



COMMISSION FOR
ENVIRONMENTAL
COOPERATION

Loggerhead Turtle

Factual Record Regarding Submission SEM-20-001

Submitted to Council in accordance with Article 24.28(5) of the *Agreement between the United States of America, the United Mexican States, and Canada*



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Photo: Center for Biological Diversity

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Acronyms

BCS	Baja California Sur
CEC	Commission for Environmental Cooperation
Cibnor	Northwest Biological Research Center (<i>Centro de Investigaciones Biológicas del Noroeste</i>)
Cicimar	Interdisciplinary Marine Science Center (<i>Centro Interdisciplinario de Ciencias Marinas</i>)
CITES	<i>Convention on International Trade in Endangered Species of Wild Fauna and Flora</i>
Conabio	National Biodiversity Commission (<i>Comisión Nacional para el Conocimiento y Uso de la Biodiversidad</i>)
Conanp	National Protected Natural Areas Commission (<i>Comisión Nacional de Áreas Naturales Protegidas</i>)
Conapesca	National Aquaculture and Fisheries Commission (<i>Comisión Nacional de Acuacultura y Pesca</i>)
DOF	Official Gazette of the Federation (<i>Diario Oficial de la Federación</i>)
ECA	Environmental Cooperation Agreement
FGR	Office of the Attorney General of the Republic (<i>Fiscalía General de la República</i>)
GTC	Turtle Group of the Californias (<i>Grupo Tortuguero de Las Californias</i>)
Inapesca	National Fisheries and Aquaculture Institute (<i>Instituto Nacional de Pesca y Acuacultura</i>), and as of December 2023, Mexican Institute for Fisheries and Aquaculture Research (<i>Instituto Mexicano de Investigación en Pesca y Acuacultura Sustentables</i>)
IUCN	International Union for the Conservation of Nature
LGEEPA	General Ecological Balance and Environmental Protection Act (<i>Ley General del Equilibrio Ecológico y la Protección al Ambiente</i>)
LGVS	General Wildlife Act (<i>Ley General de Vida Silvestre</i>)
LOAPF	Organic Act of the Federal Public Administration (<i>Ley Orgánica de la Administración Pública Federal</i>)
NMFS	National Marine Fisheries Service (also called “NOAA Fisheries”)
PNCTM	National Sea Turtle Conservation Plan (<i>Programa Nacional de Conservación de Tortugas Marinas</i>)
NOAA	National Oceanic and Atmospheric Administration
NOM	Mexican Official Standard
OBO	on-board observer
PACE-C. <i>caretta</i>	Loggerhead Turtle Conservation Action Plan (<i>Programa de Acción para la Conservación de la Especie Tortuga Caguama (Caretta caretta)</i>)
Profepa	Office of the Federal Attorney General for Environmental Protection (<i>Procuraduría Federal de Protección al Ambiente</i>)
Profepa-BCS	Branch Office of Profepa in Baja California Sur (as of July 2022, under the new Internal Regulation of the Ministry of the Environment and Natural Resource, the “delegate offices” are now called “branch offices”)
PNT	National Transparency Platform (<i>Plataforma Nacional de Transparencia</i>)
POEMR-North Pacific	North Pacific Marine and Regional Ecological Zoning Plan (<i>Programa de Ordenamiento Ecológico Marino y Regional del Pacífico Norte</i>)
Procer	Species at Risk Conservation Plan (<i>Programa de Conservación de Especies en Riesgo</i>) (later renamed the Species at Risk Recovery and Repopulation Plan <i>Programa de Recuperación y Repoblación de Especies en Riesgo</i>)

RI-Semarnat	Internal Regulation of the Ministry of the Environment and Natural Resources (<i>Reglamento Interior de la Secretaría de Medio Ambiente y Recursos Naturales</i>)
Sader	Ministry of Agriculture and Rural Development (<i>Secretaría de Agricultura y Desarrollo Rural</i> ; formerly, Sagarpa; note that the responsibilities of the former Ministry of Fisheries (<i>Secretaría de Pesca</i>) currently rest with Sader)
Sagarpa	Ministry of Agriculture, Livestock Production, Rural Development, Fisheries and Food (<i>Secretaría de Agricultura, Ganadería, Desarrollo Rural, Pesca y Alimentación</i> (today, Sader)
Semar	Ministry of the Navy (<i>Secretaría de Marina</i>)
Semarnat	Ministry of the Environment and Natural Resources (<i>Secretaría de Medio Ambiente y Recursos Naturales</i>)
UABCS	Universidad Autónoma de Baja California Sur
UCAI	International Affairs Coordinating Unit (<i>Unidad Coordinadora de Asuntos Internacionales</i>) of Semarnat
UGA	Environmental Management Unit (<i>Unidad de Gestión Ambiental</i>)
USMCA/ CUSMA	Agreement between the United States of America, the United Mexican States, and Canada

Definitions

2023 Fish Refuge Order	Order Establishing the Fish Refuge Area and New Measures to Reduce the Possible Interaction of Fishing with Sea Turtles on the West Coast of Baja California Sur (<i>Acuerdo por el que se establece la zona de refugio pesquero y nuevas medidas para reducir la posible interacción de la pesca con tortugas marinas en la costa occidental de Baja California Sur</i>) (23 June 2023)
Action plan	Loggerhead Turtle Conservation Action Plan (<i>Programa de Acción para la Conservación de la Especie Tortuga Caguama (Caretta caretta)</i> or “PACE-C. caretta”)
Extension Order	Order Extending the Order Establishing the Fish Refuge Area and New Measures to Reduce the Possible Interaction of Fishing with Sea Turtles on the West Coast of Baja California Sur, Published 23 June 2016 (<i>Acuerdo por el que se amplía la vigencia del similar que establece la zona de refugio pesquero y nuevas medidas para reducir la posible interacción de la pesca con tortugas marinas en la costa occidental de Baja California Sur, publicado el 23 de junio de 2016</i>) (25 June 2018)
C. caretta	Loggerhead turtle (<i>Caretta caretta</i>)
Closed Season Order	Order Establishing a Closed Season on Sea Turtle Species and Subspecies in Waters under Federal Jurisdiction of the Gulf of Mexico and the Caribbean, as well as in those of the Pacific Ocean, including the Gulf of California (<i>Acuerdo por el que se establece veda para las especies y subespecies de tortuga marina en aguas de jurisdicción federal del golfo de México y mar Caribe, as well as en las del océano Pacífico, incluyendo el golfo de California</i>) (31 May 1990)
Constitution	Political Constitution of the United Mexican States (<i>Constitución Política de los Estados Unidos Mexicanos</i>)

