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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, 2019.

Part I (General Information)

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

a._ Focal Point

Institution	Ministry of Environment and Energy (MINAE). Conservation Areas National System (SINAC)
Name	Rotney Piedra Chacón
Date Annual Report submitted	April 30, 2019

b._ Agency or Institution responsible for preparing this report

Name of Agency or Institution	Ministry of Environment and Energy (MINAE). Conservation Areas National System (SINAC)
Name of the person responsible for completing this report	Rotney Piedra Chacón
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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.

Costa Rica's last national report was presented in October 2018, reporting activities carried out until mid-August 2018; therefore, this new report will include information corresponding to the period between the end of August 2018 and March 2019.

As mentioned in the previous report the National Council on Conservation Areas (CONAC) in ordinary session N⁰08-2018, adopted the National Strategy for the Conservation and Protection of Sea Turtles under agreement No.10, on August 13, 2018. The Strategy involves sea turtles nesting and breeding or using foraging areas in the country, found in several stages of their lifecycle in the Caribbean and Pacific coasts: leatherback (*Dermochelys coriacea*), green turtle (*Chelonia mydas*), hawksbill (*Eretmochelys imbricata*), olive ridley (*Lepidochelys olivacea*) and the loggerhead (*Caretta caretta*) in fewer numbers.

To follow up on this national strategy, the Conservation Areas National System Executive Direction, under document SINAC-DE-1347 (annex 1), formed an implementation and monitoring institutional commission. Currently, this commission is reviewing and updating the Manual for Sea Turtle Conservation and Management in Costa Rica, with a focus on projects operations in beaches and hatcheries. This manual was official through Resolution R-SINAC-055-2007 May 2007.

The Ministry of Environment and Energy Conservation Areas National System (SINAC), is the agency responsible to manage Protected Wild Areas, including sea turtle nesting sites, as well as responsible for the protection, management, and conservation of wildlife, and responsible for the implementation of the National Strategy. The Protected Wild Areas have their general management plans and those where sea turtle are conservation targets (at least 80%) have monitoring, research, conservation, and management program for these species. Most of the nesting sites outside wild protected areas also have their monitoring and research programs and carry out actions to protect them, such as night patrols and nests relocation.



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This program's task is to facilitate, promote, and implement protection, conservation, scientific research, and environmental education activities related to sea turtles. Currently, management of nesting sites and marine and coastal ecosystems, integrate different stakeholders through their participation in the use and conservation of their resources.

Sea Turtles monitoring and research programs have been consolidated or are in development in the seven conservation areas. The communities' participation has strengthened, especially through the development of sea turtle sighting as a tourist activity. However, outside protected areas, this activity requires greater attention, and control mechanisms are pending.

SINAC, non-governmental organizations, academic institutions, local guides associations, communal development associations, researchers, and other governmental agencies, such as the Aquaculture and Fisheries National Institute (INCOPESCA) and the Coastguard National Service (SNG), carry out the activities previously mentioned inside as well as outside the protected areas.

Research, hatcheries management, and tourism and volunteering activities must have their corresponding documents and permits issued by MINAE through SINAC when talking about protected areas. Outside the protected areas, according to the Wildlife Act research and management depend on SINAC as well, however, until some aspects regarding procedures for research permits outside protected areas, INCOPESCA is also dealing with requests from the users. Activities related to tourism depend on the Costa Rica Tourism Institute (CTI) and Municipalities. All research involving genetic resources or biochemical is the competence of the Biodiversity Management National Council (CONAGEBIO in Spanish). About scientific fishing, INCOPESCA is the agency issuing research permits.



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

	YES/NO	Comments
	In Progress	Comments
Does your country have a national plan of action in accordance with Article XVIII?	Yes	In the Conservation Areas National Council (CONAC) regular meeting No. 08-2018 on August 13 th , 2018 following agreement No. 10, the National Strategy for the Conservation and Protection of Sea Turtles in Costa Rica was made official, including the Action Plan.
Does your country have policies and programs at local and regional levels in accordance with Article XVIII?	Yes	All nesting beaches in WPAs have Management Plans with a Public Use Regulation. Some of these regulations are being updated. Outside WPAs, actions are intended for the implementation of key stakeholders' participative
Does your country have monitoring programs in accordance with Article IX?	Yes	The tool known as Methods to calculate coverage of Marine Control and Protection in SINAC is being implemented (Annex 2).



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

	National Legislation	
Type and name of legal instrument (No.)	Description (Range of application)	Sanction(s) Imposed
	International Instruments	<u> </u>
Treaty, Convention, Agr Under	Year signed/or ratified	

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.



