Inter-American Convention for the Protection and Conservation of Sea Turtles

Chile

Annual Report 2012

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

Part I (General Information)

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

a._ Focal Point

Institution	Fisheries Subsecretariat
Name	Francisco Ponce Martínez
Date Annual Report submitted	September 27, 2012

b._ Agency or Institution responsible for preparing this report

Name of Agency or Institution	Fisheries Subsecretariat
Name of the person responsible for completing this report	Francisco Ponce M.
Address	Bellavista 168, piso 14, Valparaíso
Telephone(s)	(56)(32)2502769- 2502730
Fax	(56)(32)2502756
E-mail	franciscoponce@subpesca.cl

c._ Others who participated in the preparation of this report

Name	Agency or Institution	E-mail
Jorge Azocar	Instituto de Fomento Pesquero	Jorge.azocar@ifop.cl
Miguel Donoso	NGO Pacífico Laud	seaturtle@vtr.net
Leyla Miranda	DIRECTEMAR*	lmirandao@dgtm.cl
Walter Sielfeld	Arturo Prat University	Walter.sielfeld@unap.cl

*** Directorate General of the Maritime Territory and Merchant Marine**

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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.

Background:

Sea turtles are relatively scarce on Chile's jurisdictional coasts and waters, and their presence is usually associated to foraging activities. The detected groupings are small and found in Chile's northern continental coast. ***Chelonia mydas*** can be found regularly in four locations: Bahía Chipana (21°18'L.S. 70° 05' L.W), Bahía Mejillones del Sur (23°05' L.S. 70°27'L.W), Caleta Constitución (23°26,21'L.S. 70°36' L.W.) and Bahía Salado (27°41'L.S. 71°00' L.W); ***Lepidochelys olivacea*** has been registered regularly on Chinchorro beach (18°27,5' L.S. 70°18,2' L.W. ciudad de Arica); ***Chelonia mydas*** has also been detected on a regular basis on Easter Island's coastline.

Dermochelys coriacea's presence has also been associated to national jurisdictional waters. Specimens of these sea turtles have been spotted occasionally on the coastline as well as of ***Caretta caretta,*** which can be found mainly in the northern jurisdictional waters.

Taking into account the presence and distribution of the different species of sea turtles throughout the country, conservation and protection activities have centered on minimizing fishing-related mortality in ***Dermochelys coriacea*** and ***Caretta caretta*** and on the protection of the species that frequent costal areas.

Action plan:

Chile does not have a specific plan of action with regards to the protection and conservation of sea turtles. However, all activities related to minimizing accidental capture and mitigating the effects of fishery activities in protecting and conserving these species, are carried out as monitoring of highly migratory resource fishing and the scientific observer program onboard the fishing fleet.

The monitoring program carried out by the Institute for Fisheries Development (IFOP) called "Situation of fisheries of highly migratory resources investigation", is part of the

main national fisheries' sampling program that is required and financed by the State of Chile. It is based on samples taken by scientific observers on board the fleets and by samplers on the unloading docks. The program, which has annual coverage, involves a data-gathering effort that covers the majority of the fleet in the entire fishing zone and their ports. The highly migratory resources national fisheries area covers from 18° L.S. to 40° L.S. and from 72° L.W. to 120°L.W. The target species are swordfish (Xiphias gladius), mako shark (Isurus oxyrhinchus), and dolphinfish (Coryphaena hippurus). In addition to the previous information, data is also gathered on the main species that comprise the fauna that accompanies the main target species and actions are performed to minimize and/or mitigate the unwanted ecosystemic effects of fishery activities.

The general objective of the monitoring program, "Situation of fisheries of highly migratory resources investigation", is to gather and analyze the biological fishing data from activities extracting highly migratory resources in order to have up-to-date, timely information that supports ordinances and conservation measures for these fisheries.

One of the specific objectives of the program is to evaluate it in order to reduce and/or mitigate the unwanted ecosystemic effects of swordfish and shark fishing. It is within this context that activities are carried out to gather information related to incidental capture of sea turtles, actions aimed at minimizing their incidental capture and at mitigating the effects of fishery activities in protecting and conserving these same species like the release of specimens captured by fishing rigs and gear.