Council	Council of the Commission for Environmental Cooperation
Council Resolution 23-01	Instructions to the Secretariat of the Commission for Environmental Cooperation (CEC) regarding submission SEM–20-001 loggerhead turtle (<i>Caretta caretta</i>), which asserts that the Mexican environmental authorities are failing to effectively enforce provisions of the Political Constitution of the United Mexican States (<i>Constitución Política de los Estados Unidos Mexicanos</i> —CPEUM), the General Law of the Ecological Balance and the Protection of the Environment (<i>Ley General del Equilibrio Ecológico y la Protección al Ambiente</i> —LGEEPA), the General Wildlife Law (<i>Ley General de Vida Silvestre</i> —LGVS), the Internal Regulations of the Ministry of Environment and Natural Resources (<i>Reglamento Interior de la Secretaría de Medio Ambiente y Recursos Naturales</i> —RI-SEMARNAT), the Agreement Establishing a Ban on Marine Turtle Species and Subspecies in the Waters of Federal Jurisdiction of the Gulf of Mexico and the Caribbean Sea, as well as in the Pacific Ocean, including the Gulf of California (<i>Acuerdo por el que se establece veda para las especies y subespecies de tortuga marina en aguas de jurisdicción federal del Golfo de México y Mar Caribe, así como en las del Océano Pacífico, incluyendo el Golfo de California</i> —“Closed Season Agreement”); the Agreement establishing the area of refuge for the loggerhead turtle (<i>Caretta caretta</i>) in the Gulf of Ulloa, in Baja California Sur (<i>Acuerdo por el que se establece el área de refugio para la tortuga amarilla (Caretta caretta) en el Golfo de Ulloa, Baja California Sur</i> —“Turtle Refuge Agreement”); and the Agreement Establishing the Fish Refuge Area and New Measures to Reduce the Possible Interaction of Fishing with Sea Turtles on the West Coast of Baja California Sur (<i>Acuerdo por el que se establece la zona de refugio pesquero y nuevas medidas para reducir la posible interacción de la pesca con tortugas marinas en la costa occidental de Baja California Sur</i> —“Fish Refuge Agreement”), regarding the protection and conservation of the loggerhead turtle (<i>Caretta caretta</i>), a species whose conservation is a priority, and which is endangered by extinction (4 April 2023)
Fish Refuge Order	Order Establishing the Fish Refuge Area and New Measures to Reduce the Possible Interaction of Fishing with Sea Turtles on the West Coast of Baja California Sur (<i>Acuerdo por el que se establece la zona de refugio pesquero y nuevas medidas para reducir la posible interacción de la pesca con tortugas marinas en la costa occidental de Baja California Sur</i>) (23 June 2016)
Zoning Plan	North Pacific Marine and Regional Ecological Zoning Plan (<i>Programa de Ordenamiento Ecológico Marino y Regional del Pacífico Norte</i>) or POEMR-North Pacific
Mexico	United Mexican States
Notification	SEM–20-001 (<i>Loggerhead Turtle</i>) Article 24.28 Notification (27 July 2021)
Parties	The governments of Canada, the United States, and Mexico
Party	A Party to the Agreement between the United States of America, the United Mexican States, and Canada. For purposes of this Factual Record, “the Party” or “the Party in question” refers to the Government of Mexico.
Priority Species and Populations Order	Order Establishing the List of Species and Populations that are Priorities for Conservation (<i>Acuerdo por el que se da a conocer la lista de especies y poblaciones prioritarias para la conservación</i>) (5 March 2014)
Response	SEM–20-001 (<i>Loggerhead Turtle</i>), Response of Mexico in accordance with USMCA Article 24.27(4) (28 May 2021)

Secretariat	Secretariat of the Commission for Environmental Cooperation
Submission	SEM-20-001 (<i>Loggerhead Turtle</i>), Article 24.27(1) Submission (17 December 2020)
Submitters	Authors of submission SEM-20-001 (<i>Loggerhead Turtle</i>)
Turtle Refuge Order	Order Establishing a Refuge Area for the Loggerhead Turtle in the Gulf of Ulloa, in Baja California Sur (<i>Acuerdo por el que se establece el área de refugio para la tortuga amarilla (Caretta caretta) en el golfo de Ulloa, Baja California Sur</i>) (5 June 2018)

Units of measure

°C	degrees centigrade
cm	centimeter
g	gram
ha	hectare
kg	kilogram
km	kilometer
km²	square kilometer
m	meter
mm	millimeter
T	ton (metric: 1,000 kg)
wt	weight

Terminology

The table below presents definitions of the main terms used in this factual record.

Term	Definition
Copepods	The <i>copepods</i> are the largest group of microcrustaceans, with over 10,000 species, the majority of which live in marine waters, although some can be found in continental bodies of water. They are planktonic organisms of great ecological importance, playing an essential role in marine food chains. As eaters of phytoplankton, they make up a sizeable proportion of primary consumers and in turn form the diet of many fish species (secondary consumers). In the marine environment, copepods make up 60 to 97 percent of zooplankton biomass. ⁱ
Demersal species	Pelagic species that live in deep water or near the ocean floor—or that temporarily come in contact with the ocean floor—in areas located on the continental shelf are called <i>demersal species</i> . This group includes fish such as rays, soles, wreckfish, and catfish as well as a large number of crustaceans. ⁱⁱ
Pelagic species	<i>Pelagic</i> species are marine species that live in the oceanic water column from the surface to a depth of approximately 200 m, and whose contact with the ocean floor and the coast (littoral) is limited. In other words, these are species living in pelagic habitats, or zones far from the coast, beyond the continental shelf. Pelagic species are grouped into two categories: <i>planktonic</i> and <i>nektonic</i> . The former are small or microscopic plant or animal organisms (<i>phytoplankton</i> and <i>zooplankton</i>) with limited self-mobility that depend on ocean currents for movement. The <i>nekton</i> , or assemblage of nektonic species, is made up of organisms with mechanisms enabling them to swim against the current. This group includes fish, turtles, marine mammals, squid, and octopus. ⁱⁱⁱ
Foraging	A term referring to the search for food in the natural environment by wildlife species of all kinds, <i>foraging</i> is defined as the behavior of searching for, selecting, and obtaining food or other resources in order to derive the energy necessary to maintain the organism's metabolic function. Foraging can take up the bulk of a species' time, reducing the time available for other activities such as breeding, rest, defense, and escape from predators. ^{iv}
Hydrozoans	Aquatic animals belonging to the class <i>Hydrozoa</i> , in the phylum <i>Cnidaria</i> , most hydrozoans show alternation between two life cycle phases, polyp and medusa, so that individuals of both phases can be found together. The polypoid phase is sessile and benthic (i.e., it lives attached to a substrate), while the medusoid phase is generally planktonic and mobile. Some species are solitary, while others form colonies. ^v

- i. B. C. Romano Márquez (2000), *Copépodos (Crustacea: Calanoidea, Cyclopoida) en diversos sistemas acuáticos temporales y permanentes de los estados de Michoacán y Jalisco, un enfoque taxonómico*, bachelor's thesis, Universidad Nacional Autónoma de México (UNAM), Iztacala Campus, Mexico, at 3, at: <<https://bit.ly/3MktLty>>; M. E. Muñoz Colmenares (2017), *Diversidad de zooplancton (rotíferos, copépodos y cladóceros) durante un ciclo anual en la presa del Llano, Villa del Carbón*, Master's Thesis in Limnology, Universidad Nacional Autónoma de México at 3, at: <<https://bit.ly/46T89wi>>; J. Scott Frías et al. (2023), "Pelagic copepod diversity (Crustacea: Copepoda) in the Southern Caribbean: evidence of a pending assignment," *Revista Mexicana de Biodiversidad*, Instituto de Biología, UNAM, vol. 94, e944177, at: <<https://bit.ly/3u23Vnv>>.
- ii. C. Lalli and T. Parsons (1997), *Biological Oceanography an Introduction*, 2nd ed., (Oxford, UK), Elsevier, *op. cit.*, at 94, at: <<https://bit.ly/3QHvImp>>.
- iii. Conabio (2022), "Ambiente pelágico," at: <<https://bit.ly/46UEoLB>>. See also C. S. Reynolds (2013), "Pelagic Ecology," *Encyclopedia of Environmetrics*, Research Gate, January 2013, DOI: 10.1002/9780470057339.vap008.pub2, at: <<https://bit.ly/3QDQkvz>>.
- iv. G. H. Pyke (2019), "Optimal Foraging Theory: An Introduction," at: J. C. Choe (comp.), *Encyclopedia of Animal Behavior*, 2nd ed., Elsevier, Academic Press, vol. 2, at 111-117, at: <<https://bit.ly/49kEpDF>>.
- v. C. O. Carral Murrieta et al. (2023), "Los hidroides: pequeños grandes viajeros," *Revista Digital Universitaria* 24(4): 4 (July-August 2023), at: <<https://bit.ly/45W0Qmu>>.