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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:

		RESC	DLUTION DOES NOT APPLY	
IS COMPLYING WITH THE FOLLOWING	YES	NO	DES CRIBE 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?	Yes		As presented in the 2018 report, all sea turtle nesting beaches in Wild Protected Areas have a Management Plan with an ecosystem approach where nesting beaches and sea turtles are focal elements for management. There is regular and permanent monitoring in each of the nesting beaches allowing assessing their status. In nesting beaches outside protected areas, there are local and non-governmental organizations implementing monitoring programs and conservation actions to protect the species in the Costa Rican Pacific. These programs are made official through research permits by SINAC or INCOPESCA. EP Leatherback index and secondary beaches have a permanent monitoring program and activities aiming to reverse the current status. Efforts are sustained with national and international support.	
1b) Are you Implementing these conservation plans and monitoring programs?	Yes		As presented in the 2018 report, implementation in Wild Protected Areas is done through Specific Annual Plans including Environmental Education, Research, Volunteering, Protection, Control, Ecologic Monitoring, and Eco-tourism, as well as through research permits for researchers to continue monitoring and research programs. Follow up and monitoring is also done annually using the tool to Asses Wildlife Areas Management Effectiveness. Outside these areas, NGOs, academy, or organized community groups, are in charge of implementing research, monitoring, nests protection, environmental education, and volunteering activities approved by SINAC or INCOPESCA through the projects. At the end of each season, a report must be handed to the area's research coordinator.	
2. Have you taken conservation measures to eliminate poaching of leatherback turtles?	Yes		In leatherback nesting beaches inside and outside protected areas, there are permanent patrols during nesting season. Females and nest's information are recorded during these patrols while poaching is reduced. In some cases, nests are relocated or hatcheries are used for the same purpose. Research results and permanent monitoring annual reports must be considered in each protected area annual planning. Once a year, the protected areas should assess their management effectiveness and consider the corrections required. Each research and monitoring project inside or outside these protected areas should present a report with results and basic information such as the number of nests, the number of females, hatching success, emerging success, and respective recommendations which should be included in future proposals or work plans accordingly.	



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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?	Yes	The consolidation process and monitoring programs of the National Marine Park Las Baulas is established with the support of organizations such as TLT and KUEMAR, FWS, FUNDECODES as well as SINAC. Monitoring programs continue strengthening in secondary sites inside and outside protected areas where leatherbacks nest sporadically, such as the National Wildlife Reserve or RNVS Camaronal (led by SINAC), the mix RNVS Ostional (SINAC), and the monitoring in the beaches complex known as Jesus-Zapotillal (by KUEMAR), and in beaches such as Junquillal (Verdiazul), Punta Pargos (by Sea Turtle Forever), Cabuyal by TLT, and Santa Rosa National Park Naranjo beach (by LAST). These organizations make an important effort to protect leatherback nests inside or near these beaches, as much as possible in all these places. Each nest found inside or near beaches during monitoring (if possible) is protected and monitored. At the end of each nesting season, responsible for each monitoring or research with a permit by SINAC should hand out the corresponding reports, which should be considered in the development of the annual work plan and future monitoring and research. Also, researchers from organizations and SINAC, responsible for coordinating monitoring in specific sites should assess the results and make relevant recommendations, which should be analyzed and considered in the following monitoring. Nesting sites outside protected areas require attention involving civil society. Management and conservation of these places are associated with the implementation of a governance model that allows us to go further than the efforts done at the level of NGOs, Researchers, and the state, involving all key stakeholders. In the 2018 report, it was informed that for the beaches complex Nombre de Jesus Zapotillal, workshops with the participation of the local community to address management of the nesting site resulted in the Project "Initiative for management and development of best practices for sea turtle sighting outside Wildlife Protect
4. Has your country	Yes	Information from 2018 report remains
adopted fishing techniques that reduce	108	Information from 2010 report remains
incidental capture and mortality of this species?		

^(*) 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:

			RESOI	UTION DOES NOT APPLY	
IS COMPLYING FOLLOW	* *	YES	NO	DES CRIBE ACTION (*)	DOES NOT APPLY
1. Are you strengthening monitoring of the illegal use and trade of hawksbill turtles and their products?				Each conservation area is responsible for reporting about inspections in markets, therefore, hawksbill products can be confiscated. Monitoring carried out by NGOs is also important. Association LAST, for example, carries out surveys in Tourist areas. On the other hand, police authorities carry out control and protection operations (Annex 5(a,b) press release). There were no hawksbill but other species products were found during these operations.	
2. Are you enforcing pertinent hawksbill legislation?		Yes		According to national legislation, hawksbill products and sub-products commercialization are illegal. In case of events against the law, complaints are presented to the corresponding authorities. As shown in Annex 5a, the offenders were arrested.	
	3. Are activities being carried out in order to stop the illegal trade of hawksbill products?			Association LAST has been carrying out inventories on products sold on the Pacific Coast. Control and protection operations are carried out by police authorities (Annex 5(a,b), press release)	
4. Indicate if your country is strengthening the protection of important nesting and foraging habitats by declaring protected areas and regulating anthropogenic activities that adversely impact these habitats.		X		Particularly at Cahuita National Park and the Wildlife National Refugee Gandoca Manzanillo nesting beaches are monitored and protected. If hawksbill nests are found on beaches inside or outside protected areas, if monitoring and research personnel are available, nests are highly protected.	



