest mainland states in the Americas, Belize is recognised as a global leader in marine conservation. Within its 34,312 km^2 Exclusive Economic Zone, 4,118 km^2 (12%) is designated as marine protected areas (Figure 1). Belize has exceeded international conservation benchmarks, managing 36.6% of its terrestrial area and 19.8% of its marine area in protected areas; achieving the Aichi Biodiversity Target 11 thresholds that only a small group of countries worldwide have met.

Together, Belize's rich biodiversity, strong conservation leadership, and deep cultural and economic dependence on the sea make it one of the world's most inspiring and important marine nations and a compelling focus for continued support and partnership.

Belize's coastal and marine environment is central to its economy, food security, and cultural identity and is under significant stress from climate change, human pressures, and ecosystem degradation.

During initial programme scoping in 2022, Belize's environmental, social, and economic challenges were examined to inform the country-level theory of change and influence the broader programme design for OCPP. The following synthesises the key pressures, vulnerabilities, and desired areas of impact.

Within its 34,312 km² Exclusive Economic Zone, 4,118 km² (12%) is designated as marine protected areas.

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Coastal and Marine Pressures

Belize's coastal and marine environment faces converging climate and human pressures that are eroding ecosystem integrity and the livelihoods that depend on it, which is undermining its economy, food security and challenging cultural identity. Rising sea levels, warmer oceans and increasingly intense hurricanes are reshaping the seascape - driving coral bleaching across the Belize Barrier Reef, flooding low lying areas (notably around Belize City), and damaging infrastructure - while droughts and wildfires disrupt watersheds and rural communities. These climatic stresses are compounded by overharvesting and unsustainable practices; pollution from agriculture, untreated wastewater and marine pollutants degrading water quality exacerbated by increasing droughts and flooding, whilst poorly managed coastal development is harming mangroves, seagrasses and fish spawning habitats.

The cumulative impact is visible in aquaculture production, which declined from 4.9% of GDP in 2014 to ~1% in 2019 (Figure 1) following the collapse of the shrimp sector after the 2015 outbreak of Early Mortality Syndrome (EMS), also known as Acute Hepatopancreatic Necrosis Disease (AHPND) . National efforts now focus on diversifying aquaculture species (e.g., tilapia) and revitalising sustainable wild fisheries. Habitat degradation continues despite notable safeguards, an extensive Marine Protected Area (MPA) network, National Protected Areas System Management Effectiveness Evaluations (NPAS-MEE), a ban on destructive fishing gear, prohibition of offshore oil exploration, and Blue Bond financing indicating the need to strengthen implementation, compliance and resilience.

Pollution and emerging biological threats add further pressure. Terrestrial runoff, mining related contamination and sanitation gaps reduce freshwater and coastal water quality, while plastics accumulate along shorelines. Regional sargassum influxes since 2011 smother beaches, stress coral reefs and mangroves, and release harmful gases upon decomposition, affecting tourism, health and even nearby crops. Invasive lionfish continues to depress reef fish recruitment despite national culling efforts. Together, these trends threaten long-term ecosystem health, blue economy productivity and community wellbeing.

Poverty, Development and Climate Change

Belize's environmental risks intersect with persistent socioeconomic vulnerability, particularly in coastal and rural communities whose livelihoods depend directly on natural assets. Of a population of

roughly 405,000, more than half live in coastal zones; tourism and fisheries support an estimated 190,000 people directly or indirectly, with tourism contributing about 12% of GDP (figures sourced from Statistical Institute of Belize from 2019). Yet over a quarter of Belizeans live in multidimensionally poor households (based on figures sourced in 2021), with poverty more acute in rural districts (highest in Toledo, lowest in Belize District) and among larger and younger households or those with limited education and employment opportunities.

The GEDSI assessment undertaken for Belize highlights that women, persons with disabilities, Indigenous communities, and rural households face persistent barriers to marine resource access, decision-making, and climate resilience. These groups are disproportionately affected by environmental degradation and livelihood insecurity, underscoring the need for OCPP's strongly inclusive and community-focused approach.

This vulnerability heightens exposure to climate shocks, hurricanes, flooding and drought while constraining recovery capacity. Where livelihood options are limited, environmental decline can drive negative coping strategies, such as illegal fishing, mangrove clearance or overextraction. Strengthening resilience therefore requires an integrated approach that couple's ecosystem protection with livelihood diversification, skills development and access to finance linking conservation outcomes to human wellbeing and long-term economic security.

OCPP Contribution to Identified Challenges

These challenges point to several overarching needs that shaped OCPP Belize's country level design:

1. Strengthen ecosystem resilience: To mitigate climate impacts, reduce biodiversity loss, and improve food security.

2. Improve sustainable livelihoods: By supporting aquaculture, resilient fisheries, and blue economy diversification.

3. Enhance water quality and pollution controls: As a foundational requirement for ecosystem health and sustainable economic activity.

4. Build data, monitoring, and enforcement capacity: To enable evidence-based decision-making across marine, coastal, and freshwater systems.

5. Support an integrated "One System / ridge-to-reef" approach: To reduce fragmentation and strengthen cross-government coordination.

6. Empower communities and address vulnerability: Through inclusive engagement, improved stewardship, and livelihood diversification.

These issues collectively align with OCPP's three thematic pillars in Belize: Marine Pollution, Sustainable Seafood and Marine Biodiversity which have been presented in thematic narratives along with the cross-cutting push for One Health, One System, and strengthened data systems.

Strengthened preparedness to respond to emergencies

In addition, it was recognised that some Belizean partners would appreciate sustainable finance options to diversify funding options post OCPP and associated infographics. Figure 2 is a schematic of how each OCPP thematic narrative connects to support a One System approach (via One Health) to a sustainable blue nation in Belize. The areas of priority impact were defined as Blue Economy and *Sustainable Finance, Biodiversity and Conservation, Climate Resilience and Adaption* supported by *environmental water quality* in collaboration with Belize at the cross-government OCPP meetings and reviewed and discussed at the Belize OCPP Forum in February 2026. For further information and detail please see the thematic narratives and the overarching one system narrative.

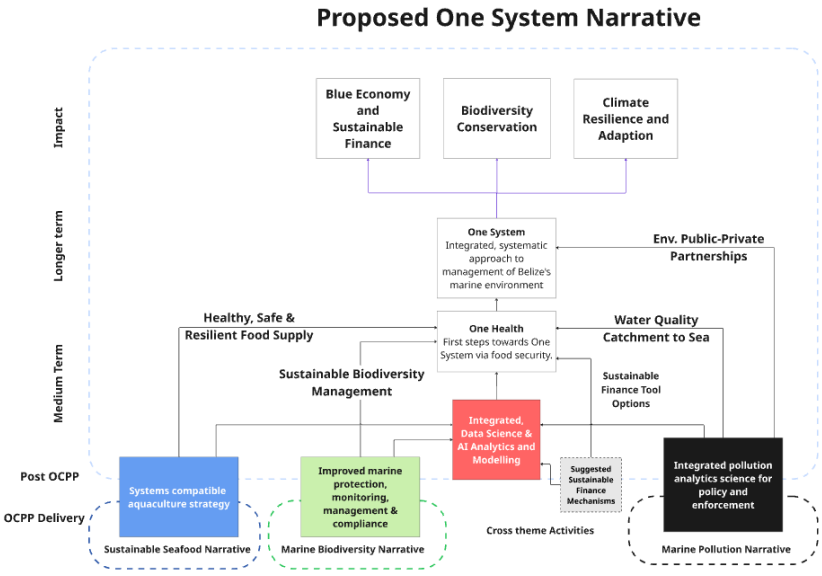

Figure 2: Diagram showing how OCPP delivery feeds into medium to long term impact contributing to a potential One System Narrative in the medium to longer term.

Stakeholders

OCPP has engaged with a range of stakeholders across multiple sectors in Belize to support delivery of programme outcomes. At the start of

the partnership, extensive work was undertaken to identify and map key stakeholders who have an interest in Belize's marine and coastal environment. These included government agencies, non-governmental organisations, academics, co-managers and wider civil society. A full stakeholder list can be found in Annex 2.

The OCPP MOU was signed in March 2023 with the following signatories from Belize Government:

- Ministry of Blue Economy and Marine Conservation (previously Ministry of Blue Economy and Civil Aviation)
- Ministry of Sustainable Development and Climate Change (previously Ministry of Sustainable Development, Climate Change and Disaster Risk Management)
- Ministry of Agriculture, Food Security and New Growth Industries (Previously Ministry of Agriculture, Food Security and Enterprise)
- Ministry of Economic Transformation (previously Ministry of Economic Development)

OCPP convened a cross-Government Agency meeting on a quarterly basis throughout the programme attended by key stakeholders including Ministry of Blue Economy and Marine Conservation, Ministry of Economic Transformation, Ministry of Agriculture Food Security and Enterprise, Coastal Zone Management Authority and Institute (CZMAI), Belize Fisheries Department, Belize Department of Environment, Belize Agricultural Health Authority (BAHA), University of Belize, Belize Department of Agriculture and National Biodiversity Office. Key delivery partners were also invited to these meetings, and the chairperson was rotated between ministry and delivery partners, whereby they could edit the agenda. OCPP have been supported by the British High Commission, Belmopan throughout the programme.

Impact

Since 2022, the OCPP has delivered coordinated, evidence-based technical assistance that has strengthened policies, enhanced technical and institutional capabilities, and embedded in more inclusive governance guided by our Belizean partner's needs.