As a complementary element, through the IFOP's scientific observers program, scientific observers are being trained so they can recognize sea turtle species, manipulate and resuscitate specimens captured by rigs and fishing gear and use proper release procedures. In order to do this, training courses have been developed and guidebooks have been edited for species recognition and the procedures to release specimens caught on fishing hooks or tangled in fishing lines

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TABLE I

Highly migratory resource fisheries
Number of vessels operating per year

	Flota			
Año	**Palangre Industrial**	**Palangre Artesanal**	**Espinel Artesanal**	**Redera Artesanal**
2001	12			
2002	13	6	110	164
2003	13	7	114	99
2004	10	7	127	216
2005	10	6	135	257
2006	7	5	123	299
2007	8	5	133	331
2008	5	2	113	337
2009	6	1	123	446
2010	7	1	105	145
2011	4	2	106	112

(Source: IFOP, 2012)

TABLE II

Coverage of scientific observer sampling on the industrial longline fleet

Año	Viajes C/OC	Viajes S/OC	Viajes Totales	Embarcaciones	N° Anz Cal Obs.	N° Anz Cal Total
2001	85	1	86	12	2.675.041	2.689.914
2002	81	1	82	13	2.316.248	2.336.048
2003	84	0	84	13	2.243.495	2.243.495
2004	51	7	58	10	1.632.120	1.804.780
2005	43	15	58	10	1.740.282	2.179.482
2006	37	5	42	7	1.453.619	1.598.249
2007	30	10	40	8	1.681.850	1.908.760
2008	29	0	29	5	846.302	846.302
2009	31	12	43	6	707.454	894.009
2010	44	10	54	7	974.488	1.151.248
2011	30	2	32	4	649.992	695.167
Total	**545**	**63**	**608**		**16.920.891**	**18.347.454**

(Source: IFOP, 2012)

TABLE III

Number of sea turtles accidentally captured on highly migratory resource fisheries, by operating year, vessel type and species

Año	Palangre Industrial					Palangre Artesanal		Redera Artesanal				Espinel Artesanal		
	Tortuga Cabezona	Tortuga Laud	Tortuga Olivacea	Tortuga sin identificar	Tortuga Verde	Tortuga Cabezona	Tortuga Laud	Tortuga Cabezona	Tortuga Laud	Tortuga Olivacea	Tortuga Verde	Tortuga Cabezona	Tortuga Olivacea	Tortuga Verde
2001	31	49		6	2									
2002	10	147	1	14	2	1	2							
2003	3	10			1		2							
2004	2	21			2		4							
2005	7	30	4		2									
2006	1	18			1		2							
2007	2	19	5				2	1	1					
2008	3	9	8		2						1			
2009		6												
2010		18						22	1	3	5	18		2
2011		11					1		5	4		14	4	
Total	**59**	**338**	**18**	**20**	**12**	**1**	**13**	**23**	**7**	**7**	**6**	**32**	**4**	**2**

(Source: IFOP, 2012)

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TABLE IV

Rate of sea turtle capture on industrial longlines (N° turtles cap/1000 hooks) 2001-2011 period

Año	Tortuga Cabezona	Tortuga Laud	Tortuga Olivacea	Tortuga Verde	Tortuga sin identificar	Total
2001	0,0116	0,0183	-	0,0007	0,0022	0,0329
2002	0,0043	0,0635	0,0004	0,0009	0,0060	0,0751
2003	0,0013	0,0045	-	0,0004	-	0,0062
2004	0,0012	0,0129	-	0,0012	-	0,0153
2005	0,0040	0,0172	0,0023	0,0011	-	0,0247
2006	0,0014	0,0131	-	0,0007	-	0,0151
2007	0,0006	0,0107	0,0030	-	-	0,0143
2008	0,0035	0,0106	0,0095	0,0024	-	0,0260
2009	-	0,0085	-	-	-	0,0085
2010	-	0,0182	-	-	-	0,0182
2011	-	0,0158	-	-	-	0,0158