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b) Protection of feeding habitats	X	At least five hawksbill feeding grounds have been identified in the last years, along Costa Rica's Pacific Coast (Golfo Dulce, Cabo Blanco, Punta Coyote, Punta Pargos y Bahía Matapalito). Most of these sites are totally or partially under a management category, for instance, Golfo Dulce is a responsible fishing area, and Cabo Blanco is an Absolute Reserve and a Marine Management Area. Punta Coyote is partially protected by the Wildlife National Refugee Caletas-Aria; Bahía Matapalito is under the Marine Management Area of Santa Elena Bay. Threats are reduced in these sites. Punto Pargos is not yet under a management category.	
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^(*) Specify actions implemented, 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-COP7-2015-R3: Resolution on the Conservation of the Loggerhead Sea Turtle (*Caretta caretta*)

ACCORDING TO RESOLUTION CIT-COP7-2015-R3, REPORT WHETHER YOUR COUNTRY:

			RESOLUTION DOES NOT APPLY	X
IS COMPLYING WITH THE FOLLOWING:	YES	NO	DESCRIBE ACTION (*)	DOES NOT APPLY
1. Has your country created national action plans or monitoring programs to promote loggerhead sea turtle conservation?				
2. State if there are plans or recovery programs, or bilateral or regional cooperation.				
3. Are these action plans or monitoring programs being implemented?				
4. Is there protection of the species at a state or federal level?				
5. If your country has loggerhead turtles nesting beaches:				
5a. Has your country taken conservation actions to protect nesting beaches and their associated habitats?				
5b. Are there laws on turtle-friendly lighting in areas impacted by coastal development?				
5c. Is there a long-term (minimum 10 years) standardized data available for population trend studies?				
6. Is there exploitation or direct harvest of loggerhead sea turtles in your country?				

^(*) 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 FOLL	OWING	YES	NO	DES CRIBE ACTION (*)	SPECIES	DOES NOT APPLY
Adopte Nations l	Food and Agriculture	e Organiz	zation (F		•	
		d monito	ring of th	he adverse impact of fisheries on sea turtles		
	ollect information y fishery	X		The medium and advanced scale commercial fleet uses an operations logbook, where captains record if there is an interaction between sea turtles and longlines.	Cm, Lo, Dc, Cc, Ei	
• Ol	bserver programs		Х	Program in a stage of development. There is a draft proposal. INCOPESCA participated at OSPECA's framework to design observer programs and in a training by Chile's IFOP coordinator on observer programs, in September 2018 in Panama.		
tu	esearch on sea rtle/fishery teractions		Х			
	formation on non- arty vessels		Х			
no	ooperation with on-Party states to otain information		Х			
B. Miti	igation measures for	the follow	ving fish	neries:		
i.	Long-line	Х		The medium and advanced scale commercial fleet uses an operations logbook, where captains record if there is an interaction between sea turtles and longlines. Longline cut the		
ii.	Gillnets		X			
iii.	Trawling (e.g., 1.TEDs: specify legally approved TEDs, their dimensions, material, and target species for that fishery, 2. time-area closures: specify the geographical area, time of closure and target species for that fishery., 3.tow times and/or 4. other measures)	x		There are no vessels authorized to carry out this activity	Cm, Lo, Ei	



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V. Other fishing gear (indicate which one(s))			X	X
vi. Training programs for fishermen about best practices for safe handling and release of sea turtles incidentally caught.	X	UNDP-INCOPESCA carried out refresher training in Cuajiniquil community in the North Pacific. Equipment for sea turtle handling and release was provided. INCOPESCA is working on the possibility of the 2019-2020 training. Training Module.		
C. Socio-economic consider	rations			
Support socio- economic activities that help mitigate adverse impacts of fisheries on sea turtles	Х	Commercialization of olive ridley <i>Lepidochelys olivacea</i> eggs from the Ostional National Wildlife Refuge is allowed by INCOPESCA, as long as ADIO presents and annual plan for use that is approved by this institution authorities.	Lo	

^(*) 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.)

SINAC, jointly with the National Coastguard Service, the Public Force, and Tourist Police take part in the protection and compliance with the national environmental law (Annex 5 a and b). Activities carried out involve marine patrols inside and outside protected areas, night and day journeys on land, inspections, and confiscation of sea turtle products and byproducts. INCOPESCA's responsibility is to authorize, regulate, and control fishing gears.

Figure in Annex 6 shows the country nesting sites. Due to a lack of personnel Nesting sites outside Wild Protected Areas, are not covered at an institutional level, therefore the NGOs work in coastal zones is determining to carry ecologic monitoring and implement Law No. 8325 (Law for the Protection and Conservation of Sea Turtles) as it compensates for the governmental surveillance. However, we are aware of the urgent need for institutional attention mainly to counteract eggs poaching.

d ._ Application [presentation] 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 with the procedure established by the COP (Doc. CIT-COP5-2011-R2). Attach management program.

This report highlights the actions between august and march 2019 regarding the exception in Ostional:

1. SINAC, through the Management of the Mix National Wildlife Refuge Ostional, plans the attention and follow up of each *arribada* through a special control and protection operation from the start to the end of the event. Subsequently, a report is prepared summarizing days of the operation, several officials collaborating with the operation, data on eggs harvest, and an estimate of the *arribada* size, as well as recommendations to improve the process. In 2018, reports were done per *arribada* (Annex 7. Report on September 2018 *arribada*). Starting in 2019, the form was changed into three months reports detailing each *arribada* (Annex 8. 2019 First quarter *Arribada* report).