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This approach is engineered so that OCPP technical supports meets Belize where it is at on the journey towards sustainable marine environments, rather partners fitting around OCPP. This strengthened foundation has enabled Belize to take more collaborative, informed action toward the sustainable management of its marine environment.

Advancing Belize's Capacity for Policy, Regulation, and Governance

Across all thematic areas, OCPP has built technical, institutional, and governance foundations needed for effective marine management. This includes strengthened analytical and laboratory capacity in pollution monitoring, improved biodiversity monitoring systems, enhanced aquatic animal health and biosecurity capabilities, and more coherent cross-government approaches to coastal and marine planning. Agencies such as the Department of the Environment, CZMAI, Belize Fisheries Department, BAHA, MAFSNGI, and the University of Belize now have greater access to reliable data, improved management tools, and clearer policy pathways; significantly improving Belize's ability to design, implement, and enforce marine related- policies and regulations.

"Nationally, we are at a better place because of OCPP."

Stakeholder at Belize OCPP forum 2026.

OCPP has particularly focused on strengthening inter-agency collaboration to ensure technical skills are more widely distributed across institutions and to reduce siloisation and duplication of effort. Support for developing national indicators, updating marine spatial data, improving monitoring frameworks, strengthening biosecurity systems, and embedding One Health and One System principles is bringing more consistency and coherence to Belize's environmental management. Building national capacity to provision their own expert training through train the trainer programmes, in response to Belize say many times the expertise and technology often leave with the programmes.

Quarterly cross-government coordination meetings and the 2026 OCPP Forum helped Belize consolidate national priorities and align evidence, policy, and institutional roles improving governance structures and strengthened national capability.

Since 2022, OCPP has delivered several concrete, high value impacts across Belize's blue economy sectors. The programme strengthened national aquatic disease management by generating Belize's first whole genome sequences of AHPND related *Vibrio parahaemolyticus* and operationalising histopathology facilities at BAHA, enabling faster and more accurate disease diagnosis. These advances have improved national risk assessment and biosecurity systems and directly supported expanded market access — including Belize's progress in the export of tilapia to Guatemala, a major achievement for the aquaculture sector and regional food security.

OCPP has also driven progress in pollution management and environmental monitoring. The OCPP has significantly strengthened

Belize's capacity to manage marine pollution and monitor environmental health. The programme expanded national water-quality and pollution-monitoring capabilities by advancing the National Marine Litter Monitoring Plan, introducing pesticide screening, upgrading laboratory equipment, and supporting ISO certification pathways and MPhil-level training.

Pollution reduction at source was also enhanced through south–south collaboration with Pacific partners, helping to establish the public–private Belizean Waste Recyclers and Management Organisation and enabling sustainable rural waste-collection initiatives. OCPP additionally supported specialist analytical and technological skills development such as advanced laboratory methods, improved geospatial systems, drone surveys and AI-enabled automated monitoring creating long-term capability for evidence-based pollution management. Full Management Effectiveness Evaluations across all marine and coastal Protected Areas achieved an average score of 74%, surpassing global benchmarks and strengthening Belize's evidence base for adaptive management and future reporting.

"OCPP strengthened our capacity and created relationships that go well beyond the programme itself."

Stakeholder at Belize OCPP forum 2026.

Strengthening Collaboration to Manage and Protect Marine Environments

Across the pollution, biodiversity, and seafood themes, the programme has connected government agencies, co-managers, NGOs, academia, and communities around shared priorities and coordinated action. In biodiversity, MPA co-managers now work more cohesively with CZMAI and the Fisheries Department through Green Listing, shared monitoring frameworks, and improved data systems. In pollution, OCPP supported community-led waste solutions, improved coordination between Department of Environment, CZMAI, University of Belize, the Port Authority, and private sector recyclers, and strengthened ridge to reef collaborations on waste and water quality. In seafood, the programme deepened collaboration between BAHA, MAFSNGI, Tilapia hatchery, farmers, and international reference centres to strengthen aquatic health systems and value chain resilience. This collaboration has supported Belize in removing some market access barriers hindering export of tilapia to neighbouring Guatemala. This represents a significant milestone that strengthens Belize's aquaculture sector, supports the ambition of the CRFM Ministerial Council to enhance "intraregional trade" and contributes to wider regional food security through reliable, high-quality production.

The collaborative approach of OCPP was further bolstered at the national level through the 2026 OCPP Forum. This event brought together ministers, technical agencies, youth groups, donors, and community partners to agree a shared vision for advancing Belize's marine

environment through One System and One Health principles. This marks a transition toward more coordinated, cross-agency decision-making and reflects clear progress in strengthening national alignment, partnership working, and environmental governance.

Laying the Groundwork for Long Term, Inclusive Impact

The ultimate impact is improved, sustainable management of Belize's marine environment that enhances marine -dependent livelihoods and community wellbeing. OCPP has made early and meaningful contributions toward this long-term ambition.

Engagement with communities, co-managers, youth, and local enterprises has helped ensure these benefits are more inclusive, equitable, and widely shared. Belize's strengthened capability and strategic clarity have also elevated its regional and international leadership in biodiversity, climate, waste management, water quality and ocean governance supporting ongoing access to investment, partnerships, and global influence.

Independent findings from an interim evaluation of the partnership reinforce these achievements, noting that OCPP is delivering relevant, demand-led work that aligns strongly with national priorities. The evaluation highlighted notable results in pollution and sustainable seafood and recognises the programme's strong technical calibre and responsiveness. It also signals the importance of sustainable finance, stronger in-country coordination, and long-term capacity ownership to avoid gaps after the programme's exit. These insights align closely with the recommendations set out in each thematic narrative.

Further detail on the achievements, impacts, gaps, and recommendations for each theme is provided in the three thematic narrative documents—Marine Pollution, Marine Biodiversity, Sustainable Seafood, and the overarching One System narrative—which together present a comprehensive account of Belize's progress under OCPP and a pathway highlighting opportunities for sustaining momentum beyond the programme.

"This programme was designed collaboratively, and that is one of the reasons it has been so successful."

Belize OCPP Forum 2026

Narratives and Delivery

The Belize OCPP partnership was formally launched in 2022 following on from previous UK-Belize partnership programmes and scoping for areas technical assistance through the OCPP. Delivery began through the OCPP workstreams of marine pollution, sustainable seafood and marine biodiversity in 2022 concluding in 2026 at the close of OCPP. Figure 3 provides an overview of the timeline for the Belize partnership.

Figure 3: Timeline of Delivery throughout the Belize OCPP partnership

Through the transition of the Belize OCPP partnership three thematic narratives have been drafted (soon to be published) along with an overarching 'One System' narrative. Each thematic narrative provides the detail of OCPP delivery within that workstream (associated with Marine Biodiversity, Marine Pollution and Sustainable Seafood) and suggest potential short to medium term next steps to leverage the benefits from OCPP deliverables. The overarching One System narrative picks up from the thematic narratives to focus on the medium to longer term next steps and provides a potential framework that the narratives could work towards informed by Belize's needs. The collection of narratives aim to provide a pathway Belize can take to solidify future resilience and achieve key Belizean identify impacts of **Biodiversity Conservation, Blue Economy** and **Sustainable Development** and **Climate Resilience and Adaption**.

Marine Pollution- Environmental Water Quality

OCPP's Marine Pollution workstream was designed to respond directly to Belize's national priorities and the need for an integrated ridge-to-reef water quality management approach. Figure 4 provides a schematic of how OCPP delivery feeds into the medium to long term impact under marine pollution and

Figure 5 illustrates OCPP Marine Pollution delivery and proposed next steps post OCPP under environmental water quality. At the top of the diagram are the main contributions to One Health & Systems approach.

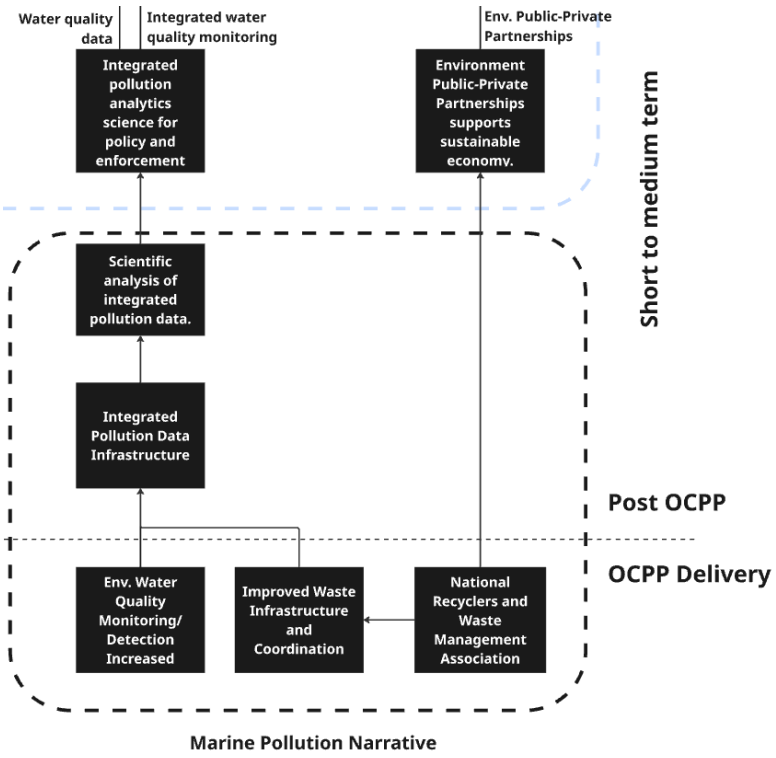

Figure 4: Schematic showing how OCPP delivery feeds into medium to long term impact under marine pollution

The programme supported the Department of Environment and the University of Belize with new laboratory infrastructure building also on the Belize Marine Litter Action Plan developed as part of the Commonwealth Litter Programme, including micro–Fourier Transform Infrared (FTIR) microscopes and mass spectrometry training, enabling Belize to detect microplastics and chemical contaminants domestically for the first time. It also developed International Organisation of Standards (ISO) assessment roadmaps for environmental laboratories to guide improvements and accreditation and supported national scale pesticide screening, revealing multiple compounds of concern across Belizean watersheds.