Term	Definition
Mesh	The <i>mesh</i> is the distance between the inner edges of two adjacent nodes in the direction in which the fishing net is woven; it depends on the target species and is one of the parameters subjected to the strictest regulation. ^{vi}
Neritic	A term referring to the shallower part of the ocean, to the waters and habitats located on the continental shelf. Horizontally, the <i>neritic zone</i> extends from the lowest low-tide mark into littoral and sublittoral waters, reaching a depth of approximately 200 meters. Since it is a photic (i.e., sunlit) zone, it is considered one of the zones most productive of biomass and marine biodiversity. ^{vii}
Distant water fishing	<i>Distant water fishing</i> is large-scale fishing carried out with boats longer than 15 m. ^{viii}
Inshore fishing	Widespread in Mexico, <i>inshore fishing</i> , also known as small-scale fishing, is multispecies fishing carried out using various methods. ^{ix}
Finfishing	The diversity of marine finfish species is so great that the corresponding fishery—known as <i>finfishing</i> in both its inshore and deep-sea variants—encompasses species ranging from those found in estuarine lagoons and coastal environments (inshore finfish) to pelagic species found far offshore, beyond the continental shelf (pelagic finfish), and also includes bottom-dwelling fish communities living in both shallow and deep water, in rocky or reef environments on the one hand or smooth, sandy, clayey, or muddy bottoms on the other (bottom finfish). ^x Depending on the fishing method and catch tactics employed, a single operation may result in catch of organisms belonging to the three groups as well as bycatch of other species. ^{xi} Examples of finfish include snooks (<i>Centropomidae</i>), drums and croakers (<i>Sciaenidae</i>), snappers (<i>Lutjanidae</i>), rockfish (<i>Sebastes</i>), sierras (<i>Scombridae</i>), flounders (<i>Paralichthyidae</i> and <i>Pleuronectidae</i>), mullets (<i>Mugilidae</i>), jacks and pompanos (<i>Carangidae</i>), and many more. ^{xii}
Multispecies fishing	A type of fishing characterized by catching different species simultaneously with the same fishing method (boats and nets), generally in the same or different casts, that may occur in the same fishing season or even in the same cast. ^{xiii}
Plankton	Sitting at the base of the marine food chain, <i>plankton</i> is made up of organisms suspended or floating in the surface zone of both freshwater and saltwater bodies. While they may exhibit a small amount of self-mobility, they largely drift with the currents. They range in size from 2 microns or less (<i>picoplankton</i>) to 20 centimeters or more (<i>megaplankton</i>). Planktons are a highly diverse group that is divided into two large subgroups: the <i>phytoplankton</i> , comprising organisms that obtain energy and nutrients from sunlight and the process of photosynthesis (microalgae), and the <i>zooplankton</i> , consisting of small organisms that obtain energy by ingesting other plant and/or animal organisms. ^{xiv}

- vi. Inapesca (2000), *Catálogo de los sistemas de captura de las principales pesquerías comerciales*, ch. II, “Redes de enmalle y agalleras,” Fisheries Research and Technological Development Branch (*Dirección General de Investigación y Desarrollo Tecnológico Pesquero*), National Fisheries Institute, Ministry of the Environment, Natural Resources, and Fisheries (*Secretaría de Medio Ambiente, Recursos Naturales y Pesca*), Mexico, D.F., at 66, at: <<http://cec.org/files/sem/20240306/aal014.pdf>>.
- vii. Conabio (2022), *op. cit.*; C. Lalli and T. Parsons (1997), *op. cit.*, at 3.
- viii. Semarnat (2003), “Aprovechamiento de la vida silvestre: recursos pesqueros” (ch. 7), in *Informe de la situación del medio ambiente en México 2002*, at: <<https://bit.ly/40dZa6H>>.
- ix. Inapesca (2014), *Memorias: VII Foro Científico de Pesca Ribereña*, Instituto Nacional de Pesca, Sagarpa, Mexico, D.F., at i, at: <<https://bit.ly/409E7BU>>.
- x. Sader (2018), “La pesquería de escama en Baja California Sur,” at: <<https://bit.ly/3M4qGgS>>. See also Sagarpa (2012), *Acuerdo por el que se da a conocer la actualización de la Carta Nacional Pesquera*, section IV, “Sistemas de captura,” published in the DOF on 24 August 2012, at 18 (third section), at: <<https://bit.ly/47b93UT>>.
- xi. Sagarpa (2012), *op. cit.*, at 18 (third section), at: <<https://bit.ly/47b93UT>>.
- xii. Semarnat (2003), “La diversidad de la escama” (table), in *Informe de la situación del medio ambiente en México 2002*, ch. 7, “Aprovechamiento de la vida silvestre: recursos pesqueros,” at: <<https://bit.ly/45N4PI2>>.
- xiii. Inapesca (2014), *Sustentabilidad y Pesca Responsable en México. Evaluación y Manejo*, Instituto Nacional de Pesca, Sagarpa, p.89, at: <<https://bit.ly/3G2wlex>>; Semarnat (2018), *Compendio de Estadísticas Ambientales 2018*, Semarnat, at: <<https://bit.ly/47hx3WH>>.
- xiv. J. L. Cifuentes Lemus et al. (1997), *El océano y sus recursos*, 2nd ed., Fondo de Cultura Económica, Mexico, at 94, at: <<https://bit.ly/40hXDME>>.

Term	Definition
Red agallera	The nets, known in Spanish as <i>redes agalleras</i> , are a form of gillnet used throughout the Mexican coastal zone to catch finfish. The characteristics of the nets—in particular, the mesh or size of the opening—depend on the target species, for which they are often named (e.g., <i>liseras</i> for mullet, <i>sierreras</i> for sierras, <i>robaleras</i> for sea bass, etc.), even though, in practice, other species are caught in these nets. ^{xv}
Gillnets	<i>Gillnets</i> are a form of net that is held vertically by one line floating on the surface and a weighted line lying below the surface. Gillnets can be fixed or be allowed to drift with the movement of currents, although they remain tied to the vessel. They are usually woven from monofilament polyamide thread, with the thickness (diameter) of the thread, the mesh, and the total size of the net depending on the target species. This type of net is used to catch shrimp and sharks. ^{xvi}
Gulfweed	Large pelagic algae of the genus <i>Sargassum</i> , the two main species of <i>gulfweed</i> present off the coast of Mexico are <i>S. natans</i> and <i>S. fluitans</i> . Gulfweed is usually found drifting on the ocean, thanks to air-filled, bladderlike structures that enable it to float. It forms an ecosystem in and of itself, providing food and shelter for crustaceans, turtles, and small fish, among other marine animals. ^{xvii}
Loggerhead Turtle	<i>Caretta caretta</i> , a marine reptile of the family Cheloniidae in the order Testudines. ^{xviii}

xv. Inapesca (2000), *op. cit.*, at 67, at: <<http://cec.org/files/sem/20240306/aal014.pdf>>.

xvi. *Ibid.*, at 51, 66.

xvii. LANOT (2017), “Monitoreo de sargazo,” Laboratorio Nacional de Observación de la Tierra, Instituto de Geografía, UNAM; Instituto de Ciencias del Mar y Limnología, UNAM; Instituto de Ciencias de la Atmósfera y Cambio Climático, UNAM, and Oceanus International, at: <<https://bit.ly/3wGWbst>>.

xviii. Conanp (2016), “Loggerhead Turtle (*Caretta caretta*),” National Protected Natural Areas Commission, Mexico, 2 August 2016, at: <<https://bit.ly/3SS0BWJ>>; Global Biodiversity Information Facility (GBIF), “*Caretta caretta* (Linnaeus, 1758),” Integrated Taxonomic Information System (ITIS), at: <www.gbif.org/en/species/8894817>.

