



PROJECT FOR THE CONSERVATION OF MARINE RESOURCES IN CENTRAL

AMERICA

Funding Agreement: (2010 66 836)

**FINAL WORK PLAN
2018-2019**

Corozal Bay Wildlife Sanctuary

Belize

1. LOGICAL FRAMEWORK OF THE PROJECT

INTERVENTION LOGIC	VERIFIABLE INDICATORS	SOURCES AND MEANS OF VERIFICATION	HYPOTHESIS
MAIN OBJECTIVE (MO)			
To contribute to the conservation of the ecological functions of the Mesoamerican Reef System (MRS).	Mangrove areas in the project's CMPA equal to or greater than those of the baseline.	Baseline study and final study.	Effective management will be able to address threats to mangrove and seagrass ecosystems
	Seagrass areas of the project's CMPA equal to or greater than those of the baseline.	Baseline study and final study.	
PROJECT OBJECTIVE (PO)			
To consolidate the CMPA selected in the project's region and ensure the use of coastal and marine resources in the medium-term.	PO VIO1: The financial gap does not increase in 100% of the CMPAs included in the programme.	Baseline study and final study.	<ul style="list-style-type: none"> The MAR ecosystem does not suffer irreparable damage by the effects of climate change. Countries with participation in the MAR coordinate their strategy. The four governments maintain and promote policies which support the protection and conservation of natural resources. Worldwide and domestic macroeconomic conditions do not adversely affect the financial resources available for the CMPAs. Social, migratory and population stability do not impose disproportionate pressures on the natural resources of the MAR. There are supportive policies for the tourism sector and the volume of tourist visits to the countries and protected areas is stable.
	PO VIO2: Management plans are updated and under implementation in 100% of the CMPAs included in the programme.	Five MP developed; qualitative analysis of the programme / sub programme running.	
	PO VIO3: The CMPAs included in the programme have natural sustainable resources use plans under implementation.	Monthly and annual Project reports, informes de seguimiento de los fondos miembros.	
RESULTS			
R1: The protection and conservation of the coastal -marine ecosystems in the marine area are secured.	R1 VIO1: At least 12 initiatives for marine and terrestrial infrastructure built or rehabilitated and put into operation by the end of the third year (2017) and that will be used properly in accordance with their original purpose until the conclusion of the project.	Inventories and monthly and institutional reports; visitor records; patrol reports; Number of participants trained; user manuals. Photos.	VIO1 & VIO2: There are no adverse weather conditions that affect the integrity of the infrastructure of the CMPAs. Funds allocated by the Executor for maintenance are available.
	R1 VIO2: The acquired facilities are being used properly and have regulation and usage logs.	Inventories; usage regulations; usage logs; operation and maintenance manuals; maintenance logs; biological monitoring reports; training reports. Photos	

INTERVENTION LOGIC	VERIFIABLE INDICATORS	SOURCES AND MEANS OF VERIFICATION	HYPOTHESIS
	R1 VIO3: The park rangers (officers and community members) receive at least two training sessions per year on the protection and conservation of natural resources.	Certificates/registration records/training reports and lists of participants.	VIO3 & VIO4: There are sufficient funds to maintain human resources of the CMPAs.
	R1 VIO4: A control and supervision planning scheme exists and is being implemented in accordance with the operational capabilities of each area.	Reports on the planning and scheduling of control and surveillance activities; Patrol reports, logs.	
	R1 VIO5: At the end of 2015 (second year) five management plans (programs) exist and are being implemented (over the lifetime of the project).	5 Management Plans produced; qualitative analysis of the ongoing programs/sub-programs.	VIO5 & VIO6: The five governments maintain policies which support the protection and conservation of natural resources; The CMPAs maintain their current administrative structures.
	R1 VIO6: At the end of the Project, the five CMPAs have improved their socio-economic and governance indicators by x%.	Baseline studies using the Management Effectiveness Assessment/final measurement.	
R2: Best management practices and the sustainable use of marine-coastal resources are applied.	R2 VIO1: The five CMPAs have a strategy/community development plan for the end of the second year.	5 strategies developed; qualitative analysis of activities in progress as part of the project.	VIO1 & VIO2: There is community interest in participating in the project's actions; There is general macroeconomic stability (input costs/sales prices/open markets); Other entities (NGOs, local governments, academia) are interested in supporting productive initiatives that strengthen communities and grassroots organizations.
	R2 VIO2: 100% of the proposed productive initiatives have undergone feasibility/market and business studies/plans, in addition to studies on business aspects and training and technical support mechanisms.	Complete proposals (support studies).	
	R2 VIO3: Increased number of community members trained, accredited and involved in activities that support daily management tasks (biological monitoring; control and surveillance) of protected areas.	Accreditation reports and records, lists of participants; activity reports.	VIO3 & VIO4: There is community interest in participation.
	R2 VIO4: The 5 CMPAs have mechanisms (community advisory committees or equivalents) which ensure the participation of local stakeholders in decision-making guidance regarding the management of the areas and meet at least twice yearly.	Rules on the constitutionality and functions of the committees/minutes of meetings/committee training reports/institutional reports/list of participants.	
R3: Communication and effective exchanges to promote the adoption of new practices.	R3 VIO1: At the end of the project, at least six (6) small regional projects implemented and monitored by the Member Funds: Three of them in a first call in 2015 and the other 3 in a second call in 2016.	Technical and financial reports; monitoring reports of the Member Funds.	There is an interest of proponents to participate in small grants projects. The respective national authorities have shown interest in participating in regional meetings and monitoring the implementation of the agreements reached.
	R3 VIO2: At least two regional meetings have been held and a strategy for monitoring the implementation of the agreements has been reached.	Meeting minutes, list of participants; activity report; statement of the agreements reached and monitoring plan.	
	R3 VIO3: At the end of the project, at least five exchanges of experiences between area managers	Visit report, list of participants.	There is interest in participating.