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- 2. Ostional Integral Development Association (ADIO) also develops reports on the *arribada* used that month (Annex 9. Report March 2019) through their regent biologist. This report shows the total of eggs harvested and the destination of the eggs according to the following categories:
 - a. Local sales
 - b. 200 eggs bags for sale
 - c. Partners courtesies
 - d. Neighbors permit
 - e. Special permits
 - f. Donations
 - g, Eggs in bad condition
- 3. Also, ADIO's regency develops and presents an annual report on the achievements of the eggs harvest, control, and management of the olive ridley (*L. olivacea*) population habitat nesting in Playa Ostional (Annex 10. Annual Report 2018). The document details information regarding ADIO activities of the year:
 - a. Eggs harvest and commercialization
 - b. Surveillance and control of illegal extraction
 - c. Habitat maintenance and management
 - d. Release and protection of hatchlings
 - e. Contributions from the members of ADIO Local Tourist Guides to the project
 - f. Social aspects (investment and infrastructure) of the project.
 - g. Conclusions
 - h. 2019 Recommendations
- 4. In response to the Environment Organic Law, stating that is the State duty to promote active and organized participation of the inhabitants through local bodies involving high participation of the civil society; and in coordination with public and private institutions, to impact decision making and the development of actions toward the protection of the environment. And under the Biodiversity Law, which establishes the duty of promoting the participation of communities in conservation and sustainable use of biologic diversity, and also establishes forming SINAC collegiate bodies such as the local council; forming the Advisory Interinstitutional Council for Ostional Wildlife Refuge known as CIMACO. This interinstitutional coordination started working in 2002, meeting every last Friday of the month, however, it was not formalized until February 2008 under Executive Decree No-34590-MINAE.



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CIMACO's objective is to consolidate and promote the participation of the communities in the Ostional Wildlife National Refuge and its area of influence natural resources conservation, use, and management according to the management plan. The activities inside Ostional Refuge can be assessed by this Council, which then will recommend decisions according to the objective proposed, excluding those related to non-essential services according to Biodiversity Law article 39

Representatives from all the communities through their Development Association or organized groups form CIMACO. Nicoya and Santa Cruz governments participate, as well as fishermen from the communities within the Refuge, and from San Juanillo given their activities within the Refuge, Ostional certified guides representatives, Costa Rica University, INCOPESCA, and SINAC. The council meets once a month to address issues in the Refuge. Each session counts with memoirs, which helps following up and comply with the agreements. Every session the council discusses the following items in their agenda:

- Management Plan Commission
- Territorial Management Commission
- Control and Protection Commission
- Follow up to the five-year Management and Conservation of the Olive Ridley Sea Turtle
- Follow up Law 9348 and its regulations

We attach the memoirs from this year's February session informing on the assessment to the Five-year Plan for Management and Conservation of the Olive Ridley operative plan (Annex 11. CIMACO 2019 session memoirs).

5. Progress on the implementation of the Traceability Plan: INCOPESCA and the University of Costa Rica carried out a second assessment on the traceability procedure in January 2019. In this second assessment, it was possible to identify significant progress by ADIO. The report implies important opportunities for improvement and recommendations (Annex 12. Second Assessment of the Traceability Process 2019). The Association recognizes that a lack of financial resources and skills make some of the processes implementation slower according to what was established. However, they have made great efforts to develop new mechanisms and procedures that allow adapting the document to the context and operational reality without risking the achievement of the traceability objectives for olive ridley eggs coming from the Refuge. Adjustments were made to the analysis and the process, an erratum was prepared for Ostional National Wildlife Refuge Olive Ridley Eggs Traceability Procedure to update details on sub-processes established, and update the tickets and other documents to follow up on the procedure (Annex 13. Erratum for the Traceability Procedure).



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- 6. The five-year plan for the conservation and management of olive ridley in Ostional 2017-2021 includes a matrix with the annual operative plan, which is reviewed at the end of every year to check the percentage of compliance with the activities scheduled for the year. We carried out work sessions on February 20 and 21 2019, with ADIO, UCR, INCOPESCA, and SINAC to assess the 2018 operative plan and plan 2019 actions. In 2018 compliance with actions planned was 75,7% (Annex 14. Operational Matrix Assessment PQ 2018 IAC).
- 7. Ostional Wildlife National Refuge control and protection actions mainly seek to avoid illegal harvest of sea turtle eggs and to develop actions and control of poaching and visitors during *arribadas*.
- 8. We have made a great effort to obtain physical identification of Ostional communities and outreach documents on the Refuge regulations and good practices during *arribadas* in a way that threats can be reduced and focusing on visitors (Annex 15. Poster).