Clarifications

Due to the length of some Internet addresses referenced in this document, and for ease of reading, Bitly (<https://bitly.com>) was used as an URL shortener. In all cases, the corresponding links were tested at the time the draft factual record was sent to the Parties.

The maps and other illustrations included in this factual record were produced from available sources and are for purposes of illustration only.

Unless otherwise indicated, all official documents cited herein are found in the archives of the Secretariat and may be viewed using the links appearing in this document. Furthermore, the page numbers cited in the submission and the response correspond to those of their original Spanish versions.

Foreword by the CEC’s Executive Director

Chapter 24 of the United States-Mexico-Canada Agreement (USMCA/CUSMA) has as one of its objectives to promote effective enforcement of environmental laws. At the time of the founding of the Commission for Environmental Cooperation (CEC) three decades ago, the North American Agreement on Environmental Cooperation (NAAEC) designed what was then a unique, innovative mechanism to work toward this goal, the Submissions on Enforcement Matters (SEM) process.

Through the SEM process, any person or nongovernmental organization from Canada, the United States, or Mexico may file a submission with the CEC Secretariat asserting a failure to effectively enforce a Party’s environmental laws. The CEC Secretariat, following instructions from the Council members, may prepare an independent factual record concerning the matter. Since the original establishment of the SEM process, the CEC has received 113 submissions and has developed 27 factual records.

The SEM process, including the production of factual records, is key to promoting public participation in the effective enforcement of environmental laws in North America and has become a pillar of trilateral environmental cooperation now continued under the USMCA/CUSMA. Independent reviews over its history indicate that the SEM process has produced useful information concerning environmental issues and has facilitated meaningful public engagement and transparency on environmental law enforcement across North America.

It is with great honor that the CEC Secretariat publishes this *first* factual record under USMCA/CUSMA Chapter 24. It is the 27th factual record since the CEC’s founding in 1994, commemorating a milestone in North American trilateral commitments to foster high levels of environmental protection. The SEM process stands as testimony to the collective and longstanding commitment of Canada, the United States, and Mexico, to public participation, access to information, and access to justice across North America.

As the world struggles to tackle the Triple Planetary Crisis of Climate Change, Pollution and Biodiversity Loss, and as intersectional vulnerabilities and environmental justice occupy a growing focus of our region’s environmental priorities, policy, and action, the SEM process has become an example and a benchmark for other regional agreements in considering ways to promote the application of our environmental law, and it continues to inspire international cooperation in environmental protection and conservation.

In closing, I would like to extend our deepest gratitude to everyone who has contributed to this and other factual records. From scientists, legal and government experts, and editors, to the CEC’s Council members and their teams, to communities, activists, NGOs, and citizens who contribute to the SEM process: your unwavering dedication and tireless efforts inspire us to redouble our commitment to work for the effective enforcement of environmental law across North America.



Jorge Daniel Taillant
Executive Director of the CEC



1. Background

1. Article 24.27(1) of Chapter 24 of the Agreement between the United States of America, the United Mexican States and Mexico (USMCA/CUSMA)¹ provides for a process allowing any “person of a Party” to the USMCA/CUSMA² (a national of a Party or enterprise of a Party) to file a submission with the Secretariat of the Commission for Environmental Cooperation (CEC) asserting that a Party to the USMCA/CUSMA is failing to effectively enforce its environmental law. The CEC Secretariat (“the Secretariat”) initially reviews submissions based on the requirements and criteria of USMCA/CUSMA Article 24.27(1) and (2). When the submission meets these requirements, the Secretariat then determines, in accordance with the provisions of Article 24.27(3), whether the submission merits a response from the Party concerned. In light of the Party’s response, the Secretariat then determines whether the matter warrants the preparation of a factual record and, if so, it so notifies the CEC Council, providing its reasons as required under Article 24.28(1); otherwise, where the Secretariat finds that the preparation of a factual record is not warranted, the submission is closed.³ When at least two of the CEC Council members instruct it to do so, the Secretariat prepares a factual record.
2. On 17 December 2020, the organizations *Centro Mexicano de Derecho Ambiental* (Cemda) and US-based Center for Biological Diversity (hereinafter, “the Submitters”) filed a submission with the Secretariat in accordance with USMCA/CUSMA Article 24.27(1).⁴ The Submitters assert that Mexico is failing to effectively enforce its environmental law in relation to the protection and conservation of the loggerhead turtle (*Caretta caretta*), an endangered species whose conservation is a priority according to the environmental law cited in the submission.
3. According to the Submitters, Mexico is failing to effectively enforce provisions of the Political Constitution of the United Mexican States (*Constitución Política de los Estados Unidos Mexicanos*—**Constitution**); the General Act on Ecological Equilibrium and Environmental Protection (*Ley General del Equilibrio Ecológico y la Protección al Ambiente*—**LGEEPA**); the General Wildlife Act (*Ley General de Vida Silvestre*—**LGVS**); the Federal Environmental Responsibility Act (*Ley Federal de Responsabilidad Ambiental*—**LFRA**); the Internal Regulation of the Ministry of the Environment and Natural Resources (*Reglamento Interior de la Secretaría de Medio Ambiente y Recursos Naturales*—**RI-Semarnat**); the **Inter-American Convention for the Protection and Conservation of Sea Turtles**; the **Convention on Biological Diversity**, and the Additional Protocol to the American Convention on Human Rights in the Area of Economic, Social, and Cultural Rights (**Protocol of San Salvador**); as well as the Order Establishing a Closed Season on Sea Turtles (*Acuerdo por el que se establece veda para las especies y subespecies de tortuga marina en aguas de jurisdicción federal del golfo de México y mar Caribe, así como en las del océano Pacífico, incluyendo el golfo de California*—**Closed Season Order**); the Order Establishing a Loggerhead Turtle Refuge (*Acuerdo por el que se establece el área de refugio para la tortuga amarilla (Caretta caretta) en el golfo de Ulloa, Baja California Sur*—**Turtle Refuge Order**); the Order Establishing the List of Species and Populations with Conservation Priority (*Acuerdo por el que se da a conocer la lista de especies y poblaciones prioritarias para la conservación*—**Priority Species Order**), the Order establishing a Fish Refuge (*Acuerdo por el que se establece la zona de refugio pesquero y nuevas medidas*

1. Agreement between the United States of America, the United Mexican States, and Canada (USMCA/CUSMA), published in the DOF on 29 June 2020, at: <https://DOF.gob.mx/2020/SRE/T_MEC_290620.pdf>. Relevant portions of USMCA/CUSMA are also at: the CEC website at: <<http://www.cec.org/publications/sem-booklet>>.

