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IAC Annual Report General Instructions

Annex IV of the Convention text states that each Contracting Party shall hand in an Annual Report. To complete this Annual Report, Focal Points should consult with various stakeholders involved in sea turtle issues. If you have any questions regarding this Annual Report, please write to the PT Secretariat at secretario@iacseaturtle.org

Please note that the date to submit this Annual Report is April 30, 2017.

Part I (General Information)

Please fill out the following tables. Add additional rows if necessary.

a._ Focal Point

Institution	Ministry of Environment of Panama
Name	Lcdo. Ricardo de Ycaza
Date Annual Report submitted	

b._ Agency or Institution responsible for preparing this report

Name of Agency or Institution	Ministry of Environment of Panama
Name of the person responsible for completing this report	Marino Eugenio Abrego
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$c._$ Others who participated in the preparation of this report

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Part II (Policy and Management)

a._ General description of activities carried out for the protection and conservation of sea turtles

In accordance with Articles IX and XVIII of the text of the Convention, each Party shall establish monitoring programs, policies and plans for implementation at a national level for the protection and conservation of sea turtles and their habitat.

As a result, the Party shall report on the action plans, management plan or other types of instruments, describing their location, the species considered and the actions implemented by governmental, non-governmental and private institutions related to sea turtles.

In addition to the above, please fill out the following tables and explain the level of progress in the comments column.

	YES/NO In Progress	Comments
Does your country have a national plan of action in accordance with Article XVIII?	Yes	According to article XVIII, Panama has a National Action Plan for the Protection and Conservation of Sea Turtles. This document ensures monitoring of the implementation of sea turtles and their habitats protection and conservation measures provided in this Convention.
Does your country have policies and programs at local and regional levels in accordance with Article XVIII?	Yes	The National Action Plan for the Protection and Conservation of Sea Turtles is a tool that will strengthen the actions toward the protection of sea turtles. Similarly, the Regional Sea Turtle Conservation Program in the Southeast Pacific CPPS supports planning of national projects.
Does your country have monitoring programs in accordance with Article IX?	Yes	According to article IX, the Ministry of Environment Direction of Seas and Coasts ensures compliance with the measures for sea turtle conservation and protection provided in this Convention.

b._ National legislation and international instruments related to sea turtles adopted in the preceding year

Describe any national regulations, international agreements and other legal instruments adopted during the preceding year (April 30, 2015-April 30, 2016) related to sea turtles and/or relevant activities. Provide a reference and attach the



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digital file for the legislation and its corresponding number. The laws adopting the international legislation should be included, when they exist.

National Legislation				
Type and name of legal instrument (No.)	Description (Range of application)	Sanction(s) Imposed		
Resolution N° DM-0657-2016, Friday, December 16, 2016, establishing the development and periodic review of Panama's Endangered Species of Flora and Fauna, and other provisions. Gazette, Thursday, December 29 th , 2016, N° 281987-A	National	Not applicable		
Executive Decree No. 5, Wednesday, February 1 st , 2017 regulating Sanctions Procedures for environmental violations. Gazette N° 28225-A Thursday, February 23rd, 2017.	National	Possession of sea turtles products or byproducts (eggs, meat, hawksbill products, among other) with commercial purposes, will be fined with B/. 2000.00		
Resolution N° DM 0085 de 2017, approving Isla Cañas Wildlife Refuge Action Plan 2017-2018 located in Tonosí, Los Santos province. Official Gazette N° 28226-B, Friday, February 24, 2017.	National	Approves Isla Cañas Wildlife Refuge Action Plan 2017-2018 located in Tonosí, Los Santos province for a year, until the Area's Management Plan is developed.		
Executive Decree No.5, February 1, 2017. Regulates direct sanction procedures due to environmental violations. Digital Official Gazette N° 28225-A, Thursday, February 23rd, 2017.	National	Sanction No.18 states that possession of sea turtles products or byproducts (eggs, meat, hawksbill products, among other) with commercial purposes, will be fined with B/. 2000.00		
Resolution N° DM-0031-2017 (Friday, January 27, 2017), approves the National Action Plan for the Protection and Conservation of Sea Turtles in the Republic of Panama. Gazette No. 28237-A Wednesday, March 15, 2017.	National	Not applicable		
Resolution N° DM-0147-2017, Monday, April 10, 2017. Approving the list of the Ministry of Environment Technical staff entitled to impose the Direct Sanctions Procedure due to environmental violations. Digital Official Gazette No. 28257-A, Wednesday, April 12, 2017.	National	Not applicable		
International Instruments				
Treaty, Convention, Agreements, Understanding	Memorandum of	Year signed/or ratified		



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Note: If this is the first time a country is submitting this information, please include all pertinent national legislation and international instruments currently in force.



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c._ Actions for compliance with national and international legislation

c.1 IAC Resolutions

Fill in the following tables for each of the IAC Resolutions listed below. In the case that a Resolution does not apply to your country, please mark the box RESOLUTION DOES NOT APPLY, and if a specific question does not apply, please mark the column DOES NOT APPLY. If you need more space to describe these actions, please attach additional pages and note the resolution and question number to which you are responding.