(Source: IFOP 2012)

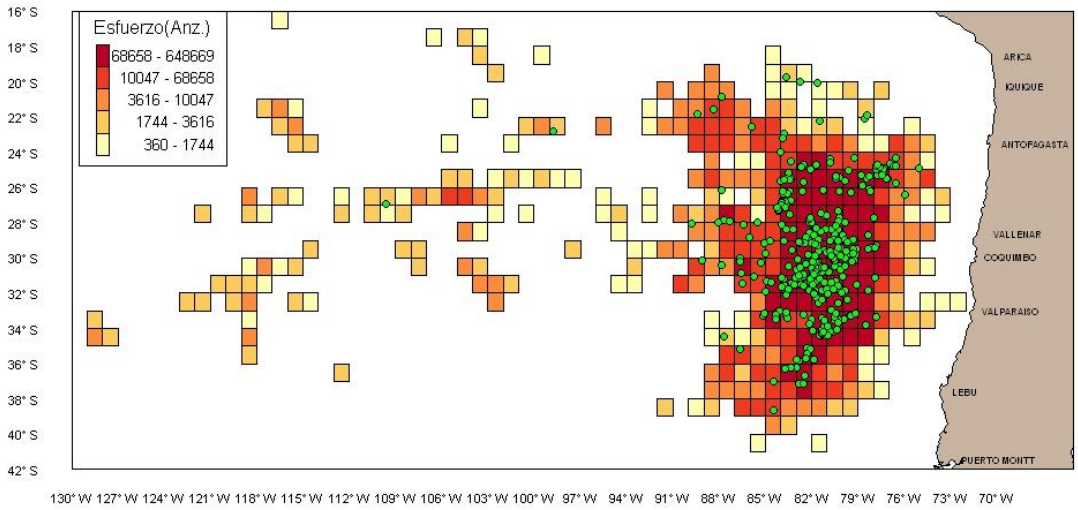

Figure 1

Historical distribution of fishing efforts of the industrial longline fleet and incidental capture of sea turtles registered during 2001-2011 period

National Consultation: carried out by Institute for Fisheries Development (IFOP)
Diagnostic of Sea Turtles in Chile (CPPS-June 2011)
Petitioner: Permanent Commission for the South Pacific (CPPS) - Action Plan for the protection of the marine environment and coastal areas of the South-East Pacific.

The document presents a summary of the knowledge, regulations and conservation status of sea turtles and the protection, conservation and research activities carried out on these animals in the country.

In order to be able to describe the current situation of sea turtles in Chile, a multispecific group of individuals working at different levels must be involved. Therefore, a national call for forming a Working Group was made. Afterwards, this group met during a workshop where they performed a SWOT (Strengths, Weaknesses, Opportunities and Threats) analysis, identifying key factors and defining strategic objectives that deal with sea turtle conservation in Chile. These were based on the experience and knowledge of the members of the group, and took into consideration the perceptions that this group has on the problems faced by these marine reptiles. The Working Group had the support of two facilitators that lead the group working sessions.

From an analysis of the general points, the necessary factors for each one of the elements required by the SWOT tool were obtained. This allowed us to design its respective TOWS matrix that highlights the six strategic objectives proposed at the workshop. These were then used as the basis for later establishing the most relevant strategic objectives, which are interdependent on each other. The topic of financing was considered to be a priority that would be taken on by a future working group, since it is fundamental in developing conservation initiatives. Therefore, the strategic objective "To establish financial sources for sea turtle research and conservation that allows us to respond to the international commercial requirements of responsible fishing" is considered to be a common axis for future activities.

From the Systematic SWOT analysis, it was concluded that the majority of the factors being considered are interdependent on each other, each time they were placed in the critical quadrant. This quadrant is complex, since the factors categorized here have a high chance of affecting the system, such as in the case of requesting training through international networks or even in the case of monitoring and responsible fishing through legislation, these are all highly influential factors, possibly even creating undesirable consequences, for example, in the case of changing legislation that may not favor the public-private relationship.