"Monitoring is now realistic, affordable, and scalable" Stakeholder at Belize OCPP forum 2026.

The programme has delivered several national -level governance enhancements, including the National Marine Litter Monitoring Plan, the Port Reception Facilities Feasibility Study, and developed the National Maritime Transport Policy all of which position Belize to reduce land-based and marine based pollution.

At the community level, OCPP introduced practical, scalable waste management solutions through Project Fresh Start, improving rural waste collection and reducing illegal dumping, and facilitated the establishment of the Belize Solid Waste Recyclers Association, strengthening private- sector- participation in waste governance developed via knowledge sharing between SIDS like Samoa and other South Pacific nations.

OCPP has also helped Belize move toward a more coherent, evidence driven and integrated pollution management system. The programme developed initial AI capabilities and provided drone-based monitoring methods, strengthened data sharing across agencies, and improved collaboration between DOE, CZMAI, University of Belize, BAHA, Sarteneja Alliance for Conservation and Development (SACD). These developments contribute strongly to Belize's broader **One System** ambition by linking freshwater and marine monitoring and supporting cross-sector environmental decision-making.

The Marine Pollution / Environmental Water Quality Narrative outlines the detail of the OCPP activities within this workstream and identifies clear opportunities for Belize to build long-term resilience, including: diversifying finance for water quality and laboratory systems; improving data standards and sharing; consolidating national laboratory capacity; scaling AI and data driven monitoring; enhancing waste management infrastructure; strengthening pesticide monitoring; and embedding ridge-to-reef approaches more firmly in national policy. Collectively, these recommended actions would support a more resilient, integrated water quality system that protects ecosystems, strengthens public health, and supports sustainable economic development. quality system that protects ecosystems, strengthens public health, and supports sustainable economic development.

"The recyclers' association exists because OCPP helped bring people together who were already doing the work but in isolation"

Stakeholder at Belize OCPP forum 2026.

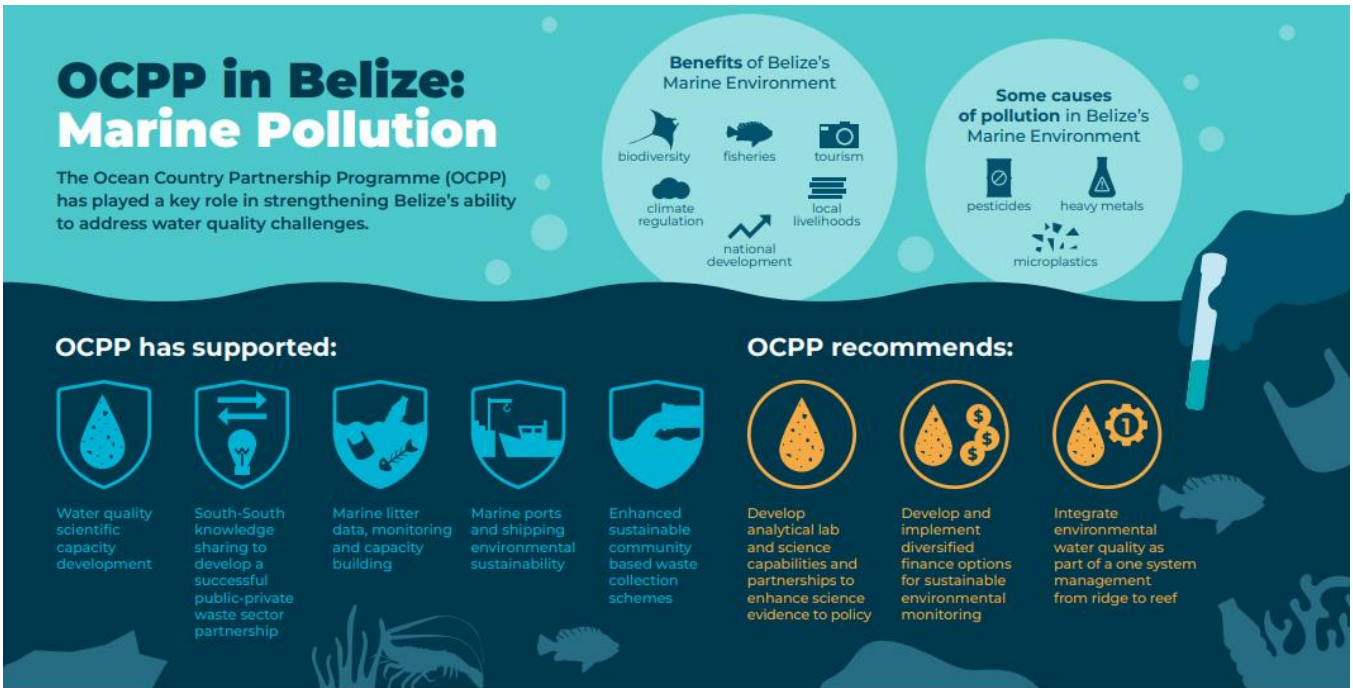

Figure 5: Poster highlighting the progress Belize has made through OCPP on marine pollution

Sustainable Seafood

The OCPP Sustainable Seafood workstream was designed in response to supporting Belize in building a more resilient, productive, and safe aquaculture and fisheries sector. Figure 6 provides a schematic of how OCPP delivery feeds into the medium to long term impact under sustainable seafood and Figure 7 illustrates OCPP Sustainable Seafood delivery and proposed next steps post OCPP.

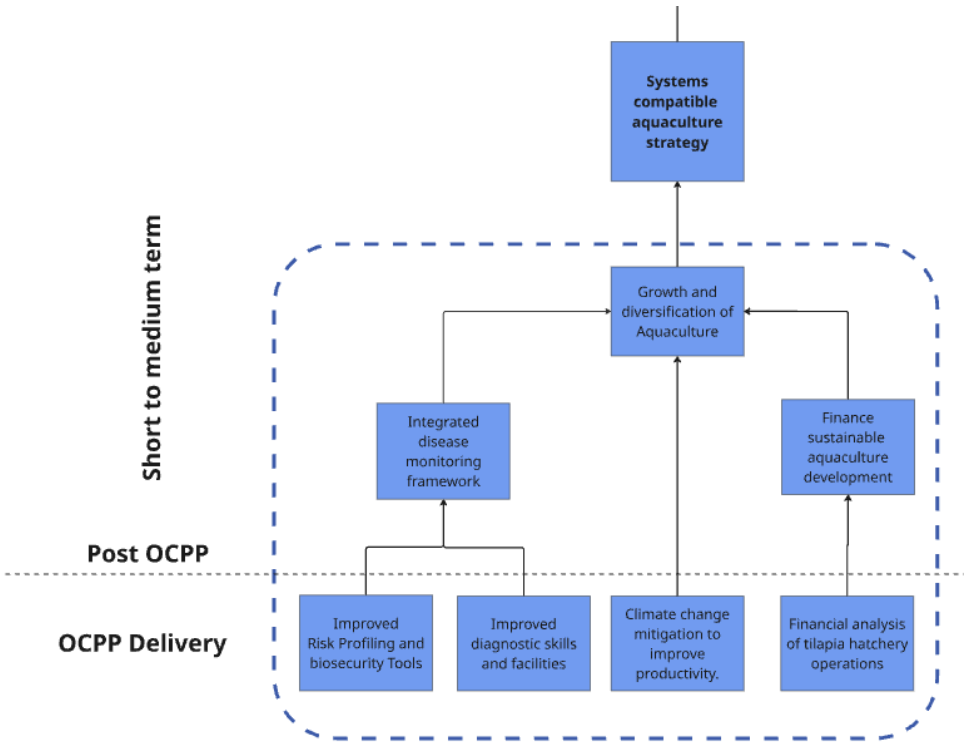

Figure 6: Diagram showing how OCPP delivery feeds into medium-to-long-term impact under sustainable seafood

OCPP has significantly improved Belize's national capacity to diagnose, monitor, and manage aquatic disease. The programme strengthened the Belize Agricultural health Authority (BAHA) and the Ministry of Agriculture, Food Security and New Growth Industries (MAFSNGI) through technical training, laboratory upgrades, and provision of essential diagnostic equipment. This included enhanced histopathology capabilities, improved biosecurity protocols, and support for emergency disease response which provided Belize with the tools needed to prevent, detect, and respond to disease outbreaks more rapidly and effectively. These improvements are critical for trade assurance, certification processes, increased production and long-term industry stability.

The Tilapia Hatchery Centre (THC) serves as a critical facility supporting growth of aquaculture-based livelihoods in rural areas.

"OCPP is [a story] of genuine collaboration and significant results. It serves as a reminder that when partnerships are built on shared goals, and consistent engagement, it can truly make a difference."