Resolution CIT-COP7-2015- R2: Conservation of the Eastern Pacific Leatherback Turtle (*Dermochelys coriacea*)

ACCORDING TO RESOLUTION CIT-COP7-2015-R2, REPORT WHETHER YOUR COUNTRY:

		RESOLUTION DOES NOT APPLY		
IS COMPLYING WITH THE FOLLOWING	YES	NO	DESCRIBE ACTION (*)	DOES NOT APPLY
1a) Have you created conservation plans and long-term programs that can reverse the critical situation of the leatherback turtle in the Eastern Pacific?	X		Resolution N° DM-0031-2017 approving the National Action Plan for the Protection and Conservation of Sea Turtles in the Republic of Panama. This recently approved plan will provide for the protection of all sea turtle species occurring in Panama. A specific strategy for leatherbacks will be developed within the framework of this plan.	
1b) Are you implementing these conservation plans and monitoring programs?	X		Gazette N° 28237-A, Wednesday, March 15 th , 2017, Resolution N° DM-0031-2017 approving the National Action Plan for the Protection and Conservation of Sea Turtles in the Republic of Panama. This recently approved plan will provide for the protection of all sea turtle species occurring in Panama. A specific strategy for hawksbills will be developed within the framework of this plan. The Ministry of Environment Direction of Coasts and Seas is in charge of implementing this plan which is valid for five years.	
2. Have you taken conservation measures to eliminate poaching of leatherback turtles?	X		Campaigns to stop the consumption of sea turtle eggs are carried out for all species.	
3. If your country has leatherback turtle nesting beaches in the Eastern Pacific: Have you taken conservation measures to protect the nesting sites and their associated habitats?	X		Currently, there are communitarian groups and NGOs working on protection and conservation projects such us Foundation Tortuguías and Association Tortuagro in Cambutal, Foundation Yaug Galu (Armila/Gunayala) and Foundation Water and Earth in Mata Oscura. There are efforts targeting coordination and support to these projects.	
4. Has your country adopted fishing	X		Executive Decree N° 82, April 1, 2005, published in Gazette 25, 272, April 6, 2015, is in force. Established the use of Sea	



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techniques that reduce incidental capture and mortality of this species?
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^(*) Specify actions implemented, the name of the project or relevant document, location, objective(s), institutions responsible, contact, financial or other support (optional), results (both positive and negative) and duration.



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Resolution CIT-COP3-2006 R-1: Hawksbill turtle conservation

(Eretmochelys imbricata)

ACCORDING TO RESOLUTION CIT-COP3-2006-R1, REPORT WHETHER YOUR COUNTRY:

		RESOLUTION DOES NOT APPLY			
IS COMPLYING WITH THE FOLLOWING YES			NO	DESCRIBE ACTION (*)	DOES NOT APPLY
1. Are you strengthening monitoring of the illegal use and trade of hawksbill turtles and their products?		X		Auditing on hawksbill illegal trade is strengthened with inter-institutional support (Environmental Ministry, DIJ, Public Ministry, and National Police). Also, with the formation of the Sea Turtle National Network, organization, and communitarian groups support monitoring presenting complaints to the corresponding authorities.	
2. Are you enforcing pert hawksbill legislation?	2. Are you enforcing pertinent hawksbill legislation?			Administrative and criminal procedures are imposed on those trading sea turtle products and byproducts, including hawksbill. B/. 2000 fine is imposed.	
3. Are activities being carried out in order to stop illegal trade of hawksbill products?		X		Ongoing National Campaign including outreach material informing about sanctions and fines applicable when violating the regulation. The prosecution will be in charge of the Direction of Cultural Development, in coordination with the Protected Areas and Wildlife Direction, and the Ministry of Environment Direction of Coasts and Seas. There are actions to reinforce control and surveillance to avoid hawksbill trafficking in ports and airports.	
4. Indicate if your country is strengthening the protection of important nesting and foraging habitats by declaring protected	a) Protection of nesting habitats	X		Property projects developed near sea turtle nesting beaches require compliance with current regulations establishing recommendations to protect these areas during Environmental Impact Assessments, which are submitted for approval to the Ministry of Environment.	
areas and regulating anthropogenic activities that adversely impact these habitats.	b) Protection of feeding habitats	X		The IAC urge the Parties to reinforce the protection of nesting and foraging areas establishing protected areas and controlling activities that negatively impact these habitats. The Governmental authorities in charge (ARAP and Ministry of Environment) have strengthened surveillance and control and impose sanctions according to current regulations.	

^(*) Specify actions implemented, the name of the project or relevant document, location, objective(s), institutions responsible, contact, financial or other support (optional), results (both positive and negative) and duration.



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Resolution CIT-COP3-2006-R2: Reduction of the adverse impacts of fisheries on sea turtles

ACCORDING TO RESOLUTION CIT-COP3-2006-R2, REPORT WHETHER YOUR COUNTRY:

WITH	MPLYING THE OWING	YES	NO	DESCRIBE ACTION (*)	DOES NOT APPLY
		Reduce S	ea Turtl	e Mortality induced by fisheries operations", of the United	
	s Food and Agricultu				
		g of adve	rse impa	act of fisheries on sea turtles	
by	ollect information / fishery		X	Panama Aquatic Resources Authority (ARAP) does not report information on the impacts of fisheries on sea turtles for this period	
• OI	bserver programs		X	Panama Aquatic Resources Authority (ARAP) is implementing an Observers Program	
tu	esearch on sea rtle/fishery teractions	X		Currently, there is a project including ARAP, Ministry of Environment and Justsea Foundation on the "Evaluation of marine megafauna's bycatch in the main fishing landing ports of Colombia and Panama Pacific coast". Through interview surveys of shipmasters, it is expected to obtain information on the interaction of marine megafauna with artisanal and commercial fisheries. Expected results for the first phase include: assessment of the nature and frequency of interaction in the region, identify temporal and spatial patterns of the interactions as well as environmental and oceanographic patterns through remote sensing; carry out worktables with fishermen and socialize the results, promote best practices and strengthen the relationship with them for future studies; and cooperate with LaudOPO network in the characterization of leatherback incidental captures for management measures that meet the conservation needs of this population.	
	formation on non- arty vessels		X		
• Co	ooperation with on-Party states to otain formation		X		
		I	3. Mitig	ation measures for the following fisheries:	
i.	Long-line		X	Ĭ.	
ii.	Gillnets		X		
iv.	Trawling (e.g., 1.TEDs: specify legally approved TEDs, their dimensions, material, and target species for that fishery, 2. time-area closures: specify geographical area, time of closure and target species	X		There are two types of TED in Panama's shrimp fleet: Georgia Jumper and Rounded and Flat stick. Panama's industrial shrimp fleet reports 133 valid permits. Panama's artisanal shrimp fleet reports 144 valid permits.	