2. The terms “person of a Party,” “enterprise of a Party,” “national,” and “enterprise” are all defined in Chapter 1 of the USMCA/CUSMA.

3. For detailed information on the various stages of the submissions on enforcement matters (SEM) process, the public registry of submissions, and the Secretariat’s determinations and factual records, please visit the CEC website at <<http://www.cec.org/submissions-on-enforcement/>>.

4. SEM-20-001 (*Loggerhead Turtle*), USMCA Article 24.27(1) Submission (17 December 2020), at: <<https://bit.ly/3Ti6f2P>> [Submission].

para reducir la posible interacción de la pesca con tortugas marinas en la costa occidental de Baja California Sur—**Fish Refuge Order**); Mexican Official Standard NOM-059-SEMARNAT-2010, *Environmental Protection – Native Wildlife Species of Mexico – Risk Categories and Specifications for their Inclusion, Exclusion, or Change – List of Species at Risk (NOM-059)*; the Species at Risk Conservation Plan (*Programa de Conservación de Especies en Riesgo—Procer*); the National Sea Turtle Conservation Plan (*Programa Nacional de Tortugas Marinas—PNCTM*); the North Pacific Marine and Regional Ecological Zoning Plan (*Programa de Ordenamiento Ecológico Marino y Regional del Pacífico Norte—POEMR-North Pacific*), and the Loggerhead Turtle Conservation Action Plan (*Programa de Acción para la Conservación de la Especie Tortuga Caguama (Caretta caretta) (“PACE-C. caretta”)*).

4. On 8 February 2021, the Secretariat determined that submission SEM-20-001 (*Loggerhead Turtle*) met the eligibility requirements of USMCA/CUSMA Article 24.27(2), and it therefore requested a response from the Government of Mexico pursuant to Article 24.27(3) within 60 days (i.e. 9 April 2021).⁵
5. On 3 May 2021, the Secretariat received a letter from Mexico (“the Party” or “the Party in question”) notifying an extension of the deadline for filing the Party response since it needed to gather more information.⁶
6. On 28 May 2021, the Secretariat received Mexico’s response in accordance with USMCA/CUSMA Article 24.27(4).⁷ After reviewing the submission in the light of the response, the Secretariat found that the preparation of a factual record was warranted with respect to the effective enforcement of various provisions of the Constitution, the LGEEPA, the LGVS, the RI-Semarnat, the Closed Season Order, the Turtle Refuge Order, and the Fish Refuge Order, in relation to the alleged deficiencies in the protection and conservation of the loggerhead turtle (*C. caretta*).
7. On 27 July 2021, the Secretariat notified the CEC Council that submission SEM-20-001 (*Loggerhead Turtle*) warranted the preparation of a factual record since Mexico’s response left central issues unresolved with respect to the effective enforcement of the provisions in question.⁸
8. On 29 March 2023, the Secretariat received instructions from the United States Council member to prepare the factual record. On 3 April 2023, during a virtual meeting of the Alternate Representatives, Canada, the Council Chair from 2022–2023, announced the previously-agreed upon, unanimous consensus of the Council members to instruct the Secretariat to prepare a factual record on submission SEM-20-001 (*Loggerhead Turtle*).⁹ The following day, on 4 April 2023, the Secretariat received instructions from a second Council member (Canada) to prepare a factual record. Thus, in accordance with USMCA/CUSMA Article 24.28(2) (“The CEC Secretariat shall prepare a factual record if at least two members of the Council instruct it to do so”) Council Resolution 23-01, which instructs the Secretariat to prepare a factual record, was adopted on 4 April 2023.¹⁰
9. On 17 May 2023, in another meeting of the Alternate Representatives, Mexico stated that it would sign Council Resolution 23-01 once the Council had adopted a reasoning statement, an approach that did not achieve consensus among the Parties. As a consequence, Mexico abstained from signing Council Resolution 23-01.¹¹

5. SEM-20-001 (*Loggerhead Turtle*), USMCA Article 24.27(2) and (3) Determination (8 February 2021), at: <https://bit.ly/DET_20-001_en> [Determination].

6. UCAJ-Semarnat, file no. 112/00640 (3 May 2021), request for extension of deadline for filing a response, at: <<https://bit.ly/45Ue4AS>>.

7. SEM-20-001 (*Loggerhead Turtle*), Response of Mexico pursuant to USMCA Article 24.27(4) (28 May 2021), at: <<https://bit.ly/4afFray>> [Response].

8. SEM-20-001 (*Loggerhead Turtle*), USMCA Article 24.28(1) Notification (27 July 2021), at: <<https://bit.ly/4a91DCW>> [Notification].

9. Session 23-01 of the CEC Council Alternate Representatives (3 April 2023).

10. SEM-20-001 (*Loggerhead Turtle*), Council Resolution 23-01 (4 April 2023), at: <<https://bit.ly/49Qi5ID>> [Council Resolution 23-01].

11. Session 23-02 of CEC Council Alternate Representatives (17 May 2023).

10. The full text of Council Resolution 23-01 is provided in Appendix 1 of this factual record, and the full text of the legal provisions in question is provided in Appendix 3.
11. On 1 August 2023, the Secretariat informed the Council members that it would need an extension of 120 calendar days for the preparation of the factual record due to various difficulties in obtaining public governmental information.¹² Mexico presented some observations with respect to this notification.¹³
12. On 26 September 2023, in response to a request from the Council, the Secretariat submitted a work plan which justified the 120 additional days requested.¹⁴
13. The Secretariat's work plan is included in Appendix 5 of the factual record, along with an update notified to the Council on 14 November 2023.¹⁵
14. Pursuant to Article 24.28(5), the Secretariat submitted the draft factual record for submission SEM-20-001 (*Loggerhead Turtle*) to Council on 1 December 2023 in the original language, Spanish. An English translation was provided on 20 December 2023¹⁶ and a French version was provided on 29 January 2024.¹⁷ As per USMCA/CUSMA Article 24.28(5), the Parties may provide comments on the accuracy of the document within 30 days of the submission of the draft factual record.¹⁸
15. On 19 January 2024, the US provided comments to the English version of the Draft Factual Record. Mexico provided its comments to the Spanish version on 30 January 2024 following a notification of extension sent on 30 December 2023. Canada did not provide comments on the accuracy of the draft factual record. Pursuant to USMCA/CUSMA Article 24.28(5), the Secretariat incorporated relevant comments into the final version of the factual record and submitted it to Council on 22 March 2024.
16. Pursuant to USMCA/CUSMA Article 24.28(6), the CEC Secretariat shall make the final factual record available to the public, normally within the 30 days following its submission, except where at least two members of Council instruct it not to do so.

12. SEM Unit, request for extension (1 August 2023), CEC Secretariat, Legal Affairs and Submissions on Enforcement Matters Unit, at: <<https://bit.ly/48RkN0q>> [Request for Extension].

13. UCAI-Semarnat, file no. UCAI/02068/2023 (7 August 2023), signed by the head of the Coordinating Unit for International Affairs, Ministry of Environment and Natural Resources.

14. Working meeting of the representatives of the General Standing Committee with the Secretariat (26 September 2023).

15. SEM Unit, Overall Workplan (26 September 2023 and updated on 14 November 2023) CEC Secretariat, Legal Affairs and Submissions on Enforcement Matters Unit, at: <<https://bit.ly/490NV4R>>.