BAHA 2025

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In 2024 the THC underpinned operation of over 100 aquaculture micro-enterprises in Belize. OCPP supported the THC, by upgrading infrastructure and laboratory facilities, strengthening operational biosecurity, and producing educational resources for farmers, schools, and colleges. The programme undertook a financial analysis of the tilapia hatchery operations, identifying opportunities to improve productivity and long-term sustainability. These contributions help diversify Belize's aquaculture sector beyond shrimp and expand livelihood opportunities in rural communities.
The sustainable seafood workstream also addressed foundational data and regulatory needs. OCPP supported the development of disease surveillance systems, explored options for next generation sequencing tools and considered the design of an Electronic Information Management Tool for BAHA. This would support real-time- data on farm registration, inspections and risk-based compliance enabling a more modern, transparent, and enforceable regulatory system. Collaboration between BAHA, MAFSNGI, microenterprises, and Global Reference Centres- (WOAH, FAO) has also strengthened Belize's technical credibility and regional leadership in aquatic animal health.

"The work we did through OCPP has been a springboard for us to provide better services to industry."

Managing Director, BAHA 2026

The Sustainable Seafood narrative Marine Pollution / Environmental Water Quality Narrative outlines the detail of the OCPP activities within this workstream and identifies several strategic opportunities for Belize: developing a national aquaculture strategy that integrates land-based and mariculture production; Stimulating growth and diversification of the aquaculture sector (possibly by establishing grant-based support schemes for sustainable or restorative aquaculture projects); modernising data systems to develop an integrated disease monitoring framework; and a key vehicle for promoting One Health approaches to food production as first steps towards a wider One System approach. Strengthening linkages between water quality, pollution control, and aquaculture will help Belize better manage risk and improve seafood safety and productivity.

Taken together, OCPP's contributions have helped Belize improve disease preparedness and emergency response capability enhancing national food security and supported access to new international markets thereby promoting a more sustainable and economically robust aquatic food production system.

Figure 7: Poster highlighting the progress Belize has made through OCPP on sustainable seafood

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Marine Biodiversity

Belize has a strong policy framework aligned with the Global Biodiversity Framework, SDG 14, regional conventions, and the Blue Bond Conservation Commitments, but requires strengthened monitoring, governance, and management capacity to meet these ambitions. The OCPP biodiversity workstream was designed to address these needs by improving MPA effectiveness, strengthening data systems, and building technical capacity across institutions.

Figure 8 provides a schematic of how OCPP delivery feeds into the medium to long term impact under marine biodiversity and Figure 9 illustrates OCPP Marine Biodiversity delivery and proposed next steps post OCPP under sustainable marine management. At the top of the diagram are the main contributions to One Health & Systems approach.

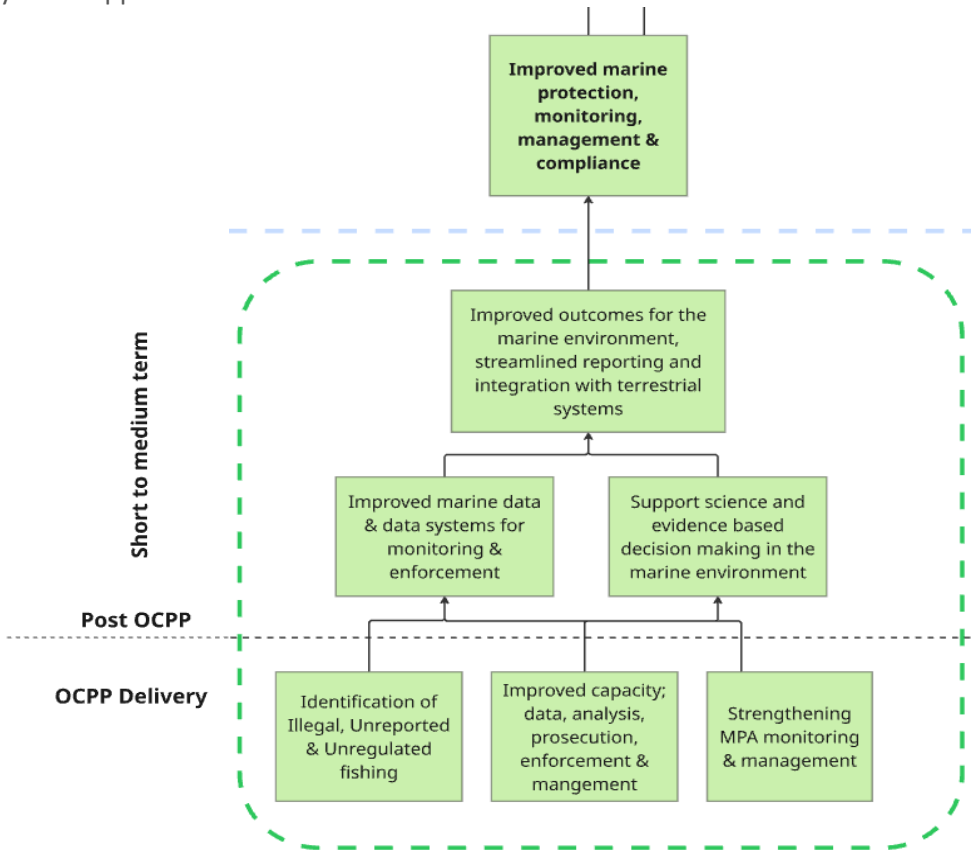


Figure 8: Diagram showing how OCPP delivery feeds into medium to long term impact under marine biodiversity

OCPP has supported Belize to develop a credible, nationally owned pathway to achieving international standards for protected area management. A central achievement has been the multiyear Green Listing process delivered through the International Union for the Conservation of Nature (IUCN), which included national orientation, Improvement Benchmarking and Evaluation Index (IBEX) rapid assessments across 14 MPAs, action roadmaps for five priority MPAs, training and establishment of the Expert Assessment Group for the Green List (EAGL) group, and support for onboarding sites to the Conservation Planning, Performance, and

Sustainability System (COMPASS) platform. Belize is now positioned to meet Blue Bond Milestone 7 and contribute evidence for GBF Target 3.1 reporting.
OCPP also delivered a suite of evidence building activities that strengthen Belize's capacity for adaptive management. These include a full MPA network and PAME assessment, national -level Management Effectiveness Evaluations (MEE) with piloted climate indicators, an MPA data review, and the Belize National Fisheries Research & Monitoring Strategy, which streamline data collection, analysis, and reporting. Support to CZMAI on geospatial data curation, data backlog processing, and improved workflows strengthened national implementation of the Belize Sustainable Oceans Plan. Combined, these outputs improve the quality, accessibility, and use of data across the marine sector.

Capacity building has been a consistent thread throughout the biodiversity workstream. OCPP supported training in GIS, R, data management, and fisheries enforcement (e.g., CRFM/RSS training), helping to ensure that CZMAI, the Belize Fisheries Department, and MPA co-managers have the skills required to deliver long-term biodiversity outcomes. These efforts enhance institutional resilience and help reduce duplication across programmes such as Resilient Reefs.

"Without OCPP, we would not have been able to conduct national management effectiveness evaluations."

Stakeholder at Belize OCPP forum 2026.

In parallel with MPA focused work, OCPP also advanced Belize's broader biodiversity and fisheries governance agenda through the independent Managed Access Programme Review. This review was a key national priority under the Blue Bond General Conservation Undertakings and provided an external, evidence-based assessment of Belize's rights-based fisheries management system. It drew on literature analysis, interviews with government partners, co-managers and NGOs, and semi-structured surveys with fishers across the country. The review identified strengths, implementation challenges, and practical opportunities to strengthen inclusive governance, data systems, compliance, and community participation in fisheries management. Its recommendations - now being taken forward by the Belize Fisheries Department and partners - include reinstating Managed Access Committees, improving data standardisation and reporting pathways, and enhancing communication between managers and fishers. By generating a clear, nationally validated roadmap for strengthening Managed Access, OCPP contributed to the enabling conditions for healthier fisheries, more resilient coastal ecosystems, and more equitable, community centred stewardship of marine resources.

The marine biodiversity narrative outlines the detail of the OCPP activities within this workstream and highlights several opportunities for Belize to consolidate and scale progress. Key recommendations include expanding Green Listing beyond the initial five MPAs, applying improved management practices across the full MPA network, strengthening data-sharing and analytical capacity between government and NGOs, completing and implementing the Fisheries Research & Monitoring Strategy, and showcasing Belize's experience globally through Green Listing and international fora. These actions support more effective management, better reporting to global commitments, and greater resilience to climate impacts.

Taken together, OCPP's contributions have strengthened Belize's ability to manage its marine biodiversity through improved evidence, clearer governance, and enhanced institutional capability, laying a strong foundation for long-term conservation outcomes and continued national leadership in marine protection.