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for that fishery. 3.tow times and/or 4. other measures) V. Other fishing gear (indicate which one(s))	X	There are reports of interactions, such as the longline fleet.	
vi. Training programs for fishermen about best practices for safe handling and release of sea turtles incidentally caught.	X	ARAP develops training activities for trawl fishing vessels crew and inspectors regarding sea turtle handling and release. Inspection personal from ARAP's Direction of Inspection, Surveillance and Control is trained every year to strengthen their inspection actions of Sea Turtle Excluder Devices. Training activities are developed in coordination with ARAP's Regional Directions. Severe penalties are imposed on those violating TEDs regulations. Between 2016 and 2017, only five vessels were caught misusing TEDs. Regarding inspections, surveillance and control, operations are periodic and unannounced.	
		C. Socio-economic considerations	
Support socio- economic activities that help mitigate adverse impacts of fisheries on sea turtles	X		

^(*) Specify actions implemented, the name of the project or relevant document, location, objective(s), institutions responsible, contact, financial or other support (optional), results (both positive and negative) and duration.



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c.2 National and International Mandates

List actions that are being carried out to comply with national and international mandates (Ex: inspections, confiscations, sanctions, etc.)

1. In 2016, there were three confiscations of eggs for a total of 9750 eggs in Los Santos province. The species involved were *Lepidochelys olivacea* and *Chelonia mydas* from the Pacific. Four additional confiscations included a total of **18,867** eggs. The information is on the Coasts and Seas Direction.

The Ministry of Environment is focusing efforts on Community-Based Organization working with sea turtles. In 2017, the Project "Strengthening actions of protection, conservations and sustainable management of sea turtles in coastal communities from Panama's Pacific and Caribbean coasts" in the head of the Direction of Coasts and Seas and funded by the Ministry of Economy and Finances investments component. The project includes components of Sustainable Management, Training, Environmental Education and Outreach, and Research and Monitoring.

Those who have violated the regulations have been fined and forced to do community work in projects involving sea turtle hatcheries. Violation of regulations carries administrative and criminal sanctions by Executive Decree N° 5, Wednesday, February 1st, 2017, regulating the Direct Sanction Procedure due to environmental violations. Gazette N° 28225-A, Thursday, February 23, 2017. In case of possession with commercial purpose of sea turtle products and byproducts (eggs, meat, hawksbill products, among others) there is a fine of B/. 2000.

Illegal trafficking of sea turtle eggs in Panama, mainly in Azuero, is a common practice although it is known it is not allowed. Poachers are less than the people supporting the Ministry to protect and conserve. More complaints and confiscation take place now, and further pressure is imposed upon perpetrators.

2. Regarding control and surveillance, the Aquatic Resources Authority of Panama (ARAP) carries out periodic operations during which violations of the regulation have been identified. Severe sanctions have been imposed on those violating the law on TED. Between 2016 and 2017, only five vessels have been caught misusing the TED.



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d._Application[submission] of exceptions established in the Convention

Describe in detail the exceptions allowed in accordance with article IV, item 3(a,b,d) and Annex IV of the text of the Convention, in accordance to the procedure established by the COP (Doc. CIT-COP5-2011-R2). Attach management program.

Resolution N° DM 0085 de 2017, approving Isla Cañas Wildlife Refuge Action Plan 2017-2018 located in Tonosí, Los Santos province. Official Gazette N° 28226-B, Friday, February 24, 2017, in force since enacted. The Plan includes provisional zoning of this Protected Area.

Isla Cañas Wildlife Refuge was established by Resolution JD-010-94, June 29, 2991, published on Official Gazette N° 22586 of June 29, 1994. The objective of the Refuge are: Protect one of the areas with more nesting in Panama's Pacific coast; Conserve significant amounts of biological diversity in the region, guaranteeing the existence of mangroves and other species of flora and fauna of economic importance; Promote the socio-economic and cultural developments of local communities, ensuring a sustainable use of renewable natural resources and protecting important archeological sites within the Refuge; and Promote scientific research activities and provide education, recreation and tourism activities at a national and international level.

Management of Isla Cañas RVS is based on the principles of Resolution AG-0491-2006 Article 3, which regulates articles 94 and 95 of the Environment General Law 41 of 1998 "The following are guiding principles for use, management and conservation of coastal and marine resources in Panama's protected areas: Principle of gradualism, Precautionary Principle, Principle of Sustainable Development, Principle of Participation, Preventive Principle, Principle of Public Interest, Principle of Shared Responsibility, Principle of Complementarity and Principle of no discretion.

Currently, Isla Cañas Wildlife Refuge is based on a series of documents which guidelines for the participation of key stakeholders in the decision-making process, such as,

- 1 Biologic and Socio-cultural diagnosis of Isla Cañas Wildlife Refuge, developed by PRONAT-ANAM, 2009.
- 2 Proposal: Isla Cañas Management Plan, 2012.
- 3 Situational Diagnosis of Isla Cañas Wildlife Refuge, implementation of the Sea Turtle Monitoring Plan and Adequacy of the Hatchery, developed by Asesores Ambientales y Legales, S.A, on April 2015.



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- 4 Proposal for Development of Ecotourism in Isla Cañas Wildlife Refuge
- 5 Annual Operative Plan 2017, including activities of Control and Surveillance
- 6 Monitoring Program for the Conservation of sea turtles and other species of interest for the local community
- Additionally, the Ministry of Environment has approved the regulations for co-management and services granting in protected areas.