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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 	Coastal Development: In some of the protected areas buffer zones there is more control on homing projects in terms of lighting, noise, tourism, activities on the beach, among others. For instance, there are instruments that if used properly should help reduce the impact of threats to sea turtles nesting habitat, such as environmental feasible from SETENA and coastal regulation plans consider sea turtles and their habitats. Management of RNVS Camaronal and RNVS Ostional have developed and share posters with recommendations on good practices. Incidental Capture: MINAE and MAG have legal mechanisms to regulate incidental capture through the tuna zoning decree (No. 38681-MAG-MINAE). Additionally, marine protected areas have measures in their management plans and regulations; additional to marine patrols within their protected boundaries. The new Marine Areas of Cabo Blanco and Santa Elena are working on the implementation of actions for its conservation and sustainable use. Ten responsible fishing areas have been established in the Pacific, and a reduction of threats should exist (Annex 16. Responsible Fishing Marine Areas)



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			Direct use: There is Egg poaching, mainly outside the protected areas, therefore diurnal and nocturnal patrols take place, as well as other protection activities (hatcheries). There are institutional regulations in place for hatcheries (Directive SINAC-DE-1438 (2018). Regarding the exception in RNVS Ostional, control patrolling is carried out along with other police institutions to reduce poaching impact.
			Contamination: Most of the pollution comes from river mouths, as natural debris or littering and organic trash. Beach cleanups are organized and there are waste management programs in different places. Some of the beaches have been nominated for the Blue Flag Program.
			Pathogens: In natural conditions, nests are exposed to pathogens. When needed, hatcheries are built and nest relocation is done respecting best practices. More information and research are required.
			Climate Change: Monitoring of parameters such as temperature. The dynamics of the dunes in some beaches, high incidence of erosion, and increasing temperatures are impacting nesting and the survival of embryos. When required, hatcheries are used to avoid these impacts, as well as nest relocation to shaded areas, respecting appropriate temperatures for the development of eggs.
Lk	☐Coastal development☐Incidental capture☐	☐Contamination ☐Pathogens	
	□Direct use	□Climate change	



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Dc	⊠Coastal development ⊠Incidental capture ⊠Direct use	Pacific and Caribbean Coastal Development: In some of the protected areas buffer zones, there is more control on homing projects in terms of lighting, noise, tourism, activities on the beach, among others. For instance, there are instruments of the Environmental Secretariat, such as environmental viability, that must consider sea turtles. More incidence in this matter is required. Also, Coastal Regulation Plans must consider these species and their critical habitats. In the case of Las Baulas, the National Technical Environmental Secretariat management resolutions regarding guidelines to build are still in place. Likewise, there is a series of recommendations provided by Camaronal and Ostional RNVS Administration to their neighbors. Control outside the protected areas is more complicated; however, groups responsible for biologic monitoring make conservation efforts. In some sites, such as Nombre de Jesus – Zapotillal area, SINAC, through Las Baulas National Marine Park administration, has stated the need that future property development considers proper use of lighting and establishes protection areas and control in visiting areas with nesting regarding noise, among other. Incidental Capture: MINAE and MAG have legal mechanisms to regulate incidental catches through tuna zoning decree (No. 38681-MAG-MINAE). Additionally, some marine protected areas have mitigation measures within their management plans and regulations. Ten responsible fishing area have been established along the Pacific coast, and INCOPESCA established one responsible fishing area in the Caribbean (Annex16. Responsible fishing marine areas)



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Direct use: Permanent patrols for control and nest protection during nesting season. Regular and permanent monitoring of nests. Outside the protected areas activities reduced poaching, but more institutional support is required, affected by the lack of personnel. There are institutional guidelines for hatcheries (Directive SINAC-DE-1438 (2018).

Contamination: Beach cleaning takes place, and some places have solid waste management programs. Some beaches are Blue Flag Program award winners.

Pathogens: Best practices to work with sea turtles and their nests. More information and research are required.

Climate Change: Monitoring of environmental parameters such as temperature. The dynamics of the dunes in some beaches, high incidence of erosion, and increasing temperatures are affecting nesting and the survival of embryos. When necessary, hatcheries or relocation to shaded areas are used to reduce the impacts, keeping proper development temperatures.



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			Pacific and Caribbean
Ei	⊠Coastal development⊠Incidental capture⊠Direct use	⊠Contamination⊠Pathogens⊠Climate change	Coastal Development: In some of the protected areas buffer zones there is more control on homing projects in terms of lighting, noise, tourism, activities on the beach, among others. For instance, there are legal instruments that used properly help to reduce the impacts of threats to sea turtles nesting habitat, such as environmental feasibility from SETENA and coastal regulation plans considering sea turtles and their critical habitats. Control outside protected areas is more difficult but the groups in charge of biologic monitoring make great conservation efforts.
			Incidental Capture: MINAE and MAG have a legal mechanism to regulate incidental catches through tuna zoning decree (No. 38681-MAG-MINAE). Additionally, some marine protected areas have mitigation measures within their management plans, specific plans, and regulations. Along the Pacific coast, ten responsible fishing areas have been defined and established
			INCOPESCA established one responsible fishing area in the Caribbean (Annex16. Responsible fishing marine areas)
			Direct use: Permanent control and protection patrols to protect the nests. Nesting monitoring is permanent and constant. Outside the protected areas, activities reduced poaching, but more institutional support is required, affected by the lack of personnel. There are institutional guidelines for hatcheries (Directive SINAC-DE-1438 (2018). Organizations concerned about illegal trafficking and SINAC, organize inspections in markets and places selling hawksbill products to control the trade.