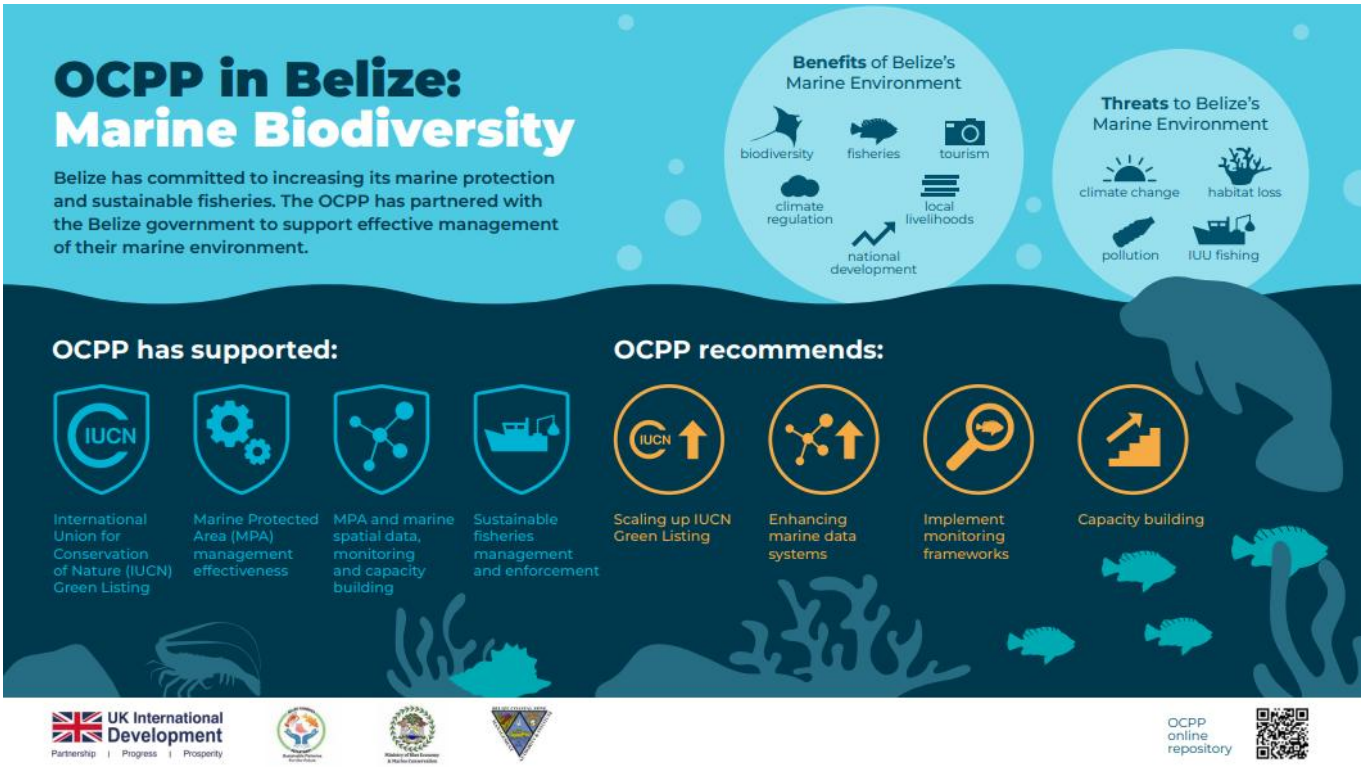


Figure 9: Poster highlighting the progress Belize has made through OCPP on marine biodiversity

One System Narrative

Belize's coastal and marine environments are highly interconnected systems that support the economy, food security, biodiversity, and community wellbeing. Yet management has historically been fragmented across agencies, policies, and data systems. Recognising this, Belize has adopted an ambitious move toward integrated, whole-of-government coastal and ocean governance, guided by the Integrated Coastal Zone Management Plan (2016), the Belize Sustainable Ocean Plan (2022), and the Integrated Coastal and Ocean Management Act (ICOMA, 2025). OCPP's overarching One System narrative supports this transition by providing the scientific, institutional, and coordination foundations required to manage Belize's environment from ridge-to-reef with a One Health principles (See Stentiford et al., 2025) forming an initial scaffold to build out from. Figure 10 provides a schematic how OCPP delivery feeds into medium to long term impact under the one system narrative. A poster highlighting the progress Belize has made through the proposed OCPP coastal one system approach is available in Figure 11.

"Projects like OCPP are helping us move towards one system."

Stakeholder at Belize OCPP forum 2026.

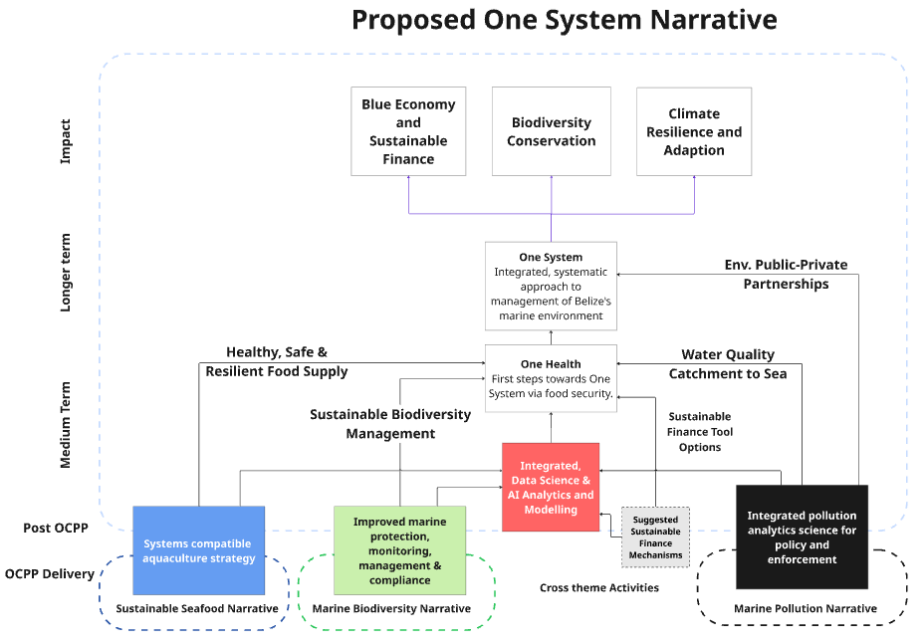


Figure 10 Diagram showing how OCPP delivery feeds into medium to long term impact under the one system narrative

OCPP has helped strengthen cross-government collaboration by convening quarterly coordination meetings, developing shared impact priorities, and uniting ministries, co-managers, youth, technical agencies, and donors at the 2026 OCPP Forum. These platforms have supported a national shift from siloed activity to joint decision-making, improved alignment across ministry portfolios, and increased coherence between biodiversity, pollution, and seafood workstreams. By producing interlinked narrative documents covering Biodiversity, Pollution and Sustainable Seafood, and the overarching One System narrative OCPP has helped Belize define a shared strategic direction for integrated coastal management.

The One System narrative highlights the importance of data science and data management to effective environmental governance. Belize faces significant gaps in data architecture, collection standards, analytical capacity, and technological readiness. OCPP's investments in GIS, AI, drone surveys, data training, and geospatial curation help address these gaps and establish the foundation for a national environmental data ecosystem capable of supporting early warning, better modelling, and cross-sector analysis. These approaches are critical for managing MPAs, monitoring water quality, supporting enforcement, and strengthening food security through a One Health lens.

Another major theme is the integration of environmental management within the Blue Economy. OCPP has supported the enabling conditions for sustainable growth by strengthening MPA monitoring, enhancing water quality analysis, improving maritime governance, exploring sustainable finance, and supporting private sector initiatives such as the Waste Recyclers Association. These actions

help Belize reduce environmental risk while unlocking long-term economic opportunities in tourism, fisheries, aquaculture, and maritime transport.

The narrative identifies key opportunities for advancing One System implementation: developing national waste infrastructure reforms, scaling AI-driven monitoring, standardising coastal data, linking enforcement across agencies, expanding Green Listing improvements, integrating biosecurity with coastal planning, and formalising cross-government coordination structures reducing duplication and maximising utilisation of constrained resources. These actions will help Belize deliver its ICOMA mandate and strengthen resilience to climate change, environmental degradation, and economic shocks.

Overall, OCPP has helped Belize articulate and operationalise a unified vision for coastal and marine governance—strengthening institutions, building technical capability, and enabling integrated decision-making across government and society. This positions Belize as a regional leader in systems-based ocean management and provides a strong platform for continued progress beyond the programme.

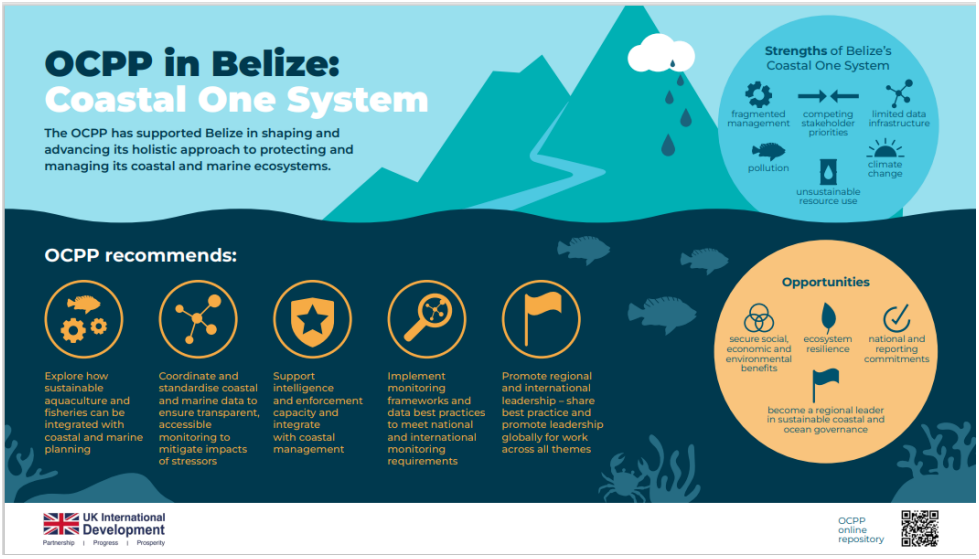


Figure 11 Poster highlighting the progress Belize has made through OCPP on coastal one system

Education

Ten OCPP Master of Philosophy (MPhil) scholarships were funded in Belize, managed by the Association of Commonwealth Universities (ACU), hosted at University of Belize. Two scholars graduated in September 2025, while the remaining eight are completing their write ups with university approved extensions; seven are expected to submit by February 2026, and one scholar by May 2026.