Regulations and the Action Plan are attached

Regarding the application of the Resolution CIT-COP6-2013-R1 ON EXCEPTIONS UNDER ARTICLE IV (3A AND B) FOR SUBSISTENCE HARVESTING OF LEPIDOCHELYS OLIVACEA EGGS IN GUATEMALA AND PANAMA, we would like to inform the following for the current period:

- 1. It has not been possible to record the number of clutches by sector in the natural hatchery, and therefore determine where the hatchery strip should be expanded-
- 2. There are records of nesting within the strip of the hatchery by each sector and in total. In such an area 3553 nests of olive ridley were protected.
- 3. Regarding control and surveillance for the protection of the nests, there is support from the National Police Units to guard the clutches in the Natural Nesting Zone, that together with staff from the Ministry of Environment are in charge of collecting information for the Sea Turtle Monitoring Program. There is also support from a member of the Peace Corp who provides technical support to collect information, and some members of the community previously trained to patrol the beaches some nights of the week and to move the nests to the hatchery.
- 4. Regarding the harvest co-management along with Isla Cañas community, there is a background with Isleños Unidos Cooperative, R.L. implemented between 2003 and 2009, after this year activities with the community have moved towards sea turtle biology, research techniques, management, and monitoring. Workshops on sea turtle conservation, conservation targets in the area, the importance of fishing, and conservation of species have been developed. Others have carried out environmental education for children in schools and promoted activities of no-waste for artisanal women interested in improving their livelihood.
- 5. There are efforts so once a group of residents obtain legal status to establish a Cooperative, and is interested in co-management, a community/governmental/private alliance is proposed. This group works in coordination with ARAPs project "Farming, Growth, and Trade of Oysters" in Isla Cañas. This activity is carried out along with the



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Aquaculture, Fishing and Agrotourism Association of Isla Cañas (ACPAT), farming has taken place since 2014. Artificial hatcheries placed during this period produced a total of 33,382 hatchlings of olive ridley. There were 2,177 nests that hatched in the Natural Nesting Zone, by counting the eggshells there was an estimate of 17,4299 hatchlings of olive ridley released.

6. In the medium term, a consultancy developed the "Situation Diagnosis of Isla Cañas RVS, implementing the Sea Turtle Monitoring Program and Adequacy of the Hatchery RVS Isla Cañas." Between January and May 2015, there was a Rapid Ecological Evaluation (REE) and a Participative Rural Evaluation (ERP) as inputs to develop the Management Plan. Also, the Sea Turtle Monitoring a Research Program began with the support of the residents, biology students from University of Panama and Staff from the Ministry of Environment working at the Refuge.

To this date, monitoring and patrols continue with the support of the Ecologic Police and volunteering biology students from the University of Panama. Also, the Sea Turtle Tagging Program started with the placement of 62 tags. 14 km of beach and of the Natural Nesting Zone were defined and zoned every 100 meters. Two artificial hatcheries located in two sectors of the beach were built with a capacity for 156 nests each, 13 m long by 6 m wide. All of the implements to build cylinders for the protection of the nests with anti-aphids mesh, and for patrols, were provided. This has allowed collecting scientific information for the compliance with the IAC recommendations.

There is information now that can be used to develop a Management Plan. Two artificial hatcheries have been improved to relocate up to 156 nests each. Collection and relocation of nests were carried out jointly with members of the community, Volunteers from the Peace Corp and National Police.

There is a database recording information from nesting events and nests that have been relocated. Monitoring and patrols went on until December 2015. The tagging program is ongoing, with 118 tags between July and December 2016, and 180 sea turtles tagged. Up to this date, 210 turtles have tags with and recapture was 7%. For season 2017, temperature and humidity data will start being recorded, to analyze the relationship between hatching and impacts of climate change.

To the date this report was written, there is a database including biometric characteristics from 657 olive ridleys. 859 nests of Lepidochelys olivacea



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were relocated in two artificial hatcheries with an 80% hatching success in both years (2015 EE= 86.95%; 2016 EE= 84.73%) and a final production of 71,040 hatchlings of olive ridley (2015= 33,382 hatchlings; 2016 = 37,658 hatchlings).

In situ protection of nests in the area of the natural hatchery (800 m) has been another conservation method. During these years 4,354 olive ridleys have been recorded nesting in this area (2015= 3553 nesting turtles; 2016= 792 nesting turtles from which 2,468 nests hatched (2015= 2,177 nests; 2016= 309 nests), with an estimated production based on number of hatched nests in situ (2015= 82.14%; 2016= 75%) of 176,474 hatchling of olive ridley (2015= 174,299 hatchlings; 2016= 22,175 hatchlings). During this period approximately 247,514 hatchlings have been released.

7. In Isla Cañas RSV there are several threats such as coastal development. In coastal areas near the beach in Isla Cañas, there is the development of tourism projects or night leisure. This could impact the reproductive cycle of sea turtles. Any proposal of coastal development within a protected area must pass an assessment conducted by the Projects Viability Department of the area.

Also, although there are regulations in place to reduce bycatch, there are several fishing methods that could harm sea turtle populations, such as trammels and longline. To prevent this, aquatic patrols are carried out jointly with the National Police and the Aeronaval National Service (SENAN) in the marine area, intensified during massive arrivals season. In regards to direct use, there is permanent control in compliance with Resolution CIT-COP6-2013-R1. Conservation and protection of nests activities are carried out to balance the harvest and make it sustainable. Beach clean-up take place with the help of the community, National Police and Isla Cañas School to remove no degradable waste from the nesting zone. To avoid pathogens, the sand in the hatchery areas is processed to avoid affecting the nests. As mentioned before, nests and beaches temperature will be measured starting next seasons using newly acquired thermocouples.