INTERVATION LOGIC	VERIFIABLE INDICATORS	SOURCES AND MEANS OF VERIFICATION	HYPOTHESIS
	and/or other stakeholders from each CMPA have been encouraged.		

2. CONTEXT AND ATTENTION POINTS (SENSITIVE POINTS)

The realignment and re-designation process of Corozal Bay Wildlife Sanctuary (CBWS) has the potential to increase the management effectiveness of the area by having established zones that will be easier to monitor and control. The new status will also define what will be permitted in the area considering the conflict between what is currently permitted by law and what is happening on the ground. However, this process, once completed, may also require that amendments/updates are made on the management plans and co-management agreements. Additionally, this may result in new social conflicts with users that are difficult to engage. However, as a first steps SACD have already incorporated the Corozal Bay Advisory committee (CBAC) as mechanism to ensure that when the time comes fishermen and stakeholders are informed, engaged and supportive of sustainable use practices of CBWS.

Traditional fishers who have used the Bay through generations are the most fragile of all. This is a situation that is hard to change and will take a very long time for the new generation to make a difference, and even so , perceptions of distrust inherited by the old generations is something that we have to work with every day. However, the Project activities and investments are targeting this very same people to be more informed and engaged. Through, firsthand experience as interns and activities that will support fishers livelihoods and improve relationships with the traditional users of CBWS.

Additionally, as most of Belize, we are in the 'highest probability of hurricane impacts' and as such, Corozal Bay and its community stakeholders are always at risk. Though, SACD provides emergency support for these type of situations in conjunction with the Belize Coast Guard for any incidents that may arise on the water. As well, with the infrastructure in place SACD is more prepared and will update its systems to ensure that all equipment and infrastructure are secured, to minimize storm damage of any type. Having space to store the vehicle and vessels.

3. ACTIVITIES TO DEVELOP

RESULT 1. THE PROTECTION AND CONSERVATION OF MARINE-COASTAL ECOSYSTEMS IN THE MARINE AREA ARE SECURED

The investment made under this component is very important for the success of this Project and ensures that SACD is meeting its responsibility as the co-manager organization of CBWS. The infrastructure and equipment provides the basis for stability and continuity of work and the implementation of the CBWS management plan. The investment made in technology are primarily to ensure the environmental safeguard needed for the long term environmental sustainability of the Organization and the resources of CBWS. As a protected area co-manager, SACD's environmental sustainability is dependent on information, community engagement, environmental friendly practices and enforcement.

All activities developed provide a strong foundation for improved protection and conservation management of this marine protected area and its critical ecosystems into the future. The institutional growth of SACD is also dependent on the continued capacity building of SACD's Board and Staff and the ability to increase its self-sustainability. SACD has invested quality effort and energy in strengthening the organization's institutional capacity as the bases for the long-term sustainability, this has been done through the revision and update of their policies and procedures manual, staff hand book, and Articles of Associations. Following this updates, SACD has restructured its board composition with a more balanced representation between the technical expertise and community representation.

A critical component is to ensure that SACD increase their capacity by engaging in field trainings, while the board takes leadership in ensuring that the Financial Mobilization plan is completed and implemented and has reduced SACD's dependency on grant funding. This component will also improve SACD's communications and information dissemination and will ensure that the investment in research and enforcement continue to contribute to ensuring informed decision making and reducing illegal activities to contribute to the overall effective management of CBWS and the larger seascape in Northern Belize.

The main activities that lead to the **protection** of the area are the following:

- The investment in purchasing and installing 3 information signs and 15 demarcation buoys, will allow the users to identify the limits of the area, the signs will provide useful information as to what is allowed and what is not within the protected area and possible illicit will be easily identified as well. The change in category, will formalize and maintain the use of the area only by traditional fishers with zone number 1 licence.
- The control and surveillance program continues to be strengthened with the acquisition of a vessel and engine. With this equipment SACD will be able to cover more area in less time in each patrol, since the engine is more potent than the one they used before. Foreseeing an increase in patrols compare to the amount executed in 2017. SACD has planned a total of 285 patrols for the two years (2018-2019), with an average of 3.8 per week and 12 joint patrols with SEMA schedule for 2018.
- The use of the GIS system has strengthen the creation of maps. Currently the demarcation of lobster traps per fisher and their location within the GIS, allows for a better control in the management of the resource.
- The training that is developed periodically with Belize Coast Guard, will strengthen the three rangers practical and security skills.

The main activities that lead to the **conservation** of the area are the following:

- The construction of an office for the organization and the planned activities to strengthen the BoD, will allow a greater visibility and governance of the organization, which will generate a better efficiency in conservation.
- The consultations for the management plan, for it to be approved, will allow SACD to have an updated document that defines the threats and the main activities to be carried out in order to achieve the conservation and management of ecosystems within the protected area.