OCPP Belize scholar, Ed'n Newfield, who completed his studies in November 2025 and has since been selected for the prestigious Alliance of Small Island States (AOSIS) fellowship, where he will participate 1 in environmental diplomacy with Belize's delegation at the UN headquarters in New York. The scholar shared the following details and feedback:

"*I am honoured to share that I have been selected for the Italy-AOSIS Fellowship, representing Belize in New York, where I will receive advanced training in climate, environmental, and diplomatic roles with real-world applications for a year. […]*

"Again, I want to express my deepest gratitude to the Ocean Country Partnership Program, Belize, for your generous support as my grantor during my Master's in Marine Environmental Science. The education and guidance I received through OCPP have been instrumental in equipping me with the knowledge, skills, and perspective necessary to serve Belize more effectively in the ocean and environmental sectors.

"[…] I am truly grateful for the role OCCP has played in preparing me for this opportunity, and I look forward to using this experience to advance Belize's priorities in these critical areas."

Topics selected by the students for their research projects covered the following, a full list of the research titles can be found in Annex 3:

- Fisheries Management, Sustainability, and Compliance
- Marine Protected Areas, Governance, and Socio-Cultural Dimensions
- Marine Pollution, Contaminants, and Environmental Pathways
- Marine Ecosystems, Habitats, and Trophic Interactions

Collectively, these projects span marine and coastal pollution, sustainable seafood, food safety and biodiversity/MPA effectiveness, directly reinforcing OCPP's thematic priorities while building a pipeline of Belizean researchers to inform national marine policy and management. Four of the students presented their key findings at the OCPP Belize forum in February 2026.

"Developing Belize's technical capacity through MPhils and offering it to working individuals not just students is an excellent initiative"

Media interview, Belize 2026.

GEDSI and Safeguarding

Social Development Direct (SDDirect) was contracted by Cefas to conduct a national level Gender Equality, Disability and Social Inclusion (GEDSI) analysis for Belize. A GEDSI analysis examines how social norms, inequalities, and power dynamics shape access to opportunities, rights, and resources, and how different groups experience exclusion and vulnerability (SDDirect, 2025). This is essential for ensuring that marine and coastal programmes do not reinforce inequalities but instead help remove barriers and "leave no one behind". The Belize assessment was conducted through a literature review and key informant interviews with national stakeholders.

The analysis identifies the groups most marginalised in Belize's coastal communities, including women and girls, persons with disabilities, LGBTQI+ people, Indigenous groups, youth, and households experiencing multidimensional poverty, and highlights the specific barriers they face in

accessing marine resources, decision-making, and economic opportunities. It also examines how these groups are disproportionately exposed to environmental degradation, climate risks, and socioeconomic shocks. The analysis provides a set of recommendations for OCPP to integrate GEDSI principles more systematically across programme delivery, engagement, capacity building, and data collection.

The Belize GEDSI analysis also explores safeguarding concerns, particularly around sexual exploitation, abuse, and harassment (SEAH). Although formal reporting remains limited, the analysis notes that SEAH risks are likely to be present in sectors such as fisheries, coastal tourism, community-based conservation, and informal marine value chains. Gender-based violence (GBV), violence against children (VAC), and other safeguarding issues were highlighted as areas where OCPP should remain vigilant, especially in community facing or livelihood related activities. The analysis also identified OCPP workstreams where safeguarding risks may be heightened and recommends strengthened SEAH awareness, clearer reporting pathways, and partner training to ensure safe, inclusive, and ethical programme delivery.

Across Belize, OCPP activities were assessed against recognised Gender Equality, Disability and Social Inclusion (GEDSI) criteria. All assessed activities were classified as *GEDSI Sensitive*, meaning they appropriately considered the needs, experiences and potential barriers faced by different groups throughout programme delivery.
OCPP have developed a toolkit to support mainstreaming GEDSI to support all those working in the blue economy, including marine biodiversity, sustainable seafood and marine pollution to mainstream and monitor GEDSI within their work. The toolkit will be published in March 2026 and will be in two parts including practical guidance and tools and templates.

Project Fresh Start

Project Fresh Start was developed under OCPP's marine pollution interventions in Belize, with a specific emphasis on improving rural solid-waste collection services in remote and underserved communities, a key action in the Belize National Marine Litter Plan. OCPP Partnered with international waste management experts, WREN to designed and implement GEDSI in its use of culturally and linguistically adaptable training materials that responded to the diverse needs of Belize's rural and indigenous populations. The intervention was informed by OCPP's Belize-specific GEDSI analysis, which identifies indigenous groups, women, youth, and coastal communities as facing heightened vulnerability to environmental degradation and socioeconomic marginalisation. This analytical foundation ensured that the pilots were not merely technical interventions but were shaped around equitable participation, accessibility, and the representation of groups traditionally underserved in environmental policy and service delivery.

Furthermore, the programme adopted a capacity-building approach aligned with OCPP's wider GEDSI principles, embedding community voice into programme design and ensuring that local actors could influence the creation of guidance

materials intended for national scale-up. The development of flexible resources and training approaches—adaptable across literacy levels, cultural norms, and linguistic contexts—supported more inclusive participation in rural waste management systems and contributed to long-term empowerment of vulnerable populations. These measures directly respond to recommendations set out in the GEDSI analysis for Belize, which emphasises the need for meaningful engagement with coastal populations, youth, and marginalised groups, and for interventions that build resilience, strengthen environmental stewardship, and reduce disparities in access to environmental services.

Port Reception Facilities Feasibility Study & Maritime Transport Policy

The Port Reception Facilities Upgrade Feasibility Study (PUFS) and the Maritime Transport Policy contributed to Belize's efforts to modernise its maritime waste-management systems and maritime transport policy coherence and fulfil obligations under MARPOL. Both initiatives were undertaken in partnership with WREN Consulting, an international wase consultancy, and with Belizean partners under OCPP. The feasibility study encompassed a wide-ranging assessment of port infrastructure, legislative requirements, and operational gaps and was supported by extensive stakeholder engagement across national authorities, port operators, and marine sector partners. Within the context of OCPP's GEDSI guidance, this multi-stakeholder process provided channels through which the differential impacts of port-sector reforms—particularly on lower-income workers, labour-intensive occupations, and coastal communities relying on maritime livelihoods—could be recognised and integrated into forward planning. These dynamics reflect findings from the Belize GEDSI country analysis, which highlights the vulnerability of marine-dependent populations and the importance of ensuring that environmental and regulatory reforms promote equitable outcomes.

Although neither the Maritime Transport Policy nor the PUFS reports are framed as GEDSI-specific analyses, they nonetheless contribute to social inclusion and environmental justice by promoting safer, cleaner, and more efficient port environments. The OCPP GEDSI toolkit sets out the requirement for policies to account for how environmental hazards, occupational exposure, and pollution risks disproportionately affect women, youth, people with disabilities, and marginalised coastal groups. By strengthening waste-management systems, improving compliance with international conventions, and supporting national policy coherence, these initiatives indirectly advance the conditions for safer working environments and more equitable access to maritime services. The modernisation of port waste infrastructure and maritime transport therefore aligns with OCPP's overarching GEDSI objectives by mitigating environmental and health risks borne unequally across demographic groups and enhancing national systems that underpin long-term inclusion and resilience.

Conclusion

The OCPP–Belize partnership has demonstrated what is possible when technical expertise, national leadership, and community priorities come together behind a shared vision. Across all three thematic areas of marine pollution, sustainable seafood, and marine biodiversity the programme has delivered tangible, measurable progress that directly strengthens Belize's blue economy and supports long-term environmental stewardship. The statistics presented throughout this report and summarised in Annex 1 show the scale of what has been achieved: national laboratory systems operationalised and upgraded, 14 MPAs assessed through internationally recognised standards, over 12,500 drone images captured to build Belize's first AI-enabled environmental datasets, improved biosecurity removing some of the market access barriers which were hindering export of tilapia to Guatemala, and strengthened monitoring frameworks now guiding coastal and marine decision-making across agencies.

Equally significant is how these results were achieved. OCPP in Belize has been characterised by a genuinely collaborative approach; co-designed with government ministries, co-managers, NGOs, academia, youth representatives, private enterprises, and coastal communities. Quarterly cross-government meetings, the 2026 OCPP Forum, joint training across more than 30 organisations, south–south knowledge exchange, and the establishment of new national platforms such as the Belize Solid Waste Recyclers Association are testament to the strength of this partnership. The breadth of the stakeholder list in Annex 2 reflects a programme that worked not in isolation, but as part of a broad, inclusive, and coherent national effort.

Belize now has stronger technical systems, improved institutional capability, clearer governance pathways, and a more connected environmental management landscape. This has helped catalyse a shift toward integrated, One System approaches that align ridge-to-reef data, monitoring, enforcement, and planning which is a transformation grounded in Belize's own vision and priorities. Importantly, these achievements lay a foundation for sustainable, long-term impact: stronger national biosecurity, more resilient fisheries and aquaculture systems, improved environmental evidence, more effective MPAs, and clearer national pathways for sustainable finance.

Above all, OCPP in Belize stands as a model of collaborative partnership. One that listened, adapted, responded to need, and invested in national leadership at every step. The results demonstrate the power of working collectively across government, institutions, and communities to protect the marine environment that underpins Belize's identity, economy, and future wellbeing. This report captures the legacy of a partnership that has not only delivered results, but has strengthened the relationships, skills, and systems needed to carry this work forward long beyond the life of the programme.