8. Results from the project "Management of activities to support the implementation and compliance with the IAC Resolution CIT-COP6-2013-R1 recommendations" which was a great effort of the IAC Secretariat and the Direction of Coasts and Seas to comply with the recommendations of the IAC Resolution, as the main objective.

The specific objectives were to support with funding the following



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activities: the development of an environmental education workshop focused on the biologic and tourist importance of sea turtles within the protected area; the development of training for women on handcrafts as an alternative livelihood discouraging sea turtle eggs consumption; purchase of materials for a beach clean-up near the hatcheries and nesting beaches; development of an infography on sea turtles importance in the island; food and transportation for volunteers involved in the sea turtle monitoring program; purchase of materials to improve artificial hatcheries and equipment for sea turtle monitoring carried out in the protected area, and the payment of the money wire transfer

These activities were designed to strengthen the relationship between the Ministry and the local community and to support the work of the Protected Area Agency regarding sea turtle conservation through concrete actions such: 1) Reinforce concepts on the importance of sea turtle conservation and an appropriate placement of trash to reduce pollution in the sea, in children and youngsters of the community; 2) Support sea turtle monitoring activities to ensure the collection of robust scientific data for a long term information on nesting turtles; 3) Support the development of entrepreneurial activities for women from the island as a mechanism to improve their livelihood, hence reducing the pressure on sea turtle eggs; and overall 4) Strengthening the relationship between the communities of the protected area. This project was proposed with the support of the IAC Secretary Pro Tempore Ms. Veronica Caceres and the IAC Scientific Committee Panama delegate Mr. Marino Abrego in the framework of the project "Implementation of the InterAmerican Convention for the Protection and Conservation of Sea Turtles through technical capacity building and greater participation in the Consultative Committee by IAC member Countries" F14AC00197 granted by the U.S Fish and Wildlife Service Marine Turtle Conservation Fund of the United States Federal Government. Implementation was conducted by the Ministry of Environment of Panama Direction of Coasts and Seas through Ms. Haydeé Medina, Panama delegate to the IAC Consultative Committee. Management of funding was done through the Foundation for the Protection of the Sea PROMAR. Acknowledgement of several people and organizations are included in the Spanish version of this document (See http://www.iacseaturtle.org/informes.htm)

Results from the project include four environmental education workshops for children and adults from the community reinforcing knowledge of sea turtles and their importance for the ecosystem and the protected area from an environmental and tourist point of view. The workshops "Entrepreneur women from Isla Cañas" with eight women from the community trained on painting techniques on canvas and stone, whom at the end of the workshop



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kept the tools and first products to sell, as well as their certificate. They also were trained on teamwork, how to offer a final product and how to determine the cost of their products. A beach clean-up was carried out along 2 km of beach, collecting 12 trash bags jointly with the community, mainly kids, highlighting the importance of proper placing of trash. Isla Cañas RVS Agency was equipped with material to improve operations in the hatcheries as well as sea turtle monitoring, and the volunteers work. Visual material was developed along with sea turtle conservation activities carried out in each protected area.

Thanks to this financial support provided to develop these activities in Isla Cañas RVS, other achievements included: Increasing the presence and participation of the Ministry of Environment in activities reinforcing the relationship between the local community and the authority; Highlighting the importance of a sea turtle monitoring program and why local participation is important for sea turtle conservation, so the community can see their importance for tourism and alternative income; Providing children and youngsters of the community the opportunity to take part in extracurricular activities in which they can learn in a fun way; and Encouraging community participation to improve the communal areas of the island that serve as tourist attractions in the island.



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Part III (Research information)

a._ Threats

Indicate threats (Coastal development, incidental capture, direct use, contamination and pathogens, and climate change) by species, with information on the area and activities taken to control them in the following table. Lo = Lepidochelys olivacea; Lk = Lepidochelys kempii; Dc = Dermochelys coriacea; Ei = Eretmochelys imbricata; Cc = Caretta caretta; Cm = Chelonia mydas.

Species	Threat (s)		Action(s)
Lo	⊠Coastal development⊠Incidental capture⊠Direct use	□Contamination □Pathogens ⊠Climate change	Complaints, environmental education, training, patrols, rescuing and relocation of nests, signaling, reforestation of the beach.
Lk	☐Coastal development☐Incidental capture☐Direct use	☐Contamination☐Pathogens☐Climate change	
Dc		⊠Contamination⊠Pathogens□Climate change	Complaints, environmental education, training, patrols, rescuing and relocation of nests, signaling, reforestation of the beach
Ei		□Contamination □Pathogens ⊠Climate change	Complaints, environmental education, training, patrols, rescuing and relocation of nests, signaling, reforestation of the beach
Cm	⊠Coastal development⊠Incidental capture⊠Direct use	□Contamination □Pathogens ⊠Climate change	Complaints, environmental education, training, patrols, rescuing and relocation of nests, signaling, reforestation of the beach
Сс	☐Coastal development☐Incidental capture☐Direct use	☐Contamination☐Pathogens☐Climate change	



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Threats identified by several organizations in specific sectors are listed in the Spanish version of this document. (See http://www.iacseaturtle.org/informes.htm)

b. Research

Describe scientific research that is being carried out in the country relating to sea turtle population assessments including tagging, migration, and genetic studies, as well as those relating to conservation issues including habitat monitoring, fisheries interactions, disease, etc. Provide a list of references for the information used in this report and note how to obtain them when needed.

In addition to the above, please fill out the following table on the types of research being carried out in the country and with what specie(s).