- The implementation of the research and monitoring program, where water quality monitoring in CBWS has been scheduled, monitoring of commercial importance species, participation in the seventh Mesoamerican Connectivity Exercise (ECOME) and final measurement and field verification of mangrove and seagrass cover. Will provide data that is used in decision making aiming to the conservation of the resources.
- The strengthening of the transboundary partnership for the conservation and sustainable development of the Mexico - Belize ecosystem is expected to be achieved through the elaboration and implementation of a joint work plan, which is fundamental for the coordination of activities for the protection and conservation of the ecosystem and monitoring of water quality, which will allow detecting any level of damage to the region.

BC.1.01 Investments in infrastructure

The investment made will improve SACD's operational functionality, increase its ability to strengthen community recognition and support for protection and sustainable resource use of the Wildlife Sanctuary, and to increase management cost-effectiveness of all Alliance members. SACD also seeks, not only more financial sustainability, but also to reduce its carbon footprint as a component of its "going green" initiative, through use of renewable energy.

BC.1.01.01 Purchase and construction of multipurpose building (2018)

In order to increase management effectiveness and long term financial sustainability, SACD purchased a land and a semi-completed building with support from the Project in the BWP 2016-2017. The main purpose of the building is to host and support SACD's operations through the provision of adequate office space, a dedicated meeting room, an interpretive center, mini-field lab, store room for patrol and field equipment, which will improve the capacity to maintain the equipment, bathroom and kitchen facilities. The building is also designed to hold two spaces to host and support other community-based organizations that work in direct collaboration with SACD to also support the organization's financial sustainability.

The rehabilitation of the building has begun and the last disbursement is pending for USD9,633.75 and an additional USD5,000 to purchase the equipment to build the fence around the building. The total amount for this activity is of USD14,633.75 funded by the Project, to be executed in January and February 2018.

BC.1.01.05 Installation of solar power system (2018)

The multi-purpose building in BC.1.01.01 will be equipped with a solar power system as a mechanism to reduce SACD's cost of operations and its partner organizations, whilst also reducing SACD's carbon footprint in the global environment. The last disbursement, for the system bought with support from the Project in the BWP 2016-2017 is USD12,738.40.

The total amount of this activity is USD18,906.38, of which USD12,738.40 will be covered by the Project to purchase the solar system, with matching funds of USD6,177.98 for the structure needed to store and install the solar system, which will be done in January 2018.

BC.1.02 Investments in Equipment

The equipment proposed under this activity has been identified as critical equipment to strengthen management effectiveness in both the short and long term, and to increase SACDs ability to meet the conservation goals for Corozal Bay Wildlife Sanctuary as outlined in the CBWS management plan. It will also further SACD's ability to proactively support system and trans-boundary management initiatives and collaboration. These equipment sets include; office equipment, surveillance and enforcement support equipment, education and outreach equipment, demarcation buoys, and research and monitoring equipment.

BC.1.02.02 Purchase and installation of marker buoys and information signs (2018)

SACD, through the MCCAP, is revisiting the Corozal Bay boundaries, and identifying potential zones, to be identified in consultation with the local users/communities. The designation of the area is still in process with possibilities of re-categorizing it either as a Wildlife Sanctuary category 2 or a marine reserve. Once this process is completed, SACD will need to do a complete demarcation of the CBWS boundaries and zones. This activity was deferred from the BWP 2016-2017 due to the delay in the process, however, the demarcation buoys and information signs will be purchased and installed to increase the general awareness about the protected area and to increase the ability of the organization to conduct effective surveillance and enforcement. The total amount requested for this activity is USD18,125, of which USD17,725 will be covered by the Project to purchase and install 3 information signs and 15 demarcation buoys on April 2018. The matching funds contribution of MCCAP is estimated to be USD2,500 for 7 shallow water PVC built markers in April 2018.

BC.1.02.04 Purchase of office equipment (2018)

SACD continues strengthening its institutional structure by acquiring equipment needed to manage the area and involve community members in the management of natural resources. All equipment purchased supports the improvement of management effectiveness of the marine protected area. The total amount for this activity is USD1,943.50 to be covered by the Project for the purchase of one conference table on January 2018.

BC.1.02.06 Purchase of a replacement vessel and outboard engine (2018)

SACD purchased a replacement vessel and outboard to support the ongoing Surveillance and Enforcement and Research and Monitoring activities in CBWS. As follow up to this activity from the BWP 2016-2017 and with support from the Project, SACD will purchase a boat trailer to be able to maintain and to launch the vessel for operations. The total amount for this activity is USD8,098, of which USD7,325 will be covered by the Project to be disbursed in January 2018. The matching funds for this activity will be USD773 to cover insurance, maintenance and licensing.

BC.1.02.08 Upgrading monitoring equipment (2018)

SACD will be purchasing one plankton net, light trap, flowmeter, one dry-box, separating trays, collection net and calibration solutions to calibrate the YSI equipment (water quality monitoring). The equipment will strengthen fish catch assessment, water quality activities and the monitoring of the fish larvae connectivity exercise in the Mesoamerican Reef System (ECOME), which actively

support the management decisions of the organization. The total amount for this activity is USD6,925, of which, USD2,400 will be covered by the Project to purchase the equipment in February 2018. The matching funds for this activity will be USD4,525 to buy one microscope (Bio Labs) & Spot lights, night goggles, batteries (PACT) in January and May 2018.