Workstream Case Studies

The case studies listed below are examples of some of the more detailed delivery conducted under some of the OCPP workstreams.

UK International Development
Partnership | Progress | Prosperity

Strengthening Water Quality Monitoring Capacity

Belize's freshwater and marine environments face increasing pressure from agricultural runoff, untreated wastewater, pesticides, heavy metals and emerging contaminants such as microplastics and pharmaceuticals. These threats undermine ecosystem integrity, public health, food safety, and the productivity of marine dependent livelihoods. Recognising the national need for reliable, in-country water quality monitoring, OCPP delivered a coordinated package of technical assistance to strengthen Belize's ability to detect, analyse, and respond to pollution across its river-to-reef systems.

The programme combined targeted investment in laboratory infrastructure with capacity building for the Department of the Environment (DOE) and the University of Belize. This included procurement and commissioning of microFTIR microscopes and mass spectrometry equipment, specialised training for pollutant detection, and detailed ISO accreditation roadmaps to guide long-term laboratory development. OCPP also supported Belize's first nationwide pesticide screening in over a decade, revealing multiple compounds of concern across major watersheds and strengthening the evidence base for regulatory amendments and farmer outreach.

This work validated long recognised challenges - including fragmented monitoring, high costs of sample export, and limited analytical capability - while establishing new domestic capacity to generate credible, scientifically robust water quality data. The initiative also enhanced national coordination on pollution management, demonstrated during the 2023 Water Quality and Marine Pollution Workshop, which convened government agencies, MPA managers, and laboratory scientists to align approaches and share emerging evidence.

These improvements now inform ongoing work to develop Belize's National Water Quality Programme, integrate data across DOE and CZMAI, and strengthen responses to threats such as microplastic pollution, pesticide contamination, and nutrient-driven algal blooms. By building the foundation for an integrated, cost effective, and nationally owned water quality monitoring system, OCPP has contributed directly to improved environmental governance, stronger public health safeguards, and long-term resilience of Belize's blue economy.

Establishing the Belize Solid Waste Recyclers Association

Waste mismanagement - particularly in rural areas lacking reliable collection systems - has long contributed to illegal dumping, burning, and

leakage of plastics and other pollutants into Belize's rivers, mangroves, and nearshore ecosystems. This was identified as a key action in Belize's National Marine Litter Action Plan for this reason. These pressures affect community wellbeing, tourism, fisheries productivity, and national water quality. To address this, OCPP supported a suite of community-level waste initiatives, culminating in the creation of the Belize Solid Waste Recyclers Association, a nationally significant step toward coordinated, private sector-led waste governance.

The Association was developed by bringing together independent recyclers and community groups who had previously worked in isolation. OCPP facilitated technical engagement, knowledge exchange - including south to south learning from models used in the South Pacific - and development of basic organisational structures to improve coordination, investment readiness, and national visibility. This work was complemented by Project Fresh Start, a rural waste collection pilot that demonstrated scalable approaches to reducing illegal dumping and improving household waste management across underserved communities.

The initiative validated widespread challenges in Belize's waste ecosystem - such as fragmented service provision, limited public awareness, and lack of formal recognition for recyclers - while creating an institutional mechanism to address them. Early results show improved collaboration between recyclers and government agencies, increased participation in national waste free events, and stronger engagement of DOE and SWaMA in supporting the sector's growth. OCPP also supported the development of training materials for sustainable rural waste collection under Fresh Start that were designed in response to community feedback on the most effective training materials for them. These are now available across Belize in different languages and as a template for Belize to replication nationally and internationally.

The Association now looking to serve as a platform for expanding recycling capacity, strengthening circular economy opportunities, and reducing waste leakage into the environment. By creating a more coherent, community driven waste management system, OCPP has contributed directly to improved environmental quality, enhanced public health outcomes, and long-term resilience in Belize's ridge-to-reef ecosystems while empowering local actors to shape and lead future solutions.

Green Listing Programme

Belize's Marine Protected Area (MPA) network is central to national biodiversity goals, Blue Bond commitments, and Global Biodiversity Framework reporting. To improve MPA effectiveness through a consistent, science-based approach, OCPP supported a multi-year process to advance Belize toward the IUCN Green List Standard, an internationally recognised benchmark for effective and equitable protected area

management. Delivered with IUCN and national authorities, this work is now a cornerstone of Belize's long-term conservation strategy.

OCPP funded IBEX rapid assessments across 14 MPAs, identifying gaps in governance, planning, monitoring, and stakeholder inclusion. Action roadmaps were developed for five fast-tracked MPAs, these sites were formally onboarded to the Green Listing process, and Belize's Expert Assessment Group for the Green List (EAGL) was established and trained, providing national leadership for verification.

Published outputs, including the 2023 PAME recommendations and the 2024 Green List effectiveness assessment, now guide national decision-making. The work underpins efforts by CZMAI, the Belize Fisheries Department, and MPA co-managers to standardise monitoring, streamline Blue Bond reporting, and improve data quality, strengthening marine biodiversity governance and long-term resilience of Belize's MPA network.

Building a Resilient Aquaculture Sector in Belize

Belize's aquaculture sector which is important to national food security, rural livelihoods, and blue economy diversification, has long been constrained by aquatic disease risks, particularly following the collapse of the shrimp industry after the 2015 EMS outbreak. Recognising the importance of rebuilding a resilient and sustainable aquaculture system, OCPP delivered a comprehensive package of support to strengthen national aquatic animal health, improve farm level biosecurity, and enhance Belize's technical capability to prevent and manage disease.

The programme combined diagnostic system upgrades, laboratory training, and infrastructure improvements at the Belize Agricultural Health Authority (BAHA) and the Tilapia Hatchery Centre (THC), alongside updated biosecurity protocols and climate resilient facility enhancements. OCPP also facilitated connections with WOAH and FAO reference centres, supported the development of emergency response procedures, and laid initial foundations for an electronic information management tool to strengthen regulatory oversight and risk-based surveillance.

This coordinated effort validated known system level challenges, including limited in-country diagnostic capacity, inconsistent farm level biosecurity, and gaps in data and regulatory systems, while providing a practical set of improvements that directly address them. Key outcomes include enhanced histopathology and disease detection capability at BAHA, improved productivity and biosecurity at the THC, strengthened technical skills across government and industry, and more coherent national preparedness for emerging aquatic health threats.

These improvements now inform ongoing work within BAHA and MAFSNGI to modernise disease surveillance systems, integrate data tools,

and strengthen national certification and trade assurance processes. By strengthening national aquatic animal health systems, OCPP has contributed directly to improved biosecurity, greater industry resilience, and more sustainable growth of Belize's aquaculture sector advancing long-term food security, rural livelihoods, and climate ready development. These activities have already had national level impacts by contributing to the complex systems required to facilitate market access of Belizean aquatic products to Guatemala and Taiwan.

Developing advance environmental technology

Belize's marine and freshwater environments face mounting pressures from coastal development, pollution, and data limitations, creating challenges for evidence-based management across its river-to-reef systems. Ocean Country Partnership Programme (OCPP) has responded to Belizes need through a series of technological support deliverables designed support the modernising of national monitoring capabilities, supporting metrics for funders and Blue Bonds programme and strengthen institutional ownership of environmental evidence. This included work across all three OCPP themes—marine pollution, biodiversity, and sustainable seafood/One Health aquaculture—reflecting a whole-system approach to environmental governance.

A major focus of the programme was the deployment and institutionalisation of modern technologies. GIS and spatial data support enabled CZMAI and partner agencies to update marine spatial plans and integrate diverse datasets into coherent national decision-support systems. Drone-based beach and coastal surveys, carried out using 12,500+ high-resolution images, provided an unprecedented evidence base for understanding litter distribution and coastline condition, while also building in-country operational competence. This was done via a national AI annotation and machine-learning capacity-building programme, equipping government agencies, NGOs and universities with the skills, pipelines and QA processes needed to generate high-quality training data to provide training data to develop automated environmental monitoring.

These technologies were complemented by strengthened laboratory infrastructure, data-management systems, and cross-agency coordination mechanisms, supporting long-term improvements in environmental decision-making. Collectively, the interventions increased national capacity across more than 30 organisations, enabled Belizean institutions to work towards reliable and policy-ready environmental evidence, and reduced reliance on external data providers. By embedding GIS skills, drone operations, AI annotation capability, and integrated data workflows within Belizean institutions, OCPP has laid the

foundation for a resilient, integrated environmental data capability that strengthens marine governance, supports blue-economy development, and enhances long-term sustainability.

Managed Access Programme Review

Belize's Managed Access system: its national Territorial Use Rights for Fishing (TURF) framework, plays a central role in sustainable fisheries management, equitable resource access, and biodiversity outcomes. Recognising its national importance and the commitment under the Blue Bond Loan Act to complete an independent evaluation, OCPP delivered a comprehensive Managed Access Programme Review to assess performance, identify implementation barriers, and chart a pathway to strengthen the system.

The review combined desk-based research with extensive engagement, including interviews with government agencies, co-managers, fishing cooperatives and NGOs, and surveys with fishers across Belize. It validated many of the challenges already recognised internally by the Belize Fisheries Department - including inconsistent data practices, limited communication channels, reduced functionality of Managed Access Committees, and uneven enforcement capacity - while providing a structured set of sixteen recommendations for improvement. Key recommendations include reinstating Managed Access Committees with strengthened representation, improving standardised data collection and catch verification systems, enhancing patrol capability, and strengthening reporting and feedback mechanisms between managers and fishing communities.