The main recommendation resulting from the National SWOT workshop was: "To establish financial sources for sea turtle research and conservation that allows us to respond to the international commercial requirements of responsible fishing". This confirms the need to create a National Technical Committee, which would meet at least once a year and would have the stable and permanent funding needed to strengthen the strategic guidelines already developed.

The relevant international conventions confirm this need since the preparation of the technical reports required by their respective Secretariats must include information that is managed by different specialists in the nation.

As a result, this consultation turned out be an important foundation for future studies on sea turtles since it gathered abundant information that will help support the formation of a working group of specialists for this species, due to the international commitments made by this country, especially to the Inter-American Sea Turtle Convention (IAC).

Activities carried out by non-governmental institutions and organizations

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?	*NO*	*Chile does not have a specific plan of action for sea turtles. However, all activities related to training, observation and release of sea turtles affected by fishery activities are carried out as part of a program of scientific observers onboard vessels and the monitoring of highly migratory resource fisheries*
Does your country have policies and programs at local and regional levels in accordance with Article XVIII?	*YES*	*Activities to reduce incidental capture of turtles and their release are included in the monitoring program of highly migratory resource fisheries.*
Does your country have monitoring programs in accordance with Article IX?	*YES*	*Activities to reduce accidental capture of turtles and their release are included in the monitoring program of highly migratory resource fisheries.*

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, 2012-April 30, 2012) 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 the international legislation should be included, when they exist.

National Legislation		
Type and name of legal instrument (No.)	Description (Range of application)	Sanctions(s) Imposed
NONE ADOPTED		
International Instruments		
Treaty, Convention, Agreements, Memorandum of Understanding		Year signed and/or ratified
NONE ADOPTED		

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-COP2-2004 R1: Conservation of leatherback turtles (*Dermochelys coriacea*)

ACCORDING TO RESOLUTION CIT-COP2-2004-R1, 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		As part of the national monitoring program of highly migratory resource fisheries and of scientific observers, protocols have been developed for the release of turtles incidentally captured by fishing rigs and gear. These programs are financed by Chile and are part of strategic projects with permanent execution. They maintain a national coverage of all the industrial fleet and parte of the artisanal fleet. The primary institution is the Subsecretariat of Fisheries and the institution executing the program is the Institute for Fisheries Development (IFOP).	
1b) Are you implementing these conservation plans and monitoring programs?	x		Observers onboard fishing vessels apply the release protocols that have been developed.	
2a) Have you taken conservation measures to significantly reduce the use of leatherback turtle products and by-products?				x
2b) Do you evaluate these conservation measures?				x
3a) 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
3b) Do you evaluate the conservation measures taken to protect those nesting sites and their associated habitats?				x
4. Has your country adopted fishing techniques that reduce incidental capture and mortality of this species?		x	Incidental capture rates are fairly low and specimens captured that result in death are scarce (less than 4 in the last 10 years).	

5a) Is your country collecting information on incidental capture of leatherbacks in the following fisheries:				
Artisanal fisheries				
i) Long-line	x		Incidental capture rates.	
ii) Gillnets			They are used on the coast and do not affect leatherbacks.	X
iii) Other fishing gear (entangling nets)	x		Number of turtles caught	
Industrial fisheries				
i) Long-line	x		Incidental capture rate	
ii) Gillnets			Not used by industrial fleet	x
iii) Other fishing gear (indicate which one(s))				x
5b) Have you provided the IAC with information on incidental capture of leatherbacks in the following fisheries:				
Artisanal fishing				
i) Long-line	x		Incidental capture of specimens	
ii) Gillnets				x
iii) Other fishing gear (indicate which one(s))	x		Number of specimen caught	
Industrial fisheries				
i) Long-line	x		Incidental capture of specimens	
ii) Gillnets				X
iii) Other fishing gear (indicate which one(s))				X
6. Have you established agreements and/or understandings with countries fishing within international waters to adopt fishing techniques that reduce incidental capture of leatherback turtles? List which countries:		x		
7. Have you encouraged other non-Party states to the IAC, carrying out activities that affect leatherback turtles, to adopt measures in favor of their conservation, by means of bilateral, multilateral or regional contacts?		x		
8. Have any cooperative agreements or alliances been established with pertinent organizations? List:	x		Within the scope of CPPS, the Regional Program for the Conservation of Sea Turtles in the Southeastern Pacific was established. As part of this program, the second assessment of sea turtles in Chile was carried out in 2010 financed by CPPS.	