16. SEM Unit, English translation of the factual record concerning submission SEM-20-001 (*Loggerhead Turtle*) (20 December 2023) CEC Secretariat, Legal Affairs and Submissions on Enforcement Matters Unit.

17. SEM Unit, French translation concerning submission SEM-20-001 (*Loggerhead Turtle*) (29 January 2023) CEC Secretariat, Legal Affairs and Submissions on Enforcement Matters Unit.

18. Note that the timeline under Article 24.28(5) was considered to start upon the delivery of the version into the official language of a Party.



Photo: Andressa Aviz - iStock

2. Scope of the Factual Record

17. In accordance with Council Resolution 23-01, this factual record addresses matters of effective enforcement of the following provisions of Mexican environmental law with respect to alleged deficiencies in the protection and conservation of the loggerhead turtle:
 - Article 4, fifth paragraph, of the Constitution;
 - LGEEPA Articles 5 paragraph XIX, 161, 171, 182 (first paragraph), and 202 first paragraph;
 - LGVS Articles 9 paragraph XXI, 60 (first paragraph), 62, and 104;
 - RI-Semarnat Article 45 paragraphs I, II, V(a) and (c), VI, X, XI and XII, and Article 70 paragraphs I, III, IV and XIII;
 - the Closed Season Order;
 - the Turtle Refuge Order, and
 - the Fish Refuge Order.
18. On 4 June 2023, the Secretariat visited the community of Adolfo López Mateos, Baja California Sur (BCS), to gather relevant information and meet with the Submitters to address the issues raised in the submission and invite them to submit relevant information for the factual record.¹⁹ Article 14 of the Environmental Cooperation Agreement (ECA) provides that “[e]ach Party shall cooperate with the Secretariat to provide information relevant for the preparation of a factual record. Between 21 and 27 June 2023, The Secretariat sent requests for meetings and information to the directors of the offices in the state of Baja California Sur for the Ministry of the Environment and Natural Resources (*Secretaría de Medio Ambiente y Recursos Naturales*—Semarnat),²⁰ the Federal Attorney General for Environmental Protection (*Procuraduría Federal de Protección al Ambiente*—Profepa),²¹ the National Protected Natural Areas Commission (*Comisión Nacional de Áreas Naturales Protegidas*—Conanp),²² the National Fisheries Commission (*Comisión Nacional de Pesca*—Conapesca),²³ and the National Fisheries and Aquaculture Institute (*Instituto Nacional de Pesca y Acuacultura*—Inapesca).²⁴
19. On 19 July 2023, the Secretariat conducted a field trip to Playa San Lázaro, on Isla Magdalena, BCS; also, while in La Paz, BCS, the Secretariat staff held meetings with officials from the Baja California Sur offices of Profepa, Inapesca, and Conapesca. Semarnat and Conanp representatives in the state did not confirm their availability to meet with the Secretariat which had notified the agencies that it would conduct its site visit activities between 16 and 22 July 2023 as a *special delegation*, according to a diplomatic note sent by the Canadian Embassy in Mexico.²⁵

19. Legal Affairs and SEM Unit, Request for information to develop a factual record (25 May 2023). Note that the Secretariat usually meets submitters and other relevant persons, authorities, and entities as part of the factual record development process.

20. CEC, Request for a meeting with Semarnat re: factual record SEM-20-001 (*Loggerhead Turtle*), signed by the CEC Executive Director, and email from the SEM Unit (21 June 2023).

21. CEC, Request for a meeting with Profepa re: factual record SEM-20-001 (*Loggerhead Turtle*), signed by the CEC Executive Director, and email from the SEM Unit (21 June 2023).

22. CEC, Request for a meeting with Conanp re: factual record SEM-20-001 (*Loggerhead Turtle*), signed by the CEC Executive Director, and email from the SEM Unit (21 June 2023).

23. CEC, Request for a meeting with Conapesca re: factual record SEM-20-001 (*Loggerhead Turtle*), signed by the CEC Executive Director, and email from the SEM Unit (27 June 2023).

24. CEC, Request for a meeting with Inapesca re: factual record SEM-20-001 (*Loggerhead Turtle*), signed by the CEC Executive Director, and email from the SEM Unit (21 June 2023).

25. Embassy of Canada, note no. GR-2062/23 (11 July 2023).

20. On 7 August 2023, the Party in question requested to channel all information requests to environmental authorities through the International Affairs Coordinating Unit (*Unidad Coordinadora de Asuntos Internacionales*—UCAI) of Semarnat.²⁶ Accordingly, the Secretariat sent a request for information to UCAI on 11 August 2023²⁷ (see Appendix 4). On 15 August 2023, UCAI communicated to the Secretariat that the request would be addressed once the Council had made a determination on Mexico's comments to the deadline extension for the draft factual record completion based on the Secretariat's communication on 1 August 2023.²⁸ None of the authorities from which information had been requested in June under ECA Article 14 had responded to the Secretariat's request.
21. The Secretariat relied on an outside consultant to submit the following requests for information through the National Transparency Platform (*Plataforma Nacional de Transparencia*—PNT) of the National Transparency, Access to Information, and Protection of Privacy Institute (*Instituto Nacional de Transparencia, Acceso a la Información y Protección de Datos Personales*—INAI):²⁹
- Request no. 330024423001417, 9 August 2023, to Profepa.³⁰
 - Request no. 330024423001437, 14 August 2023, to Profepa.³¹
 - Request no. 330024423001457, 17 August 2023, to Profepa.³²
 - Request no. 330024623002672, 14 August 2023, to the Office of the Attorney General of the Republic (Fiscalía General de la República—FGR).³³
 - Request no. 330026723003521, 21 August 2023, to Semarnat.³⁴
 - Request no. 330008123000460, 11 August 2023, to Conapesca.³⁵
 - Request no. 330008323000561, 14 August 2023, to Conanp.³⁶
 - Request no. 330008323000576, 17 August 2023, to Conanp.³⁷
22. In accordance with USMCA/CUSMA Article 24.28(4), the Secretariat has taken into account all the information provided by Mexico, as well as the relevant technical, scientific, and other information that is available to the public, submitted by interested persons and organizations, or developed by independent experts and incorporated by the Secretariat for the purposes of this factual record.

26. UCAI-Semarnat, official letter no. UCAI/02068/2023 (August 7, 2023), signed by the head of the Coordinating Unit for International Affairs, Ministry of Environment and Natural Resources.

27. CEC, file no. A24.27/SEM/20-001/85/REQ (11 August 2023), CEC Secretariat, at: <<http://cec.org/files/sem/20231124/aak001.pdf>>.

28. UCAI-Semarnat, file no. UCAI/02189/2023 (15 August 2023).

29. Access to requests for information from the PNT can be obtained by using the request search bar at <www.plataformadetransparencia.org.mx/>.

30. Cf. Profepa, file no. PFP/1.7/12C.6/2476/2023 (5 September 2023), in response to request for information no. 330024423001417 submitted through the PNT, at: <<http://cec.org/files/sem/20231103/aad001.pdf>>.

31. Cf. Profepa, file no. PFP/1.7/12C.6/2508/2023 (11 September 2023), in response to request for information no. 330024423001437 submitted through the PNT, at: <<http://cec.org/files/sem/20231103/aad002.pdf>>.

32. Cf. Profepa, file no. PFP/1.7/12C.6/2533/2023 (12 September 2023), in response to request for information no. 330024423001457 submitted through the PNT, at: <<http://cec.org/files/sem/20231103/aad003.pdf>>.