The review now informs ongoing work under the Sustainable Blue Economy (SBE) programme, including the development of a roadmap to reinstate Managed Access Committees. Belize Fisheries Department has also begun advancing several recommendations independently, including upgrades to catch reporting systems and improvements to data access and storage. By generating an evidence based, nationally endorsed plan for strengthening the Managed Access system, OCPP has contributed directly to more effective fisheries governance, improved compliance, stronger co-management relationships, and long-term resilience of Belize's marine ecosystems.

Building a Sustainable Finance Framework for Belize's Blue Economy

Through a year programme of stakeholder engagement, consultation and analysis OCPP has delivered a set of packages designed around each theme. These were carefully built to compliment existing efforts and responsive to Belize's financing priorities. This process began with a countrywide assessment of OCPP outcomes to identify those requiring sustainable finance solutions (Deliverable 1), followed by detailed

cost-revenue analysis across three thematic packages: marine conservation, aquaculture and hatchery development, and environmental laboratory testing. The work also mapped suitable financing mechanisms—from tourism-based fees and blended finance options to blue carbon credits, performance-based grants, and trade-related instruments—and assessed their feasibility in Belize's economic and policy context (Deliverable 3).

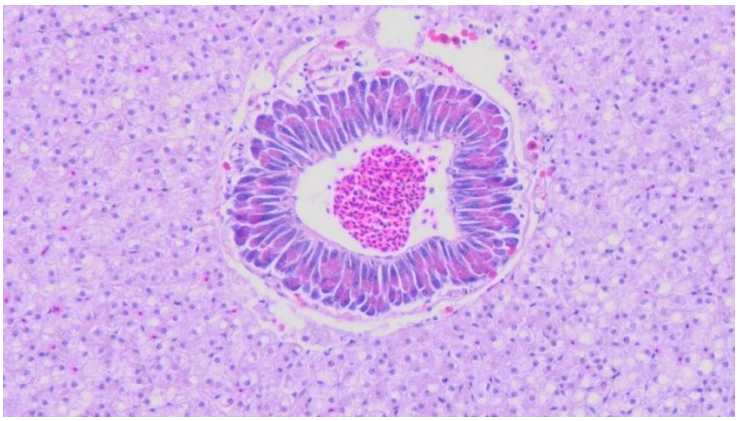
Recognising that long-term sustainability required more than technical design, OCPP also strengthened Belize's institutional capacity to deliver and govern these mechanisms. This included the development of a national Sustainable Finance Training Programme, providing foundational skills in marine finance, valuation, risk management, and investment concepts for government, academia, and civil society (Deliverable 7). A structured Stakeholder Engagement Plan guided consultations with Ministries, the Blue Bond & PFP Unit, PACT, DFC, BAHA, MPA co-managers, and community groups, ensuring the resulting framework reflected Belizean priorities and institutional realities (Deliverable 4) which led to Deliverable (5), a final set of consulted and agreed sustainable financing options for Belize to support ongoing OCPP deliverables.

The culmination of this work was a long-term implementation and institutional architecture roadmap (Deliverable 8), which sets out strategic options for a Sustainable Finance Working Group, a national MRV and data coordination function, a Sustainable Finance Registry, and mechanisms to strengthen enterprise support at community level. These recommendations intentionally build on existing structures—such as the Blue Economy Cluster, Ocean Accounts Steering Committee, and the Belize Fund—reflecting stakeholder preferences for enhancing, rather than duplicating, national systems.

This integrated approach has produced the strongest national picture to date of what Belize requires to sustain benefits of OCPP deliverables e.g. transparent funding pathways for MPAs, scalable models for aquaculture and biosecurity, financially viable laboratory systems to support pollution monitoring, and coordinated institutions capable of managing complex financing portfolios. The work has already informed ongoing Government of Belize discussions on the Blue Economy Bill, helped align financing pathways with Blue Bond and PFP commitments, and strengthened collaboration between key agencies by providing a shared evidence base and common strategic direction. The OCPP Forum in February 2026 also emphasised the importance of translating the complex sustainable finance mechanisms into language for those not fluent in sustainable finance.

By building the foundations for a coherent, nationally owned sustainable finance system, OCPP has helped Belize move from fragmented, project-by-project support toward a forward-looking model that links marine conservation, sustainable livelihoods, and environmental

governance to predictable, long-term financial strategies. This positions Belize to scale its blue economy ambitions, strengthen resilience of coastal communities, and maintain healthy marine ecosystems for decades to come.



Liver Histology of a Tilapia farmed in Belize and generated by the histology facilities operationalised at BAHA under OCPP.

A small scale family run tilapia production facility indicative of the micro-enterprises supported by the Tilapia Hatchery Centre.

Annex 1 - Full Stakeholder list

Table 1: Key stakeholders involved in the OCPP Belize partnership.

Stakeholder Type	Key Stakeholder or Partner
NGO	Association of Protected Areas Management Organization (APAMO)
Government	Belize Agricultural Health Authority (BAHA)
NGO. MPA co-manager	Belize Audubon Society (BAS)
Government	Blue Bond and Finance Permanent Unit
Government	Belize Coast Guard (BCG)
Other	Belize Fishermen Cooperative Association (BFCA)
Government	Belize Fisheries Department (BFiD)
Government	Belize Forestry Department (BFD)
Private. Funder	Belize Fund for a Sustainable Future (BFSF)
Industry	Belize Shrimp Growers Association (BSGA)
Government	Belize Port Authority (BPA)
NGO	Blue Ventures
Regional Institute	Caribbean Community Climate Change Centre (CCCCC)
Regional Institute (Intergovernmental)	Caribbean Regional Fisheries Mechanism (CRFM)
NGO	Caye Caulker Group for Environmental Sustainability
Cooperative / Other	Caye Caulker Stone Crab Fishermen Association
Cooperative / Other	Chunox Fishermen Association
Cooperative / Other	Copper Bank Fishermen Association
Government	Climate Finance Unit
Government	Coastal Zone Management Authority and Institute (CZMAI)
Government	Department of Environment (DoE)
NGO	Environmental Defense Fund
NGO	Forest & Marine Reserve Association of Caye Caulker
NGO. MPA co-manager	Friends of Swallow Caye (FoSC)
Academia	Galen University
Multilateral Fund / Other	Global Fund for Coral Reefs (GFCR)
Global Partnership / Other	Global Ocean Accounts Partnership (GOAP)
Regional coalition	Healthy Reefs for Healthy People Initiative
NGO. MPA co-manager	Hol Chan Marine Reserve
Cooperative / Other	Hopkins Fishermen Association
International NGO	International Union for the Conservation of Nature (IUCN)
NGO	Lighthouse Reef Conservation Institute
Government	Ministry of Agriculture, Food Security and New Growth Industries

Government	Ministry of Blue Economy and Marine Conservation
Government	Ministry of Economic Transformation
Government	Ministry of Finance
Government	Ministry of Sustainable Development, Climate Change & Disaster Risk Management
Government	National Association of Village Councils (NAVCO)
Government	National Biodiversity Office, Ministry of Sustainable Development
Cooperative / Other	National Fishermen Cooperative Society
NGO	OCEANA Belize
Multilateral Fund	PROBLUE - World Bank
NGO. MPA co-manager	Sarteneja Alliance for Conservation & Development (SACD)
Cooperative / Other	Sarteneja Fishermen Association
NGO. MPA co-manager	Southern Environmental Association (SEA)
Cooperative / Other	Southern Fisher Folk Alliance Association
Cooperative / Other	Stann Creek Fishermen Association
Government	Sustainable Development Unit (SDU)
NGO. MPA co-manager	Turneffe Atoll Sustainability Association (TASA)
NGO	The Nature Conservancy
NGO. MPA co-manager	Toledo Institute for Development and Environment (TIDE)
Cooperative / Other	Toledo Fishermen Association
Academia	UB Environmental Research Institute (ERI)
Academia	University of Belize (UoB)
UN Agency	UNICEF
Cooperative / Other	Wabafu Fishermen Association
NGO	Wildlife Conservation Society Belize (WCS)
NGO	Wildtracks
NGO & Funder	World Wildlife Fund (WWF)

Annex 2: Scholarship Research Titles

1. Climate Change and Marine Protected Area Management Effectiveness. Linking Managed Access Review, IUU/C&E, Deep-Sea Camera System
2. Sustainable Fishing: Analysing Tropical Tuna and Bycatch Data from Belize's High Seas Operations
3. Assessment of an artisanal fishery using fisher's knowledge: A case study of beach trap fishing inside Corozal Bay Wildlife Sanctuary
4. Evaluating Cultural Ecosystem Services and Environmental Stewardship among Camp Based and Sailing-Vessel Based Fishers operating on Turneffe Atoll, Belize.
5. Assessing Microplastic Abundance in Seagrass Beds of Bacalar Chico Marine Reserve (BCMR)
6. A Study on Pelagic Sargassum as a Potential Vector of Meso and Microplastic Dispersal into the Coast of Belize.
7. Analysis of pharmaceuticals and veterinary drugs in marine fish in managed access fishing areas in Belize.
8. Pollution Potential Assessment of Corozal Town's Drainage System
9. Diet of lionfish (Pterois spp.) in Southwater Marine Reserve
10. Using participatory mapping to support resource allocation and management in Belizean's data-limited recreational fishery.

Training university students and officials from BAHA on disease investigation methods for fish.