(*) 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.

Resolution CIT-COP3-2006 R-1: Hawksbill turtle conservation *(Eretmochelys imbricata)*

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

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			RESOLUTION DOES NOT APPLY		XX
IS COMPLYING WITH THE FOLLOWING:		**YES**	**NO**	**DESCRIBE ACTION (*)**	**DOES NOT APPLY**
1. Has your country promoted synergies with other Conventions, treaties, international organizations, and/or regional fisheries bodies on the management and conservation of hawksbill turtles and their habitats? Indicate which one(s).					
2 a) Are you strengthening monitoring of the illegal use and trade of hawksbill turtles and their products?					
2 b) Are you enforcing pertinent hawksbill legislation?					
2 c) Are activities being carried out in order to stop illegal trade of hawksbill products?					
3. Does your country support and strengthen the research and monitoring activities required to improve the scientific basis of conservation measures for the hawksbill turtle? Especially in:	Genetics				
	Migratory behavior				
	Location and conservation status of foraging habitats.				
	Location and conservation status of prey species.				
	Population dynamics at foraging sites				
	Integrity of nesting habitats				
	Others (specify)				
4. As indicated in the recommendations from FAO's Technical Meeting on the conservation of marine turtles and fisheries that was held in Bangkok in 2004 and adopted by the 26th Session of FAO's Fisheries Committee (COFI), does your country carry out any activities mentioned in a) and/or b)?	a) Evaluate incidental capture of hawksbill turtles in jurisdictional waters.				
	b) Actions to mitigate incidental capture of hawksbill turtles in their jurisdictional waters.				
5. Does your country apply the precautionary approach when considering proposals for seismic exploration on priority marine habitats of the hawksbill turtle?					
6. Indicate if your country is strengthening the protection of important nesting and	a) Protection of nesting habitats				

foraging habitats by declaring protected areas and regulating anthropogenic activities that adversely impact these habitats.	b) Protection of feeding habitats				
7. Does your country promote exchange of technical capacity and collaborative research on hawksbill habitats among Parties as well as non Parties and other involved organizations in the Area of the Convention?					

(*) 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.

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:

IS COMPLYING WITH THE FOLLOWING:	YES	NO	DESCRIBE ACTION (*)	DOES NOT APPLY
1.Adopted the "Guidelines to Reduce Sea Turtle Mortality induced by fisheries operations", of the United Nations Food and Agriculture Organization (FAO), including:				
A.Research and monitoring of adverse impact of fisheries on sea turtles				
• Collect information by fishery	x		Information is gathered in the monitoring of highly migratory resource fisheries.	
• Observer programs	x		Chile maintains a national program of scientific observers onboard the different fisheries.	
• Research on sea turtle/fishery interactions	x		Information is gathered in the monitoring of highly migratory resource fisheries.	
• Information on non-Party vessels		x		
• Cooperation with non-Party states to obtain information		x		
B. Mitigation measures for the following fisheries:				
i) Long-line	x		Release and resuscitation of specimens caught.	
ii) Gillnets			Artisanal fisheries are just now being studied	
iii) 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 for that fishery, 3. tow times and/or 4. other measures)			Trawling does not impact sea turtles in Chile since it takes place in areas with a scant presence of turtles and in areas deeper tan 100 meters.	
iv) Other fishing gear (indicate which one(s))	x		Release and resuscitation of specimens caught.	
C.Training, education and dissemination				
• Training, education and dissemination activities	x		Training activities with scientific observers from IFOP. Education by the NGO, Pacífico Laud .	