Research	Species (Lo, Lk, Cm, Ei, Cc, Dc)
Tagging	Lo, Cm, Ei, Cc, Dc
Migration	Cm, Dc, Ei
Habitat monitoring	Cm, Dc, Ei, Lo
Fisheries interactions	Cm, Lo, Dc, Ei
Genetics	Cm, Ei

A detailed description of the efforts carried out by NGOs and community-based organization for the Protection, Conservation, and Research on Sea Turtles in the Republic of Panama is included in the Spanish version of this document (See http://www.iacseaturtle.org/informes.htm)

c. Other activities

Include information on environmental education activities, programs to establish and manage protected areas, and cooperative activities with other Party countries.

1. Foundation Tortuguias is doing Environmental Education in schools near the area of the project and in Panama City reaching 300 students with the following activities: Workshops and talks about conservation and the importance of the environment; sea turtle hatchlings release; night patrols; outdoor activities and games; volunteering; Participation in scientific conferences with the presentation "Nesting of Lepidochelys olivacea in a hatchery in Cambutal" focusing on incubation temperature results from dataloggers, during the III International Congress on Marine Science 2016, UMIP, Panamá; and with the poster "Nesting of Lepidochelys olivacea in a



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hatchery in Cambutal" at the VIII International Symposium on Marine Science in Alicante, Spain.

2. Foundation Water and Earth (FUNDAT) develops and environmental education program including the following activities in 2016: presentations about conservation of sea turtles in four schools within the Special Management Zone in South Veragua, specifically in Torio, Malena, Morillo and La Loma school at Mariato district. It also carried out workshops in two primary schools, two secondary schools, and one University, as well as in other areas of Panama. Workshops were conducted in 15 units of Ecologic Police and in the Foundation's headquarters to 325 visitors during 2016.

There was participation in five environmental fairs with an educational stand. On September 2016, the Foundation organized the first Eco-fair on the Conservation of Sea Turtles in Rusia de Quebro, Veraguas Province.

The national campaign "Turtles Forever" was developed and broadcasted with the help of PANAMANGLAR network, using short videos recorded with mobile phones, and posted on social networks.

Other activities of FUNDAT included a drawing contest "The Ocean and the Turtles", beaches clean-up, two releases of hatchlings with kids from Morillo school, signaling in Mata Oscura beach, and workshops on recycling in nesting beaches.

The project Organizational Strengthening and Capacity Building in three organizations within the Sur de Veraguas Special Management Marine and Coastal Zone was carried out in the framework of the Management Plan. With the help of Eco-promoters, there was a dissemination of Golfo de Montijo Wetland on International Importance Management Plan (Golfos Vivos Project).

There were also cooperation activities with the collaboration of the Ministry of Environment Direction of Seas and Coasts, such as convening the meeting to form PANATORTUGAS Network with the participation of 18 organizations.

Foundation Water and Earth has a sea turtle Volunteering program with the participation of university students from Panama, independent volunteers and foreigners (France and Mexico). They belong to ICAPO and LAUDOPO networks.

3. Sea Turtle Conservancy and Foundation Panama carry our education activities at all schooling levels, from kindergarten to Universities, as well as in communities, hotels, with tourists and the general public, on the threats to sea turtles, and negative impacts affecting the sea turtles habitats.



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There are agreements with community authorities, to work jointly with the communities in the protection of different beaches which are important for the *Ngäbe Buglé* community.

They contributed to the development of a support document to increase Bluff Beach category of protection to Wildlife Refuge. The document is been evaluated by the Ministry of Environment.

- 4. In March 2016, within the activities of the Mainstreaming Conservation of Biodiversity in Fishing and Tourism sectors in Panama's Archipelagos (Project PS00073109) the workshop on **Sea Turtle Monitoring and Research Techniques** took place in Guánico Abajo, Tonoci, Los Santos province. The workshop was organized by the Ministry of Environment Direction of Seas and Coasts Department of Marine and Coastal Resources Conservation within the framework of strengthening communities from Panama's Archipelago and connectivity areas, promoting the development of best practices for protection and conservation regarding sea turtle management, in coastal communities where there is interaction with this species.
- Thirty members of Pedasí and Tonosí communities were trained along with staff from the Ministry of Environment working directly with this community and who ware in charge of the protection and conservation of sea turtles. These activities strengthened the technical capacity of the Ministry staff and local groups working on monitoring, surveillance, and research. This workshop also helped to promote monitoring activities in connectivity areas and good practice for tourist activities related to sea turtle conservation.
- 5. In October 2016, there was the First National Encounter of Organizations working with Sea Turtle, resulting in the formation of the Sea Turtle Network of Panama. This event was carried out within the component of Support and Strengthening of Community Groups in Archipelagos of Panama and Connectivity Areas, as an activity of the Direction of Seas and Coasts Department of Coastal and Marine Resources, in Santiago, Veraguas province. The activity was developed within the framework of the project Mainstreaming Conservation of Biodiversity in Fishing and Tourism sectors in Panama's Archipelagos and with the support of the Development Program of the United Nations (PNUD).

6.

This encounter included the participation of 12 Community-based Organizations and NGOs working with sea turtles in Panama's Pacific and Caribbean coasts. The objective was establishing an organizational structure to promote conservation and sustainability of sea turtles. Participants names: Fundación Agua y Tierra (FUNDAT), YAUK SABGUEDINALA de la Comarca Guna Yala), Asociación Agroturística de Quebro (AAPEQ), Asociación Natural Bocas Carey (ANABOCA), Agrupación en Pro de la Conservación de las Tortugas Marinas (ACOTMAR), Grupo Agroecológico and Turístico de Isla Cañas (GAETIC), Grupo Protectores de las Tortugas Marinas de Jaqué, Asociaión Agro Turística para la Protección de las Tortugas Marinas



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(TORTUAGRO), Tortugas Pedasí, Fundación TORTUGUÍAS, Asociación para la Protección de los Recursos Naturales de Bocas del Toro (APRORENANB), Sea Turtle Conservancy (STC), there were also representative from Conservation International (CI), PNUD, MIAMBIENTE and volunteers.