BC.1.02.14 Equipment to strengthen the education and outreach programme (2018)

SACD will be purchasing one outdoor tent, camera accessories, 7 snorkelling sets and 15 life vests, to support the Education and Outreach Programme activities. The equipment will directly support the education, outreach and field activities carried out in the area, with the schools and youths in the area. It is considered a critically important investment in the future leaders of CBWS stakeholder communities, engaging them in conservation activities and providing them with the knowledge and motivation to grow up as effective stewards of the marine protected area and marine resources. The total amount for this activity is USD1,667.50 to be covered by the Project and will be invested in March of 2018.

BC.1.03 Generation / updating of the MCPA management plans.

SACD is operating under a current five year management plan for CBWS (2013-2018); however, during 2017, SACD with support from GEF has updated the management plan to include management activities and outputs that will address system level priorities and climate change adaptation strategies (Adaptive Management Plans). This updates have allowed for coordinated strategies to be developed for the protected areas within the Northern Belize Coastal Complex (Bacalar Chico National Park, Hol Chan Marine Reserve, Cake Caulker Marine Reserve and Forest Reserve, and Corozal Bay Wildlife Sanctuary). The updates have allowed for 4 individual Draft Management Plans to be aligned with each other to provide for greater protection of critical ecosystems such as mangroves, sea grass, water quality and coral reefs, all of which are identified conservation targets of the Northern Belize Coastal Complex.

Although, these management plans have not yet been taken to public consultation, they already have the framework in place for each protected area to take each individual management plan for public consultation to have a final approved Management plan.

BC.1.03.01 Management plan consultations (2018)

During the BWP, SACD with the support of GEF/SGP updated the four management plans of the four protected areas in the Northern Belize Coastal Complex (NBCC) to include climate change and system level strategies and outputs, as part of its adaptive management for CBWS. Though, in view of the updating process the management plans need to go to public consultation for finalization and approval by the Forest Department. With support from the Project, SACD will carry out three consultations with stakeholder communities to validate the management plan and to provide input towards its development. The total amount for this activity is USD2,250 to be covered by the Project (USD750 each consultation) in April, May and June 2018. With this CBWS will have updated its management plan 2018-2022 following all processes.

BC.1.04 Support for the implementation of the control and surveillance systems.

Surveillance and Enforcement is a key component of the programme areas of CBWS management plan and also highlighted as a priority areas to be addressed. This will be done through the continued implementation of patrols and training for rangers to strengthen the organizational capacity for effective management. This activity will be strengthened via joint patrols with other enforcement agencies (Belize Coast Guard) and with coordinated patrols at transboundary level. This will contribute in the maximising of resources to effectively protect and conserve the marine - coastal ecosystems, ensuring that the percentage of infractions are minimized and the impacts to the ecosystems are reported and addressed.

BC.1.04.03 Implementation of surveillance and enforcement programme (2018-2019)

This activity is ongoing throughout the life of the Project - SACD will continue the implementation of the Surveillance and Enforcement program of the CBWS management plan. Patrols are targeting illegal fishing activities, transboundary incursions, non-permitted development and mangrove clearance. The protection and conservation of the coastal ecosystems of CBWS is greatly dependent on the presence of the patrols, with fuel consumption being one of SACD's highest costs. For this BWP SACD has planned a total of 285 patrols for the two years (2018-2019), with an average of 3.8 per week. The total amount for this activity is USD27,000, of which USD4,200 will be covered by the Project for 20% of the fuel cost for 14 months, from May 2018 to June 2019. The remaining 80% of fuel cost for the S&E activities will be matching funds from Summit, PACT and OAK foundation (OAK will support until May 2018), providing approximately USD22,800 for 18 months, which will be distributed at USD1,266.66 per month starting January 2018 to June 2019.

BC.1.04.06 Training of rangers as special constables and Forest Officers (2018)

SACD will carry out an experience exchange with the Toledo Institute for Development and Environment (TIDE) in Punta Gorda, sending three rangers to acquire knowledge in fisheries enforcement procedures applied by TIDE. This will support SACD to be more effective in addressing illegal activities and boarding procedures. The total amount for this activity is USD3,738.95 of which USD1,782.50 will be covered by the Project, amount deferred from the BWP 2016-2017, to be used in February 2018. The matching funds for this activity will be USD1,956.45 to cover travel costs and related expenses for the exchange visit in February 2018 provided by PACT.

BC.1.05 Support for the implementation of evaluation and monitoring systems

Research and monitoring are critical in providing information for management decisions focused on the effective management of the biodiversity of the protected area. Monitoring activities focus on continued strengthening of knowledge in regards to fish larvae assessment, continue with the implementation of the water quality monitoring programme for CBWS and Chetumal, integrating the sea grass net monitoring, coastal impacts, and climate change associated impacts, among others. These strategies are important for improving the viability of Corozal Bay Wildlife Sanctuary as a functional protected area within Belize while fulfilling information gaps and implementing the monitoring and research programme of the CBWS management plan.