D. Harmonization of policies and legislation				
• Modifications to instruments				
E. Capacity building				
• Creation of a national sea turtle committee/network	x		Created in 2011.	
F. Financing				
• Financial support obtained to implement guidelines in this resolution	x		Funds are provided by the government of Chile through the Highly Migratory Fisheries Resources Monitoring Program and National Scientific Observers Program.	
G. Socio-economic considerations				
• Support socio-economic activities that help mitigate adverse impacts of fisheries on sea turtles		x		
H. Other aspects				
• Environmental impact studies for mariculture projects		x	No studies are available on the environmental impact of mariculture that affects turtles.	
2. Sent information and documents on sea turtles created by your country to the Secretariat of the Convention? List documents.				
3. Initiated activities that assist the Convention Secretariat in contacting non Party States through established mechanisms, especially in the area of the Convention, so that they may provide, in a cooperative spirit, the Secretariat with available data on incidental sea turtle catches in their fisheries?		x		
4. Supports the Convention Secretariat, through established mechanisms, to commence discussions with regional fishery management organizations in order to develop Memorandum of Understandings.		x		

(*) 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.

Resolution CIT-COP4-2009-R5: Adaptation of sea turtle habitats to climate change

ACCORDING TO RESOLUTION CIT-COP4-2009-R5, REPORT WHETHER YOUR COUNTRY:

IS COMPLYING WITH THE FOLLOWING:	YES	NO	DESCRIBE ACTION (*)	DOES NOT APPLY
1 a) Have marine and coastal habitats on which sea turtles depend been included in national plans and programs for adaptation to climate change? Specify habitats and plans		X		
1 b) Are these plans for adaptation to climate change being implemented?		X		
2 a) Are corrective measures and measures on adaptation to climate change included within management plans and/or protection and		X		

conservation programs for sea turtles and their habitats?				
2 b) Are you evaluating the corrective measures and measures on adaptation to climate change included within management plans and/or protection and conservation programs for sea turtles and their habitats?		X		
3. Have you identified any organizations or pertinent expert groups as possible partners to work on the topic of adaptation by sea turtles to climate change? Please list.		X		
4. Have you carried out research and monitoring to improve knowledge of the effects on, and vulnerability of sea turtles and their habitats, to climate change?		X		
5. Has your country hosted capacity building workshops for monitoring techniques and/or adaptation to climate change?		X		
6. Has your country implemented mitigation measures for non-climatic threats as a way to improve the resilience of populations to the impacts of climate change? Specify which ones.		X		

(*) 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.

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.)

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.

Part III (Research information)

a._ Threats

Describe 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)	Actions
Lo	*Contamination*	*No specific actions*
Lk	*Does not apply*	*Does not apply*

Dc	*Incidental capture*	*Release turtles from fishing gear with line cutters*
Ei	*Does not apply*	*Does not apply*
Cm	*Contamination*	*No actions*
Cc	*Incidental capture*	*Restricted fishing area*

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.

Sea turtle conservation program in the Arica and Parinacota region and its potential for developing tourist activities of special interest.

Program began in 2010.
This program includes the development of a study focused on Chinchorro Beach (Soldado house sector) in Arica. This is an urban beach where turtles come to feed on beds of green and brown algae associated with the San José river-mouth. Over the past few years this area has had a permanent population of around 60 individuals, which makes it the most important site for green turtles in our country.