33. Cf. FGR, file no. FGR/UTAG/DG/004952/2023 (21 August 2023), in response to request for information no. 330024623002672 submitted through the PNT, at: <<http://cec.org/files/sem/20231103/aai001.pdf>>.

34. Semarnat, file no. SEMARNAT/UCVSDHT/UT/3556/2023 (2 October 2023), in response to request for information no. 330026723003521 submitted through the PNT, at: <<http://cec.org/files/sem/20231103/aaf001.docx>>.

35. Cf. Conapesca, unnumbered file (7 September 2023), in response to request for information no. 330008123000460 submitted through the PNT, at: <<http://cec.org/files/sem/20231103/aae001.pdf>>.

36. Cf. Conanp, file nos. DGOR/1082/2023 (31 August 2023), DGC/DESPC/030/2023 (8 September 2023) and, F00.1.DRPBCPN.I.-642/2023 (11 September 2023), in response to request for information no. 330008323000561 submitted through the PNT, at: <<http://cec.org/files/sem/20231103/aag002.pdf>>, <<http://cec.org/files/sem/20231103/aag001.pdf>> and <<http://cec.org/files/sem/20231103/aag008.pdf>>, respectively.

37. Cf. Conanp, file nos. DGOR/1116/2023, F00.1.DRPBCPN.I.-643/2023, and DGC/DESPC/031/2023 (8 September 2023), in response to request for information no. 330008323000576 submitted through the PNT, at: <<http://cec.org/files/sem/20231103/aah010.pdf>>, <<http://cec.org/files/sem/20231103/aah009.pdf>> and <<http://cec.org/files/sem/20231103/aah014.pdf>>, respectively.

2.1 Background information on enforcement

23. As a preliminary matter and before addressing the environmental law in question in this factual record (as instructed by Council in Resolution 23-01), it is relevant to present an overview of the responsibilities, powers, and duties of the environmental law enforcement authorities in Mexico, and, more specifically, of the relevant provisions for the purposes of submission SEM–20-001 (*Loggerhead Turtle*).
24. Semarnat is the entity responsible for guaranteeing the protection, restoration, conservation, preservation, and sustainable use of ecosystems and natural resources, as well as environmental goods and services, with a view to guaranteeing the right to a healthy environment. It has the power to oversee the conservation and sustainable use of ecosystems and their biodiversity; the prevention and control of pollution; the comprehensive management of water resources, and the fight against climate change.³⁸
25. Profepa is the entity in charge of obtaining environmental justice through the effective, efficient, expeditious, and transparent enforcement of applicable federal environmental law and monitoring compliance therewith. It is responsible for addressing citizen complaints as well as taking inspection, verification, and surveillance measures and implementing voluntary compliance instruments. The mission of Profepa includes ensuring the protection of natural resources and assets, with a preference for a preventive rather than a corrective focus and by promoting social participation.³⁹
26. Conanp has the power to contribute to the preservation and sustainability of ecosystems and natural environments representative of the biological diversity of Mexico, through effective, equitable, honest, and transparent planning, management, and administration of the Mexican Protected Natural Areas system.⁴⁰
27. Conapesca is the deconcentrated body of the Ministry of Agriculture and Rural Development (*Secretaría de Agricultura y Desarrollo Rural*—Sader) responsible for formulating and managing fisheries public policy, for which it promotes and puts into effect coordination mechanisms with various bodies with a view to implementing policies, plans, and standards governing fisheries and aquaculture in Mexico.⁴¹
28. Finally, Inapesca is a decentralized public body responsible for directing, coordinating, and guiding scientific and technological research on fishing and aquaculture, as well as the development of innovation and technology transfer required by the fisheries and aquaculture sector.⁴²

2.2 Environmental law in question

29. In accordance with Council Resolution 23-01,⁴³ this section presents the environmental law cited in the submission covered by this factual record in relation to four aspects: i) the filing of complaints with the Federal Public Prosecutor (*ministerio público federal*); ii) inspection and surveillance visits and the application of administrative sanctions; iii) the promotion and execution of conservation work, and iv) the effectiveness of the instruments and measures used to reduce bycatch (orders and closed seasons or bans).

38. Semarnat (n.d.), “¿Qué hacemos?, misión y visión,” at: <<https://bit.ly/46uo9yqu>>. Cf. Organic Act of the Federal Public Administration (*Ley Orgánica de la Administración Pública Federal* -- LOAPF), Article 32 bis.

39. Profepa (n.d.), “¿Qué hacemos?, misión y visión,” at: <<https://bit.ly/46c4vNO>>. Cf. RI-Semarnat Article 43 (DOF: 27/07/2022).

40. Conanp (n.d.), “¿Qué hacemos?, misión y visión,” at: <<https://bit.ly/3LNdmUj>>. Cf. RI-Semarnat, Article 67 (DOF: 27/07/2022).

41. Conapesca (2023), “¿Qué es Conapesca?, misión y visión,” at: <<https://bit.ly/48FILgg>>. Cf. *Decreto por el que se crea la Comisión Nacional de Acuicultura y Pesca*, Article 2, published in the DOF on 5 June 2001, at: <<https://bit.ly/3MkmgT7>>.

42. Inapesca (n.d.), “¿Qué hacemos?, misión y visión,” at: <<https://bit.ly/3PZ3L94>>. Cf. *Estatuto Orgánico del Instituto Nacional de Pesca*, Article 5, published in the DOF on 18 October 2013.

43. Council Resolution 23-01, at: <<https://bit.ly/49Qi5ID>>.

30. Regarding the alleged failure to file complaints with the FGR in connection with the death of loggerhead turtle (*C. caretta*) specimens in the Gulf of Ulloa, BCS, in the period running from 2010 to July 2020:⁴⁴
- i. **Article 4 of the Constitution** recognizes (in its fifth paragraph) the human right to a healthy environment. In this regard, the Mexican Supreme Court (*Suprema Corte de Justicia de la Nación*) has reiterated that “this human right generates the obligation of all governmental authorities to guarantee the existence of a healthy environment conducive to human development and the well-being of persons.”⁴⁵
 - ii. **LGEEPA Article 182** provides that where Semarnat is aware of “acts or omissions that may constitute offenses under the applicable law, it shall make the corresponding complaint to the competent Federal Public Prosecutor.” In addition, it recognizes the right of any person to file a criminal complaint with respect to possible environmental offenses; it empowers Semarnat to give the relevant technical or expert reports to the judicial authorities, and it provides that the Ministry shall function as coadjutant to the public prosecutor.
 - iii. **LGEEPA Article 202** gives Profepa the power to “initiate any applicable measures with the competent authorities where it is aware of acts, facts, or omissions constituting violations of administrative or penal law,” as well as to pursue a class action where the environmental rights or interests of a collectivity are infringed.
 - iv. **RI-Semarnat Article 45**⁴⁶ establishes the powers and duties of Profepa in the area of environmental protection, which include receiving, addressing, and investigating citizen complaints filed with the authority, as well as undertaking the necessary procedures, pursuant to the applicable legal provisions, to ascertain the existence of the acts, facts, or omissions denounced and, as applicable, relaying the complaints to the competent authorities (paragraph II); investigating and ascertaining the existence of violations of environmental law and, where such acts, facts, or omissions are not within its jurisdiction, relaying them to the relevant authorities with a request for the application of the relevant safety measures (paragraph XI); and complaining to the Federal Public Prosecutor of acts, facts, or omissions indicating the probable commission of environmental offenses, acting as a party and a coadjutant in the criminal proceeding (paragraph XII).
31. In regard to conducting an average of two annual inspection and surveillance visits, as well as the failure to apply administrative sanctions relating to the bycatch and death of loggerhead turtle specimens in the Gulf of Ulloa, BCS in the period running from 2010 to July 2020:⁴⁷
- i. **LGEEPA Article 5 paragraph XIX** establishes the power of the federation, within the scope of its jurisdiction, to monitor and promote compliance with the Act and the regulations derived from it.
 - ii. **LGEEPA Article 161** provides that Semarnat “shall carry out acts of inspection and surveillance of compliance with the provisions of this Act as well as those derived from it.” In marine zones, such acts of inspection and surveillance may be carried out either by Semarnat or by the Ministry of the Navy (*Secretaría de Marina—Semar*).
 - iii. **LGEEPA Article 171** establishes the administrative sanctions applicable to violations of the provisions of the Act, its regulations, and any provisions emanating from them.