BC.1.05.02 Final measurement of mangrove cover and marine grassland in the five MCPAs (2018-2019)

The baseline study of seagrass and mangrove was done by RSS in 2016 and was covered by the Project during the BWP 2016-2017. The first study is the baseline and the final measurement will be done during this FWP. RSS will be hired to carry out the study of seagrass and mangrove cover and measure and compare the data obtained, with the data of the initial base line conducted in 2016, in order to determine if there was an increase or decrease in both ecosystems during the course and validity of the Project "Conservation of Marine Resources in Central America, Phase II". This activity will provide updated information on the percentage of coverage of these two ecosystems, comparing if it varied in the time of execution of the Project. The total amount for this activity is USD12,000 to be covered by the Project, USD10,000 for the consultancy to be carried out in March 2019 and the groundtruthing for USD2,000 in April and May 2019 for fuel, goods and stipends for community researchers.

BC.1.05.06 Fish catch assessments of commercial important species (2018 – 2019)

This activity is an ongoing activity outlined in the CBWS's Research and Monitoring Plan which looks at monitoring fish catch and fishing effort. As part of this monitoring SACD will carry out a fish larvae assessment to establish research sites and monitor recruitment and nursery habitats within CBWS, as well as DNA barcoding. The total cost for this activity is USD3,360 to be covered by the Project, USD540 to cover 2 community researchers and fuel for the fish larvae assessment from January to December 2018 and USD270 for January to June 2019; also USD2,550 for the DNA barcoding to be used in May, August and December 2018.

BC.1.05.06 Monitoring of the fish larvae connectivity exercise in the Mesoamerican Reef System (ECOME)

These monitoring has been carried out in Bacalar Chico. SACD participated for the first time in the ECOME 4 done in 2015, and continued in the simultaneous regional exercise in order to enrich the information and the database. This monitoring is carried out once a year with an approximate duration of 9 days per year. The total cost of this activity is USD1,871, of which USD971 will be covered by the Project for stipends for community researchers, food and fuel. The matching funds for this activity will be USD900 for lodging in Bacalar Chico in September 2018.

BC.1.05.07 Monitoring of water quality (2018-2019)

This monitoring is considered critically important in the maintenance of the health of coastal waters of northern Belize; as it is expected that this will lead to a greater need for adaptive management, with information required to make effective management decisions. As follow up to the activity carried out in the BWP 2016-2017 and outlined in the Research and Monitoring Plan for Corozal Bay Wildlife Sanctuary. The total amount for this activity is USD15,243.50 of which USD7,570 will be covered by the Project to sign a new contract with ECOSUR for the analysis of contaminant in the water samples, USD1,500 for one final technical report including Corozal Bay and Chetumal Bay System data in April 2019 and USD4,576 for SACD physical water quality measurements that will cover food, fuel, stipend and transportation of the samples to ECOSUR. The matching funds for this

activity will be USD1,597.50 for stipends for community researchers for May, July and November 2018 and May 2019.

BC.1.06 Protection of fragile ecosystems

The use of technology is critical for protected areas management. Specifically for mapping and visual representation of information using GIS technology. Most research activities and data management are highly dependent on GIS, these include but are not limited to, fragile ecosystems (seagrass, mangroves and stromatolites) and species. Mapping of these important ecosystems is crucial in addressing non-permitted development and mangrove clearance - linking spatial data on potential and actual illegal impacts to ecosystems to inform areas to be patrolled. Additionally, the GIS supports the SMART system and provides us with the ability to visualize patrol routes and uses areas (beach traps).

BC.1.06.04 Mapping services (manatee resting areas, stromatolites, no take areas) (2018-2019)

This activity is an ongoing activity that aims to ensure that the SACD Research and Monitoring Programme has the support of spatial data and mapping services. As follow up to the BWP 2016-2017 and the knowledge acquire by SACD team in handling GIS software, having an updated GIS software will continue to assist SACD to be able to advocate for the protection of fragile ecosystems and have up to date maps. The total amount for this activity is USD1,110, of which USD260 will be covered by the Project to purchase the retainer GIS software for two more year to be carried in May 2018 and May 2019. The matching funds for this activity will be USD850 for the value of the equipment used during 2018 and 2019.

BC.1.08 Institutional Strengthening for Area Managers.

This activity is very important for the success of this Project and ensures that SACD is meeting its responsibility as the co-manager organization of CBWS. It provides for building the capacity of the Board of Directors for institutional growth and effective decision making It also builds the financial sustainability of the organization through the development of a financial sustainability plan and provides the improvement of SACD's communications and information dissemination.

BC.1.08.02 Implementation of key recommendations of SACD's Communications Plan (2018-2019)

This activity was executed in the BWP 2016-2017, as follow up to recommendations and information created by the communication expert and to be able to share SACD's work in the area and ensure effective dissemination of information at all levels, SACD is requesting from the Project the use of USD2000 to print business cards, brochures and SACD annual report on March, June and October 2018 and March and May 2019.

BC.1.08.02 Events of socialization of the activities developed throughout the Project (2018-2019)

As a fundamental part of the Project sharing information, with stakeholders and organization involved in the area, about the activities developed and results achieved is important. To be able to

develop this activity, two socialization meetings will be developed; these meetings will focus mainly on publicizing the progress that has been made on the activities proposed within this BWP. The total amount for this activity is USD5,000 provided by the Project to cover venue, food, transportation and materials and develop the first meeting to socialize the BWP 2018-2019 on March 2018 and the second to share results achieved through the life of the Project on April 2019.