During this event, Mr. Marino Abrego, Chief of the Direction of Seas and Coasts Department of Marine and Coastal Resources Conservation stated that the occasion was important to boost the exchange of information and knowledge among the organizations forming PANATORTUGAS. Mr. Abrego informed that it is important for the Ministry of Environment to support this initiative given that sea turtles are emblematic species threatened with extinction due to several threats, on land and at sea. It is the responsibility of the Ministry to contribute to the protection and conservation of these species by promoting respect for their lives, as well as the right of future generations of having them around. This also ensures their importance to keep ecologic balance in marine and coastal ecosystem, favoring the harmony that should exist between human beings and nature.

Among the result, progress within each organization is highlighted, as well as the appointment of the Board of Directors of the Network, homologation of forms to collect data in nesting beaches, updates to the database and dissemination of volunteering activities.

The participants presented a variety of items to be discussed such as monitoring in beaches and open waters, volunteering programs, training needs, improvement if infrastructure, support on inspections and more presence of authorities in the beaches, implementation of strong sanctions to poachers and traffickers of hawksbill, and currency of the link between Regional Cooperation (IAC and Treaties) and the Network.

PANATORTUGAS Board of Directors was formed as follows: Magaret Von Saenger (Tortugas Pedasí) as General Coordinator, Biologist Cristina Ordoñez (STC) as Subcoordinator, Mr. Enzo Pérez as Administrative Secretary, Ms. Karen Ávila as Financial Secretary, Ms. Marilaura Cajar (Tortugas Pedasí) as Outreach and Communication Secretary and Mr. Jacinto Rodríguez, Marine Biologist Marino Abrego, Biologist Cristina Ordoñez and Prof. Juan Blas as members of the Consultative Scientific Board.

Members of PANATORTUGAS network are committed to boosting this initiative that will strengthen responsible conservation and management of sea turtles in Panama, moving forward to the recovery of sea turtle population of the species nesting in Panama.

7. During this period, there were nine reports of strandings of sea turtle, with a total of 26 dead, mainly *Lepidochelys olivacea* and one *Chelonia mydas*. Additionally, a



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C. mydas was assisted and released. Stranding reports have been received from Santa Isabel, Colón; Puerto Conquira, Panamá; Bocas del Toro, Mata Oscura in Veraguas; and Pedasí, Los Santos Province.

8. The investment Project "Strengthening actions for the protection, conservation and sustainable management of sea turtle in coastal communities of Panama's Pacific and Caribbean coast" is ongoing with a projection of four years. This projects is a comprehensive management strategy for the protection and conservation of sea turtles and their habitats, as well as improving the quality of life of the communities depending on this resource in Panama. The project is a response to the National Action Plan for the Sea Turtle Protection, Conservation and Research, recently approved by Resolution N° DM-0031-2017 (Friday, January 27, 2017) Gazette N° 28237-A Wednesday, March 15, 2017.

Other institutional actions are also linked to this project, including training, environmental education, and outreach towards improving sea turtle conservation status through knowledge of local communities and key stakeholders. It also encourages strategic alliances to promote research and sustainable management, involving tourism companies, governmental organizations, scientific and academic sector, nongovernmental organizations. It strengthens institutionalism and cooperation regarding sea turtle protection, conservation, sustainable management and communities development.

This proposal includes priority areas for sea turtle conservation which require urgent protection, where activities required to be strengthened by the Ministry of Environment. These areas are Playa Maya Oscura: Sur de Veragua Special Marine and Coastal Management Zone, where there is nesting of four sea turtle species, two of them critically endangered. Foundation Water and Earth develop a sea turtle conservation and sustainable management project jointly with Quebro Agropesca and Ecotourism Association in this area.

La Marinera beach, declared as Reserve in Resolution N°092 August 12, 2010, where massive arrivals of *L. olivacea* are reported between July and December every year, making it a place of global importance for this event. There are also reports of *C. mydas* nesting in this area. The Biologic Station for Sea Turtle Monitoring and Research is located in this place, currently managed by the Ministry of Environment, with the participation of the community-based organization PROTORTUGA of Guanico Abajo. Playa Armila, a nesting area for two species critically endangered. Alternative livelihood initiatives have been developed such as the Armila Sea Turtle Scientific, Cultural, and Folkloric Festival organized with the organization Yaug Galu.

Las Perlas Archipelago, including a Special Coastal and Marine Management Area of las Perlas Archipelago, where there are nesting reports of three sea turtle species. There



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is a projection to develop activities to promote sea turtle sustainable management jointly with the community.

It is expected that by 2017 Community-based Organizations are strengthened, the Sea Turtle National Network be formed, the Training Plan and Workshops are ongoing, as well as the development of sea turtle protection and sustainable management activities. In 2018, along with the continuation of the activities previously mentioned, it is expected to begin the process to allow the construction of a Center that will provide marine fauna care, rehabilitation, research, and training for local communities and other stakeholders in subjects such as biology, ecology, identification, behavior, monitoring, regulations, safety measure and rescue of sea turtles.

9. Once the Ministry of Environment IAC Technical Focal Point was appointed after approval by Law on March 25, 2015, compliance with the commitments to the Convention continued. Accordingly, delegates have participated in all of the meetings of the IAC Consultative and Scientific Committees, and coordination with organizations and institutions relevant to the matter have been carried out.



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Part IV: Annexes

Table 1: Species Present

Place an X in the box when the species listed is present in the oceanographic basins of your country as established in Article III of the text of the Convention. Lo = Lepidochelys olivacea; Lk = Lepidochelys kempii; Dc = Dermochelys coriacea; Ei = Eretmochelys imbricata; Cm = Chelonia mydas; Cc = Caretta Caretta.