Project researchers:

Walter Sielfeld Kowald: Project director - Universidad Arturo Prat
Paula Salinas Cisternas: Project Sub-director - Universidad Arturo Prat
Edgardo Santander: "Oceanographic Chemistry" Researcher - Universidad Arturo Prat
Guillermo Guzmán: "Epibiont" Researcher- Universidad Arturo Prat
David Veliz: "Genetics" Researcher –Universidad de Chile
Christopher Harrod: "Isotopes" Researcher - Universidad de Queen Reino Unido
Dario Contreras De La Fuente: "GIS" Researcher Universidad Arturo Prat
Viviana Varas: "In charge of Outreach" Universidad Arturo Prat
Marco Tobar: Buzo-Universidad Arturo Prat
Jeannelle Jaque: Chemical Analyst
Jesús Gallargo: Assistant from Terreno-Universidad Arturo Prat

Name of the Activity:	Description of the Activity	Results Indicators
Characterization of the study area	Physical-chemical analysis of the water column. Implementation of a Geographic Information System (GIS) with information collected on land.	Area used by sea turtles
Characterization and identification of the sea turtle population found in	Morphological and morphometric characterization	Species; population size; sexual and age structure,

the area	of the turtles. Genetic analysis in order to identify the population and find out if it belongs to known nesting groups in the tropical Pacific.	genotypic characterization and its relationship to eastern Pacific populations.
Turtle monitoring	Capture and tagging of individuals found in the area.	Population size, use of the study area, migration routes, seasonality, abundance
Develop a protection plan	Establish boundaries of area used by turtles. Train monitors in conservation, protection and turtle rescue through a workshop (care takers and guides)	Personnel trained in conservation work.
Transfer knowledge to community	Prepare a workshop and course directed at guides and tourism operations. Develop a workshop for students and general public.	Form a group of care takers for this species and tourist guides competent in topics of marine wildlife (sea turtles)

Analysis of the use of fishing gear and techniques in costal fisheries in the XV, I and II regions, and its interaction with sea turtles, phase I.

Specific objectives

1. Perform a detailed assessment of the different techniques and types of fishing gear being used in the XV, I and II regions, in terms of their design, operational regimen and type of fleet.
2. Identify the zones where the different sea turtle species are congregating in the study area.
3. Identify zones with the most interactions and type of interaction occurring with the different techniques and types of fishing gear.
4. Establish reference parameters to evaluate the interactions that occur between the different species of sea turtles and the different techniques and types of fishing gear.
5. Other activities: forms prepared by the IAC Scientific Committee to record turtle interactions with gillnet fisheries will be tested.

Upon completion of the Project, an international workshop will be held, where the results will be presented and experiences exchanged with experts from Peru and Brazil. The international invited guests are Dr. Joanna Alfaro-Shigueto of the NGO Pro-Delphinus of Peru, and Mr. Joao Carlos Thome, oceanographer and founder of Proyecto Tamar, and Bruno Giffordi, fisheries biologist from the same organization.

c._ Other activities

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

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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**		
Ei			
Cm	**X**		
Cc	**X**		

Table 2: Important nesting sites for sea turtle conservation (DOES NOT APPLY)

a. *This table is intended to report information on the priority nesting beaches (for example, sites with greater abundance, endemism, genetic importance, others) 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 beaches, information is to be entered for each species independently. Indicate the names of nesting sites and the nesting season months for each site.*
b. *Geographic location: Specify latitude and longitude in degrees, minutes and seconds - provide one or two points of reference for nesting sites (if available).*
c. *Extension: Provide the total length (in Kilometers) of the nesting beach.*
d. *Declared protection area: Indicate if the area is declared as some type of protected area.*
e. *Protection measures: Indicate if any type of protection measures are in place at the nesting site (For example, turtle safe lights).*
f. *Annual nesting abundance: Where possible, provide information on the total number of females and/or nests deposited at the nesting beach. If a specific value is not available, please provide a range for annual number of nesting females or nests deposited. If data are unavailable, enter 'unknown' or 'unavailable'. The ranges for annual number of females are: 0-10, 11-100, 101-500, 501-1000, 1001-5000, 5001-10000, 10001-50000, 50001-100000, >100000. The ranges for annual number of nests are: 0-10, 11-100, 101-500, 501-1000, 1001-5000, 5001-10000, 10001-100000, 100001-500000, >500000. On a separate sheet, provide a brief description/justification on why each site that was mentioned is considered important (sites with greater abundance, endemism, genetic, others). Include historical information (graphic and/or tables) showing the population status of each species present at the site.*
g. *Information from tagging program: Indicate if there have been any tagging activities at the nesting beach. This includes flipper tagging, passive integrated transponder (PIT) tagging, and satellite telemetry 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.*
h. *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?*