BC.1.08.04 Exchange visits for Board officers and staff to meet with counterparts at other agencies

As a means to strengthen its institution capacity, SACD will be updating its Strategic Plan for implementation for the next five years 2018-2022. This process will ensure, that SACD evaluates its level of implementation and success of the current strategic plan and review its vision, mission and strategies for improved management effectiveness. This will be done through a consultancy financed by the Protected Areas Conservation Trust (PACT) at the value of USDD7,500, developed from February to May 2018.

Following the previous exchange to TIDE, SACD Board of Directors see the need for a second visit to TIDE to learn about TIDE's Financial Sustainability structures and strategies. This will ensure that as a board SACD can develop and complement financial sustainability mechanism to support the long term management and protection of the coastal marine resources of CBWS. This activity will be financed by the OAK project in the month of October 2018 will an amount of USDD834.

BC.1.08.05 Financial Sustainability Study and implementation of key recommendations (2018)

This activity is important to ensure the long term sustainability of the Project activities and results. As follow up to activity from BWP 2016-2017, the final payment for the consultancy is USD2,971.69 and will be disbursed in January 2018. The total amount for this activity is USD36,471.69, of which USD2,971.69 will be covered by the Project on January 2018 and matching funds provided by OAK Foundation will be USD33,500 for the implementation of the priority recommendations of the plan in February, March and April 2018.

BC.1.08.08 Implementation of priority system and transboundary management activities (2018)

In 2015, management of Corozal Bay Wildlife Sanctuary was strengthened as an integrated part of a collaborative partnership with adjacent MPAs as part of the Northern Belize Coastal Complex. Collaboration with transboundary MPAs was also strengthened through the development of a transboundary collaboration mechanism. As follow up to the activity in the BWP 2016-2017, SACD aims to sign a formal transboundary MoU to ensure that collaboration is maintained with partners in both Mexico and Belize. The total amount for this activity is USD4,237.12 provided by the Project to ensure traveling, accommodation and food for 5 members to assist to at least 4 transboundary meetings in February, May, June and October 2018.

RESULT 2: APPLIED BEST MANAGEMENT PRACTICES AND SUSTAINABLE USE OF MARINE-COASTAL RESOURCES.

Engagement is key to the success of this Project and for the long term sustainable use of the marine coastal resources of CBWS and the larger seascape. This is being achieved through the development and implementation of economic alternative livelihoods guided by a community strategy with the

aim to invest in at least 3 of the most vulnerable communities of CBWS (Sarteneja, Chunox and Copper Bank). The alternative economic projects are design to recognizing the traditional and cultural values of the communities that are being targeted

In parallel, a sustainable fishery plan will be developed and implemented seeking for sustainable fishing practices such as fly fishing (catch and release), best practices, regulations, and the designation of areas to support it. The Advisory committee and fishers will also have the opportunity to learn and build their capacity in under to understand and support sustainable use practices through two exchange visits. In addition, 4 paid interns will be integrated in SACD management activities, with first-hand experience, complementing the already established community researcher's programme as a way of engaging youths in conservation and strengthening the capacity of the community by investing in future conservation leaders. With environmentally strong development plans, integrating best practices, and greater engagement of informed stakeholders, SACD will have the foundation for community collaboration in best practices and sustainable resource uses.

The investment under this Project will help strengthen engagement and communication with the stakeholder communities, particularly fishermen, women and youths; increasing recognition of the organization, with greater stakeholder understanding of what SACD is and what it hopes to achieve, and increased support for its activities and those of the protected area- important for both short and long term social sustainability.

The activities that have a direct impact on achieving this result are:

- The participation of users in the area in the management and sustainable use of resources will be expanded through community training as tour guides, outreach and education campaigns, the volunteer program and the program of community researchers. In addition, the exchange aims to involve stakeholder communities in the management of the area's natural resources through capacity building and strengthening community engagement.
- Five alternative economic projects are expected to be implemented, focusing on best practices for the use of natural resources, co-financed between the Project and MCCAP.
- The implementation of the Fishery Plan will involve the use of hydro-biological resources in a sustainable manner in the area.
- One of SACD focus is the integration and engagement of youth in conservation, though capacity strengthening by investing in future conservation leaders. With the paid internship, SACD seeks to involve 4 youths in the management of the protected area providing knowledge in resource management and conservation.

BC.2.01 Development of the productive fabric of communities/associations

The activities in this component are priority activities under the Sustainable Development Programmes within the CBWS 5 year management plan. The aim is to provide for greater community engagement in three buffer communities; with greater support for the protection and conservation of the protected area through Conservation Agreements with the community members. While also providing economic opportunities for the stakeholders that depend on the resources of the CBWS.

BC.2.01.02 Support for alternative economic activities compatible with the environment and in line with the development of the sustainable fishery plan (2018)

SACD seeks to support alternative and supplemental incomes in Sarteneja, Chunox, and Copper Bank that will be identified based on the outputs of each individual community strategy document and the tourism action plan developed through the support of MCCAP, to reduce their dependence on the marine resources. Within this work plan SACD will implement one project in each of the three stakeholder communities mentioned above. The total amount for this activity is USD162,400, of which USD62,400 will be provided by the Project (USD20,000.00 will be used for each project and USD2,400 to hire a supervisor who will follow up on the execution of the activities within the projects). The projects will begin in April and continue in June and August 2018. The matching funds for this activity provided by MCCAP during this work plan will be D100,000.00 for two projects that are undergoing a feasibility study, this projects are: 1) Securing the Fishermen Livelihood through Capacity Building and Promotion of Organic Farming through Environmentally Friendly Techniques and Build a Responsive Marketing Network for Organic Greenhouse Products for Chonox Fishermen Association and 2) the enhancement of the St. Viator Vocational High School climate resilience school farm to be implemented in August, September and October 2018.