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		Contamination: Beach cleanup takes places and some sites have solid waste management programs. The Blue Flag program has awarded some beaches. Pathogens: Best practices to handle sea turtles and their nests. More information and research
		are required. Climate Change Monitoring of environmental parameters such as temperature. The dynamics of the dunes in some beaches, high incidence of erosion, and increasing temperatures are affecting nesting and the survival of embryos. When necessary, hatcheries or relocation to shaded areas are used to reduce the impacts, keeping proper development temperatures.
Cm	⊠Contamination⊠Pathogens⊠Climate change	Coastal Development: On the Pacific coast, the most important sites are outside protected areas, this requires defining, formalizing, and implementing an instrument for better control of threats coming from homing projects, such as buildings, condos, and hotels. These threats can come from lighting, noise, tourism, activities with several people on the beach, among others. Some individuals show injuries indicating interaction with boats, there are no actions to deal with this issue. There is work in better control of tourist activities in beaches without a management category, such as good practices implementation for sighting sea turtles (see Annex 4).



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			Incidental Capture: MINAE and MAG have legal mechanisms to regulate incidental catches through a tuna zoning decree (No. 38681-MAG-MINAE). Additionally, some marine protected areas have measures within their management plans, specific plans, and regulations, as well as marine patrols within their protected boundaries. On the Pacific coast, the new Marine Areas of Cabo Blanco and Santa Elena are working in the implementation to help conservation and sustainable use. Also, ten responsible fishing areas have been established in the Pacific and one in the Caribbean (Annex 16).
Сс	☐Coastal development ☐Incidental capture	☐Contamination ☐Pathogens	
Cc	Direct use	☐Climate change	



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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.

An important number of organizations are in the country making great efforts, including governmental, academic, and non-governmental institutions, as well as the State, investing time and resources in research, monitoring, and protection of the sea turtles nesting and using their habitat in Costa Rica.

In the Pacific and the Caribbean, these efforts are constant thank to the work of organizations such as:

Caribbean: Asociación Latin American Sea Turtles (LAST); Sea Turtle Conservancy; Reserva Pacuare-EPI; Centro Científico Tropical; ASTOP; COTERC; Estación Las Tortugas. Reserva Marina; Cahuita Rescue Turtle Race; Asociación de Voluntariado para la Protección del Ambiente-ASVPA.

Pacific: Red de Conservación de Tortugas Marinas del Pacífico Sur; Reserva Playa Tortuga, Fundación Corcovado, Comité para la Conservación de las Tortugas Marinas de Corcovado (COTORCO); Conservación Osa; Asociación de Vecinos Punta Banco; CREMA; Turtle Trax; Sea Turtle Forever; Asociación Verdiazul; Asociación Latin American Sea Turtles (LAST); Biocenosis Marina; Cirena; ASVO; TLT; KUEMAR; Equipo Tora Carey/Universidad de Costa Rica; Refugio Mixto de Vida Silvestre Romelia.

The list of investigations and monitoring programs for the 2019 period is included in the Spanish version of this report.



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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, Dc, Cc
Migration	Ei
Habitat Monitoring	Lo, Cm, Ei, Dc
Fisheries interactions	Cm, Lo, Dc, Ei
Genetics	Cm



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c. Other activities

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

Environmental education is a strong component of the Protected Areas Management Plans and other key stakeholders' sea turtle conservation programs. There are talks, field tours, booklets delivery, and activities such as the Leatherback Festival. Actions carried out for 60 days finalize with the release of hatchling in a family activity joined by staff from the Ministry of Public education, and representatives from the State and Moín Port. There is a similar activity with kids from Pacuare beach school, with the participation of the National Coast Guard service and the community.

INCOPESCA has been negotiating with personnel from INA's Nautical Fishing Node to find options to teach the training "Program on Techniques to Increase Sea Turtle Post-capture Survival in Sea Turtles Incidentally Captured in Costa Rican Fisheries". Work has been done in the preparation of the documents during the last years to schedule the training. Captains and sailors of the commercial small and advanced scale fleet, as well as staff from SINAC working in marine areas, will receive this training.

The former to comply with the IATTC Resolution and Executive Decree No. 38681 MAG-MINAE on "Management for the use of Tuna and Tuna-like specie in the Economic Exclusive Zone of Costa Rica's Pacific Coast". As well as to consider the Agreement approved by INCOPESCA Board of Directors AJDIP/218-2016 posted in Gazette 152 in August 2016 on training on sea turtle handling and release and the use of appropriate equipment.

Currently, there is at least one draft of the training syllabus, and personnel promoting the subject and the agreements required to begin the training.

All of the above contribute to fisheries strengthening. Work is being done along with the fishing sector of the commercial small and advanced scale fleet. This project has been included in the program to improve fisheries for tuna, dolphin fish and swordfish, and the large pelagic sustainable fishing action plan.