Species	Pacific Ocean	Atlantic Ocean	Caribbean Sea
Lo	X		
Lk			
Dc	X		X
Ei	X		X
Cm	X		X
Cc	X		X

Table 2: Index nesting sites or beaches for sea turtle conservation

- a. This table is intended to report information on index nesting sites or beaches for each species. For beaches that have multiple species nesting, enter that beach under the list for the primary nesting species. When entering information on nesting site or beaches, information is to be entered for each species independently. Indicate the names of index nesting sites. On a separate sheet of paper, indicate the selection criteria used for identifying the index beach, for example, because it hosts a significant proportion of the overall nesting population within a region or other defined unit or genetic importance.
- b. Nesting season: Indicate the starting and finishing date of the nesting season.
- c. Monitoring period: Indicate the starting and finishing date of monitoring efforts.
- d. Survey frequency: Indicate the frequency with which the surveys are done (daily, weekly, bi-weekly, monthly, among others).
- e. Geographic location: Specify latitude and longitude in decimal degrees.
- f. Extension of beach monitored: Provide the total length (in Kilometers) of the nesting beach.
- g. Declared protection area: Indicate (yes or no) if the area is declared as some type of protected area.
- h. Annual nesting abundance: Provide information on the total number of females and/or clutches or nests deposited at the nesting site or beach in real numbers. Provide the exact count of females based on tagged or uniquely identified individuals. If the exact number of clutches is unknown provide total number of nests.



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- i. Information from tagging program: Indicate if there have been any tagging activities at the nesting beach by using the letters of the type of tagging being done: flipper tagging (FT), passive integrated transponder (PIT) tagging, and satellite telemetry (ST) programs. If possible, on a separate sheet or as attached reference provide greater detail about the type of tagging efforts conducted. Also provide satellite telemetry maps or flipper tag recovery information if available.
- j. Tissue sampling: Indicate if there has been tissue sampling conducted at this site. This includes skin, blood, and other body tissues. On a separate sheet, or as attached references, describe these tissue sampling programs in greater detail. For example, were samples collected for genetic, contaminant, and/or stable isotope studies?
- k. Indicate what organization or entity is providing the data.
- 1. When inserting new rows, please copy and paste the drop down menus when applicable.



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	Name of Index			Monitoring period		Survey	Geographic Location (Lat/Lon)		2 to 2 to 3 to 3 to 3 to 3 to 3 to 3 to	Declared	Annual Nesting Abundance			Tagging Program	Tissue	Organization
Spp	Nesting Site or Beach	Start	Finish	Start	Finish	Frequency	Latitude	Longitude	ion of monito red beach	Protected Area (Yes/No)	Females Exact Count	Clutches Exact Count	Number of Nests	(FS, ST, PIT)	Sampling (Yes/No)	or entity providing data
	La Marinera Beach	Jul	Dec	Jan	Dec	Not available	7° 15' 26.91" 7° 21' 42.79"	80° 25' 27.87" 80° 25' 32.31"	600 m	Yes	Not available	Not available	Not available	Not available	No	Miambiente/SI NAP
Lo	Isla Cañas Beach	Jul	Dec	Jul	Dec	Daily	7° 25' 29.40" 7° 21' 42.79"	80° 15' 30.01" 80° 21' 46.80"	0.8 km	Yes	Not available	Not available	4345	FS	No	Miambiente/SI NAP
	Armila Beach	Feb	Aug	Not available	Not available	Not available	8° 41′ 53.83" 8° 39′ 51.71"	77° 31' 27.04" 77° 27' 08.42"	4.5 km	No	Not available	Not available	Not availabl e	Records of tags from other beaches	No	Fundacion Yaug Galu
Dc	Playa Chiriquí	Feb	Jul	Jan	Dec	Jan to Dec once a week; Feb to Nov alternate days; Mar to Oct daily	9° 00' 57.02" 8° 47' 48.93"	81° 42' 37.94" 81° 29' 35.93"	24 km	Yes	555*		3933	FS and ST	No	Sea Turtle Conservancy and Fundación Panama
Ei	Playa Chiriquí	May	Oct	Jan	Dec	Jan to Dec once a week; Feb to Nov alternate days; Mar to Oct daily	9° 00' 57.02" 8° 47' 48.93"	81° 42' 37.94" 81° 29' 35.93"	24 km	Yes	243*		14	FS	No	Sea Turtle Conservancy and Fundación Panama
Cm	Playa Chiriquí	Jan	Dec	Jan	Dec	Jan to Dec once a week; Feb to Nov alternate days; Mar to Oct daily. Sporadic nesting	9° 00′ 57.02" 8° 47′ 48.93"	81° 42' 37.94" 81° 29' 35.93"	24 km	Yes	1*		14	FS	No	Sea Turtle Conservancy and Fundación Panama

^{*} Number of different females observed during the 2016 season, genetic samples have been extracted in previous years.



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Table 3: Important foraging sites for sea turtle conservation

NOTE: This section of the report has been removed by the decision of the IAC Scientific Committee during its 13th meeting. Instead, the information about foraging sites will become part of a technical document, making the information easier to access for the users. The document will include the following:

a) List of foraging sites per Party, b) People working in the corresponding foraging areas, c) Threats in foraging areas, among others. This document will be updated every 5 years.

Spp	Name of the Study Area	Geographic Location (Lat/Long) in Decimal Degrees Gr Latitude Longitude			Area (Km²)	Protected Area (Yes/No)	Life Stage (Juvenile, Sub- adult, Adult)	Tagging Program (FS, ST, PIT)	Tissue Sampling (Yes/No)	Organization or entity providing data
Ei	Parque Nacional Coiba.	7° 25' 59"	° 81° 45' 58"	0	20,24.63 km ² .	Yes	Juveniles, Sub-adult, and Adults	FS and ST	Yes	MiAmbiente, ICAPO, NOAA, Campamento Eco Mayto.



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