BC.2.01.04 Provision of Tour Guide Training for community members (2018)

Tourism has been identified as an important foundation for the future sustainable development of the community of Sarteneja, and perhaps the only option for shifting and diversifying the economic base away from fishing. This activity has been deferred from the BWP 2016-2017 and SACD will be working with a lecturer identified by the Belize Tourism Board (BTB) to provide tour guide training targeting young fishermen from the three major stakeholder communities of CBWS (Chunox, Copper Bank and Sarteneja). The total amount for this activity is USD26,875, of which USD15,000.00 will be provided by the Project to cover 25 youths, costs that include the lecturer, materials, travel, accommodation, and logistics. The matching funds for this activity provided by the participants and MCCAP will be USD11,875.00 for manuals and field training. This activity will be implemented in March, April and May 2018.

BC.2.02 Generation/Updating of sustainable usage plans for marine-coastal resources within communities/associations.

Maintaining a healthy fish population and local fishery is highlighted as a priority objective within the CBWS management plan and aligns with the National Protected Areas Policy for community use and benefit from natural resources. This activity provides the opportunity for the implementation and integration of a sustainable fishery plan in CBWS, following site specific regulations, increasing the opportunity of fishermen to fully engage in the management of resource extraction of the area based on the national Managed Access framework and guided by the recommendations of the Corozal Bay Advisory Committee (CBAC).

BC.2.02.02 Participatory Sustainable fishery plan and implementation (2018)

This activity has been deferred from the BWP 2016-2017, though, SACD will be working to engage local fishermen to implement guidelines for the community management of the small-scale fishery in the Wildlife Sanctuary, towards the goal of long term sustainable use of the resources for the benefit of both current and future generations. The total amount for this activity is USD32,140, of which USD25,000 will be covered by the Project to hire a consultant to develop the plan from January to July 2018. An estimate of USD7,140 will be provided by Summit and PACT as matching funds for the Corozal Bay Advisory Committee engagement in the planning process.

BC.2.03 Involvement of organised community groups in the management of natural resources

SACD is built on a foundation of community collaboration and support at organizational level, but recognizes that it needs to strengthen its social sustainability by building up its community engagement. This activity will ensure greater stakeholder understanding of what SACD is and what it hopes to achieve, leading to increase support, important for both short and long term social and environmental sustainability. SACD aims to continue building the participation of fishers via the annual fisher fair. This will be further sustained through the creation of a paid internship to get youths engaged in marine-coastal resource management.

BC.2.03.02 Environmental education campaigns focusing on environmental awareness-raising, importance of marine reserves (2018-2019)

SACD's Education and Outreach Programme focuses on increasing understanding of basic concepts of estuary and reef ecology, conservation and the sustainable use of marine resources in the community. Also of concern for SACD, is the issue of climate change and seeks to improve ecological sustainability of the resources on which the community stakeholders depend. This will further be strengthened at community level through the SACD annual fishers fair. The total amount for this activity is USD3,000 which will be provided by the Project to develop the fair in June 2018 and May 2019.

BC.2.03.05 Exchange of community members with other PA's (2019)

SACD has been supporting community members since 2008 integrating them in the management of the AP's natural resources. In the line of involving the stakeholder communities and its members SACD will plan to conduct an exchange visit to Sian Ka'an for 10 fishermen and two staff members to learn about the community engagement in the management of the protected areas. The total amount for this activity is USD 7,094, of which USD5,000 will be provided by the Project to visit Sian Kan An in February 2019. With matching funds of USD2,094 for 5 members of the CBAC to travel to TIDE for capacity building and experience exchange to learn about replenishment zones and the work TIDE does to manage the replenishment zones with on February 2018.

BC.2.03.10 Support of community youths through the continuation of the Volunteer Internship Programme and Scholarship Programme (2018-2019)

SACD has an ongoing Volunteer and Internship Programme that is focused on engaging youths in conservation and strengthening the capacity of the community by investing in future conservation

leaders. In line with this Programme and with support of the Project, SACD will open a paid internship position to involve 2 youths for three months in 2018 and two youths for three months in 2019 (6 months in total,) to support SACD in the management of the PA and the activities executed. The total amount for this activity is USD3,600 (USDD300 per month per person) and will be provided by the Project on May, June and July in 2018 and February, March and April in 2019. This will ensure the involvement of the youths in conservation-related activities.

BC.2.05. Administrative Expenses

BC.2.05.02 Bank Fees

The estimated cost for bank transfers of the projects resources will be of USD600.00 per year, USD1,200 for the duration of this BWP, to be covered by the Project.

BC.1.6 Unforeseen expenses

BC.6.01.02 Unforeseen expenses

Throughout the projects lifetime the prices of materials and supplies may increase due to global changes in the market. As a contingency a small amount of money from the project is set aside to cater for these activities. These will also cover the expenses incurred from the transfer of funds, and bank charges. A total of USD6,726.05 to be covered by the project is set aside.