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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

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 sites 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 a 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 genetics, contaminant, and/or stable isotope studies?
- k. Indicate the 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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San	Name of Index Spp Nesting Site	Nesting	g Season	Monitoring Period		Survey Frequency	(Lat/Long)	Geographic Location (Lat/Long) in Decimal Degrees		Declared Protected		Nesting Ab	undance	Tagging Program	Tissue Sampling	Organization or Institution
Зрр	Nesting Site or Beach	Start	Finish	Start	Finish	Sur Frequ	Latitude	Longitude	Extension of beach monitored (km)	Areas (Yes/No)	Females Exact Count	Clutches Exact Count	Number of Nests	(FS, ST, PIT)	(Yes/No)	Providing Data
	Nancite	Jul 1	Jun 30	Aug 1	Feb28	Daily	10.804811	85.669346	1.05	Yes		78206			No	Luis Fonseca
	Naranjo	Jul 1	Jun 30	Nov 1	Feb 28	Daily	10.779040	85.666107	4.0	Yes		322			No	Luis Fonseca
Lo	Ostional	Jul 1	Jun 30	Jul 1	Jun 30	During arribadas	9.993913	85.700403	7.00	Yes	769941	769941	769941	Inconel		Carlos Mario Orego (MINAE- SINAC)
	Hermosa										No data	No data	No data			
	Playa Grande (PNM Baulas)	Oct 2018	Mar 2019	Oct 2018	Mar 2019	Daily	10.334675	85.847822	3.6	Yes	13		96*	PIT	No	TLT Kuemar
Dc	Tortuguero	Mar 2018	Jul 2018	Mar 2018	Jul 2018	Daily	10.586675	83.52247	29	Yes	107				No	Sea Turtle Conservancy
	Pacuare Norte	Mar 2018	Jul 2018	Mar 2018	Jul 2018	Daily	10.244813	83.299166	7.1	No	134	241		FS	No	LAST
	Reserva Pacuare	Mar 2018	Jul 2018	Feb 2018	Sep 2018	Daily	10.178801	83.242027	5.8 km	Yes	266	443	443	FS, PIT	No	Reserva Pacuare - EPI
Ei	Cahuita	May 2018	Nov 2018	June 20, 2018	Oct 22, 2018	Daily	9.736107	82.825770	6.0	Yes		69			No	LAST
El	Gandoca	May 2018	Nov20 18	June 20, 2018	Sep 12, 2018	Daily	9.598498	82.605934	7.0	Yes		72			No	LAST



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Spp	Nesting Site		Index Nesting Site		•	Survey Frequency	Geographic Location (Lat/Long) in Decimal Degrees		Extension of monitored	Declared Protected Areas	Annual Nesting Abundance			Tagging Program (FS, ST,	Tissue Sampling (Yes/No)	Organization or Institution Providing
	or Beach	Start	Finish	Start	Finish	Surve	Latitude	Longitude	Exi	(Yes/No)	Females Exact Count	Clutches Exact Count	Number of Nests	PIT)	(165/110)	Data
	Isla Murciélago						10.855792	85.911412	0.35	Yes	No data	No data	No data		No	
	Naranjo	Oct 2018	Mar 2019	Nov 1	Feb 28	Daily	10.779040	85.666107	4.0	Yes	8	10		FS	No	Luis Fonseca
	Cabuyal	Oct 2018	Mar 2019	Oct 2018	Mar 2019	Daily	10.673881 5	85.654271 9	1.4	No	41		165**	FS and PIT	No	TLT
Cm	Nombre de Jesús	Jan 2018	Dec 2018	Jan 2018	Dec 2018	Daily	10.394233	85.835983 1	0.9	No	215	624		FS	No	KUEMAR
	Punta Pargos													FS	No	Sea Turtles Forever
	Tortuguero	Apr 2018	Nov 2018			Daily	10.586675	83.522247	29	Yes	61169				No	STC
Сс																

INTER-AMERICAN CONVENTION FOR THE PROTECTION AND CONSERVATION OF SEA TURTLES - IAC

List of index sites for each sea turtle species for each IAC country within which sea turtle nesting occurs.

Name of Beach	DC	CM	EI	CC	LO	LK	Responsible
Belize (2)		(1)	(1)	(1)			
Gales Point			X				
Bacalar Chico Marine		X		X			
Brazil (18)	(2)	(1)	(7)	(12)	(3)		
Comboios	X			X			
Povoação	X			X			
Busca Vida			X	X			
Santa Maria				X			
Barra Jacuipe			X	X			
Guarajuba			X	X			
Itacimirim			X	X			
Praia do Forte			X	X			
Barra do Furado				X			
Farol				X			
Farolzinho				X			
Maria Rosa				X			
Berta			X				
Pipa			X				
Mangue Seco					X		
Coqueiros					X		
Pirambu					X		
Trindade Island		X					