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Spp	Name of Priority Nesting Site (Regular nesting)	Season	Geographic Location (Lat/Long) in Degrees, Minutes, and Seconds — Beginning	Ending	Extension (km)	Declared Protection Area	Protection Measures	Annual Nesting Abundance — Females	Clutches	Tagging Program	Tissue Sampling
			° ' " N ° ' " W	to ° ' " N ° ' " W							
			° ' " N ° ' " W	to ° ' " N ° ' " W							
Lo			° ' " N ° ' " W	to ° ' " N ° ' " W							
			° ' " N ° ' " W	to ° ' " N ° ' " W							
Lk			° ' " N ° ' " W	to ° ' " N ° ' " W							
			° ' " N ° ' " W	to ° ' " N ° ' " W							
			° ' " N ° ' " W	to ° ' " N ° ' " W							
Dc			° ' " N ° ' " W	to ° ' " N ° ' " W							
			° ' " N ° ' " W	to ° ' " N ° ' " W							
			° ' " N ° ' " W	to ° ' " N ° ' " W							
Ei			° ' " N ° ' " W	to ° ' " N ° ' " W							
			° ' " N ° ' " W	to ° ' " N ° ' " W							
			° ' " N ° ' " W	to ° ' " N ° ' " W							
Cm			° ' " N ° ' " W	to ° ' " N ° ' " W							
			° ' " N ° ' " W	to ° ' " N ° ' " W							
Cc			° ' " N ° ' " W	to ° ' " N ° ' " W							

Table 3: Important in-water sites for sea turtle conservation

a. *This table is intended to contain information for the priority in-water sites for each species. For marine habitats that have multiple species present, enter the specific site under the heading for the priority species at that site. Indicate whether or not there is in water occurrence and/or foraging sites for that species.*
b. *Geographic location: Describe the in-water site in general, providing the name of the site and points of reference at sea, when available. If possible add the geographic location in Lat/Long coordinates.*
c. *Declared protection area: Indicate if the area is declared as some type of protected area.*
d. *Information from tagging program: Indicate if there have been any tagging activities at the in-water site. This includes flipper tagging, passive integrated transponder (PIT) tagging, and satellite telemetry 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.*
e. *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?*

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Spp			Desscription of geographic location	Declared Protection Area	Tagging Program	Tissue Sampling
Lo	In water Occurrence	Si	Playa Chinchorro 18°27,5' L.S; 70°18,2' W	No	Ninguno	Si
	Foraging Sites	Si	Playa Chinchorro 18°27,5' L.S; 70°18,2' W	No	Ninguno	Si
Lk	In water Occurrence	Si		No	Ninguno	Choose an item.
	Foraging Sites	Si		No	Ninguno	Choose an item.
Dc	In water Occurrence	Si		No	Ninguno	Choose an item.
	Foraging Sites	Si		No	Ninguno	Choose an item.
Ei	In water Occurrence	Si		No	Ninguno	Choose an item.
	Foraging Sites	Si		No	Ninguno	Choose an item.
Cm	In water Occurrence	Si	Bahía Chipana 21°18' L.S; 70°05'W Bahía Mejillones del Sur 23°05'L.S; 70°27' W Caleta Constitución 23°26,21'L.S. 70°36' W	No	Ninguno	Si
	Foraging Sites	Si	Bahía Chipana 21°18' L.S; 70°05'W Bahía Mejillones del Sur 23°05'L.S; 70°27' W Caleta Constitución 23°26,21'L.S. 70°36' W	No	Ninguno	Si
Cc	In water Occurrence	Choose an item.		Choose an item.	Choose an item.	Choose an item.
	Foraging Sites	Choose an item.		Choose an	Choose an item.	Choose an

				item.		item.