4. SUSTAINABILITY

- **INSTITUTIONAL SUSTAINABILITY.**

During the past year, SACD has invested quality effort and energy in strengthening the organization's institutional capacity as the bases for the long-term sustainability of the Organization. SACD has revised and updated policies and procedures manual, staff hand book, and Articles of Associations. Following the updates, SACD has restructured its board composition with a more balanced representation between the technical expertise and community representation. Additionally, SACD is currently processing a full NGO status under the NGO's act from the Attorney General office. The board members have also went through board development sessions with signed commitment agreements and full orientation components, and have also participated in an exchange visit at another well-established NGO in Belize (TIDE). This will ensure the continued growth of SACD, aligned with its vision and mission, as SACD is now looking at the updating of SACD's Strategic Plan 2018-2022 and the establishment of M&E Frameworks. The infrastructure and equipment now established will also support the foundation and will enable SACD to continue with the co management of the protected area, hence providing the institutional foundation for the sustainability of SACD. The stronger the foundation the more likely the Organization will be sustainable and successful.

- **FINANCIAL SUSTAINABILITY.**

During 2017, SACD initiated the process of developing a Financial Mobilization Plan with aim of strengthening SACD's long term financial sustainability. The final plan will be ready in January 2018 and it is expected that it will provide the bases for diversifying SACD's income sources and reducing its dependency in grant funding. Via a support project SACD has already secure seed funds to implement priority recommendations of the plan. Additionally, SACD has already secured 100 % of its operational costs (salaries and fuel) up to June 2018, 80% up to June 2019 and 40 % up to October 2020. This will allow SACD to leverage funding from other source complemented by the implementation of the Financial Mobilization Plan. Notwithstanding the limitations over the past years and the dependency of grant funding, SACD has a track record of continues growth and continuity. This has been achieved by the hard work and commitment of each staff member and board member of the institution to ensure that SACD maintain its vision. The infrastructure and solar technology in itself are already providing a source of financial sustainability for SACD by reducing the operational costs associated with the management of the area. Through the tourism funded activities SACD also seeks to increase tourism in the area, providing with the potential for SACD to seek supporting donations and visitor fees.

- **ENVIRONMENT**

The investment made in technology are primarily to ensure the environmental safeguard needed for the long term environmental sustainability of the Organization and the resources of CBWS. As a protected area co-manager, SACD's environmental sustainability is dependent on information, community engagement, environmental friendly practices, and enforcement. This is addressed through the implementation of the monitoring and research activities (water contamination, over fishing, removal of mangroves among others). Also, developing and strengthening collaboration between conservation stakeholders and communities through system level collaboration and implementation of sustainable practices such as sustainable fishery and sustainable tourism activities. This will ensure effective marine protected area management and improved ecological sustainability. This estuarine system, is the largest in the MAR region, is a critical nursery ground for several important commercial species, as well as for the viability of the vulnerable West Indian manatee.

- **APPROPRIATE TECHNOLOGY.**

We are located in a country that is by nature limited in technology, however, our infrastructure will contain low energy light bulbs, fully powered by solar power technology - providing a cleaner energy source for its operational headquarters in Sarteneja, and to reduce impacts to operations from local power issues – brown outs and black outs, which can cause damage to equipment. As part of the infrastructural development SACD also seeks to install aerator system and a chlorinating system to be able to treat and recycle waste water produced in the facility. Outboard and the vehicle are also low fuel use and locally purchased. The engines are 4 stroke outboards and the vehicle is a 4 cylinder diesel pickup truck, both minimizing SACD carbon footprint and contributing to the economy of Belize. SACD is also leading towards the use of higher technology for its monitoring purposes via the continued use of GIS (in-house) and the use of drones. The drones in essence will reduce the amount of fuel used and the time needed for many research and surveillance activities (Mangroves clearance, mangrove mapping, and manatee count to mention a few).

- **SOCIO-CUTURAL AND MAINSTREAM SUSTAINABILITY.**

The alternative economic projects are design to recognizing the traditional and cultural values of the communities that are being targeted. SACD has ensured that in taking the co-management of CBWS, it assures that the livelihood of people are not displacing anyone, but recommends sustainable use practices to be able to maintain a balance. The investment under this Project also seek to strengthen engagement and communication with the stakeholder communities, particularly fishermen, women and youths; increasing recognition of the organization, with greater stakeholder understanding of what SACD is and what it hopes to achieve, and increased support for its activities and those of the protected area- important for both short and long term social sustainability. In doing so SACD has instated an advisory committee (CBAC) composed of eleven members, representing 1) a representative from the Village / Town Councils of the five focal communities - Sarteneja (the primary user), Chunox, Copper Bank, Corozal Town, and Consejo; 2) representatives from each of the four focal sectors: fishing (commercial and sport), tourism, conservation and development, 3) and a representative from both the Forest and Fisheries Departments. Additionally, the CBAC has nominated a representative from their membership to sit on the SACD Board of Directors, to contribute CBAC's perspectives and recommendations into SACD's deliberations and decision-making for management of the protected area.

5. BWP's Annex 1: Development table format (Excel file).

In annex 1 (Excel format) you can find the development table.

6. BWP's Annex 2: Financial Planning Matrix (Excel file).

For the Biennial Work Plan, the planning has a single plan sheet, which has united both general and project expenses and you can find it in Annex 2.