Name of Beach	DC	CM	EI	CC	LO	LK	Responsible
Caribbean Netherlands (2)	(1)	(2)	(1)	(1)			
Klein Bonaire, Bonaire		X	X	X			Sea Turtle Conservation
Zeelandia, St. Eustatius	X	X					St Eustatius Sea Turtle
Costa Rica /Pacific (9)	(1)	(5)			(4)		
Isla Murcielago		X					
Nancite*					X		
Naranjo		X			X		
Cabuyal		X					
Nombre de Jesús		X					
Punta Pargos		X					
Playa Grande	X						
Ostional*					X		
Hermosa					X		
Costa Rica/Atlantic (4)	(3)	(1)	(1)				
Tortuguero	X	X					
Pacuare Norte	X						
Mondonguillo	X						
Cahuita			X				
Ecuador (9)		(6)	(1)		(5)		
San Lorenzo					X		MAE (Pacoche)
La Botada					X		MAE (Pacoche)
Playa Chocolatera		X			X		MAE (REMACOPSE)
Playa Tres Cruces		X			X		MAE(REMACOPSE)
Playa Mar Bravo		X			X		MAE(REMACOPSE)
Playita (Machalilla)			X				MAE (PNM/ Equilibrio Azul)
Quinta Playa (Galapagos)		X					MAE (DPNG)
Barahona (Galapagos)		X					MAE (DPNG)
Las Bachas (Galapagos)		X					MAE (DPNG)

Name of Beach	DC	CM	EI	CC	LO	LK	Responsible
Guatemala (2)	(1)				(2)		
Hawaii	X				X		ARCAS
La Barrona					X		
Honduras/Atlantic (3)	(1)		(2)				
Pumkin Hill, Utila			X				
Plaplaya	X						
Cayos Cochinos			X				
Honduras/Pacific (2)					(2)		
Punta Ratón					X		
El Venado					X		
México/Atlantic (12)		(11)	(4)	(8)		(7)	
Rancho Nuevo, Tamps		X		X		X	CONANP
Barra del Tordo, Tamps		X		X		X	CONANP
Altamira, Tamps		X		X		X	CONANP
Mirama, Tamps						X	CONANP
Lechuguillas, Ver		X	X			X	CONANP
Isla Aguada-Xicalango- Victoria, Camp		X	X			X	CONANP
Chenkán, Camp		X	X			X	CONANP
Las Coloradas/Rio Lagartos, Yuc		X	X	X			CONANP
Xcacel, Q.Roo		X		X			Reserve Estatal
Chemuyil, Q. Roo		X		X			
Xel Ha, Q. Roo		X		X			
Puerto Aventuras, Q. Roo		X		X			
México/Pacific (13)	(6)	(5)			(9)		
El Verde, Sin	X				X		CONANP
Platanitos, Nay					X		CONANP
Nuevo Vallarta, Nay					X		CONANP
Mismaloya, Jal					X		CONANP
Chalacatepec, Jal					X		CONANP
El Chupadero, Col							CONANP

Name of Beach	DC	CM	EI	CC	LO	LK	Responsible
Mexiquillo, Mich	X	X			X		CONANP
Tierra Colorada, Gro	X	X			X		CONANP
Cahuitán, Oax	X						CONANP
Escobilla, Oax*	X				X		CONANP
Barra de la Cruz, Oax	X	X			X		CONANP
Maruata, Mich		X					Univ. Michoacana SNH
Colola, Mich		X					Univ. Michoacana SNH
Panamá/Atlantic (3)	(2)	(1)	(3)	(1)			
Cayos Zapatillas (B. del			X				
Playa Chiriqui (B. del Toro)	X	X	X	X			
Playa Armita o Pito	X		X				
Panamá/Pacific (2)		(2)			(2)		
RVS Isla Cañas		X			X		
Playa La Marinera		X			X		
United States/Atlantic (7)	(5)	(4)	(3)	(4)		(1)	
Culebra Island, Puerto Rico	X						
Vieques Island, Puerto Rico	X	X	X				
Mona Island, Puerto Rico			X				
Buck Island Reef National Monument,	X	X					
Sandy Point NWR, U.S. Virgin Islands	X	X	X				
Florida Index Beaches	X	X		X			
Georgia Index Beaches				X			
North Carolina Index				X			
South Carolina Index				X			
Texas (South Padre Island)						X	
United States/Pacific (2)		(1)	(1)				
French Frigate Shoals (HI)		X					
Hawaii			X				

Name of Beach	DC	CM	EI	CC	LO	LK	Responsible
Venezuela (11)	(6)	(4)	(6)	(6)			
Querepare (Edo. Sucre)	X			X			CICTMAR
Cipara (Edo. Sucre)	X			X			CICTMAR
Macuro (varias playas cercanas, Edo. Sucre)	X	X	X				ONDB-MPPA
El Agua - Parguito Beach (Edo. Nueva	X						ONDB-MPPA
Parque Nacional Archipiélago Los Roques			X	X			INPARQUES, Fundación
La Sabana (Edo. Vargas)	X						ONDB-MPPA, Consejo de
Parque Nacional Henri Pittier (Playas Cuyagua,		X	X	X			INPARQUES, Fundación Ecodiversa, Lideres
Playas entre las bocas del Rio Morón Y Rio Yaracuy			X	X			Palmichal S.C.
Parque Nacional Morrocoy (Cayo Borracho, Varadero y		X	X				CICTMAR, INPARQUES
Paraguana Peninsula	X		X	X			UNEFM (Universidad Nacional
RFS Isla de Aves		X					ONDB-MPPA