44. *Ibid.* at 2, paragraph A.

45. DERECHO HUMANO A UN MEDIO AMBIENTE SANO, SU CONTENIDO. Tesis aislada of the Mexican Supreme Court (*Suprema Corte de Justicia de la Nación*), First Chamber, no. 1a. CCXLVIII/2017 (10a.), *Semanario Judicial de la Federación y su Gaceta*, 10th period, book 49, v. I, 8 December 2017, digital record 2015825, at: <<https://bit.ly/3UwoJPw>>.

46. It should be noted that in the version of the RI-Semarnat cited by the Submitters, published 26 November 2012, the article establishing the duties and powers of Profepa is number 45, while in the version currently in force (last revised 27 July 2022), that provision corresponds to Article 43.

47. Council Resolution 23-01 at 2, paragraph B, at: <<https://bit.ly/49Qi5ID>>.

- iv. **LGVS Article 9** gives the federation the power to conduct inspection and surveillance of compliance with the Act and the rules derived from it, as well as to apply the safety measures and administrative sanctions set out in the Act (**paragraph XXI**).
 - v. **LGVS Article 104** stipulates that Semarnat shall carry out “those acts of inspection and surveillance that are necessary for the conservation and sustainable use of wildlife, with adherence to the provisions of [the LGVS], [the LGEEPA], and any provisions derived from them.”
 - vi. **RI-Semarnat Article 45** establishes powers and duties of Profepa in the area of environmental protection, including preservation and conservation of natural resources and wildlife (including chelonians, marine mammals, and other aquatic species at risk) through acts of inspection and surveillance (**paragraph I**); requesting the revocation of authorizations, permits, licenses, and concessions as a result of administrative sanctions, and arranging with the federal, state, or municipal authorities for the implementation of safety measures where there exists an imminent risk of ecological imbalance or serious harm to natural resources (**paragraph V(a) and (c)**); drafting and issuing recommendations to the competent authorities for promotion of environmental compliance (**paragraph VI**), and implementing corrective, urgent, and/or restorative measures as well as safety measures and relevant sanctions (**paragraph X**).
32. In relation to the promotion and execution of conservation activities as well as updating and evaluating such activities in the Gulf of Ulloa, BCS, in the period running from 2017 to 2019:⁴⁸
- i. **LGVS Article 60** (first paragraph) provides that Semarnat shall promote and foster the conservation and protection of species and populations at risk by means of various measures, including the application of special measures for the management and conservation of critical habitat and refuge areas for the protection of aquatic species; certification of sustainable use, and the signing of coordination agreements.
 - ii. **LGVS Article 62** provides that Semarnat shall implement “plans for the conservation, recovery, breeding, and reintroduction into their habitat of species and populations that are priorities for conservation.”
 - iii. **RI-Semarnat Article 70** establishes the powers and duties of Conanp, among them the implementation of activities for the conservation of ecosystems and their biodiversity (**paragraph I**); the implementation of conservation plans (**paragraph III**), and the administration of refuge areas for the protection of aquatic species (**paragraph XIII**). In addition, Conanp is responsible for formulating, promoting, executing, and assessing conservation projects for species and populations considered priorities (**paragraph IV**).
33. Concerning the effectiveness of the instruments used to reduce bycatch of loggerhead turtles and the alleged lack of mechanisms to assess the measures implemented under the Closed Season Order, the Turtle Refuge Order, and the Fish Refuge Order:⁴⁹
- i. Published in the Official Gazette of the Federation (*Diario Oficial de la Federación*—DOF) on 31 May 1990 and issued pursuant to the Organic Act of the Federal Public Administration (*Ley Orgánica de la Administración Pública Federal*—LOAPF) and the Federal Fisheries Act (*Ley Federal de Pesca*), the **Closed Season Order** acknowledges that in addition to the slow biological development characteristic of sea turtles, “the inevitable effects of the industrialization process and the rise in human settlements and tourism ... have hampered the recovery [of all sea turtle species and subspecies], and the worldwide decline in their populations continues.”⁵⁰ For this reason, the Closed Season Order establishes “a total and indefinite closed season” on sea turtle species in national waters under federal jurisdiction, including

48. *Ibid.* at 2, paragraph C.

49. *Ibid.* at 2, paragraph D.

50. Closed Season Order, preamble, at: <https://bit.ly/DOF_31-05-1990>.

- the loggerhead turtle;⁵¹ bans their removal and capture;⁵² stipulates the obligation to return accidentally caught turtle specimens to their natural habitat,⁵³ and sets forth control and surveillance measures that the relevant authorities must implement in order to guarantee compliance with the order and, consequently, to protect and conserve sea turtles.⁵⁴
- ii. Published in the DOF on 5 June 2018 and issued by Semarnat pursuant to the LOAPF, the LGVS, the LGEEPA, and the Inter-American Convention for the Protection and Conservation of Sea Turtles, the **Turtle Refuge Order** acknowledges that “the incidence of deaths of specimens of [the species *C. caretta*] linked to the use of certain types of fishing gear in the Gulf of Ulloa” has been documented and that the species is classified as endangered.⁵⁵ For this reason, this instrument establishes a refuge area for the protection of the loggerhead turtle in the Gulf of Ulloa, BCS;⁵⁶ provides that Semarnat shall devise a protection plan applicable to the refuge area,⁵⁷ and provides that Conanp is responsible for the administration of this area.⁵⁸ In order to develop the protection plan, Semarnat requires the joint action of other government agencies, particularly Conapesca, Inapesca, Semar, and the state and municipal governments of Baja California Sur.⁵⁹
 - iii. Issued by the former Ministry of Agriculture, Livestock Production, Rural Development, Fisheries and Food (*Secretaría de Agricultura, Ganadería, Desarrollo Rural, Pesca y Alimentación*—Sagarpa, known today as: *Secretaría de Agricultura y Desarrollo Rural*—Sader) and published in the DOF on 23 June 2016, the **Fish Refuge Order** aims to reduce interactions between commercial and sport-recreational fishing activities and sea turtles in waters under federal jurisdiction in the Gulf of Ulloa.⁶⁰ This instrument, applicable to fishermen and to fishing permit and concession holders, establishes the coordinates of a *temporary partial fish refuge area*, with a *specific area covered by fishing restrictions*;⁶¹ limits the use of certain types of nets and other fishing gear in that area; imposes a suspension on fishing activities (except for certain specific activities) in the rest of the refuge area, and establishes a video-recording system for fishing operations.⁶² In particular, it stipulates a “mortality limit of 90 specimens [of loggerhead turtle] per year for commercial fishing operations in the refuge area.”⁶³ The original period of two years given in the provisions of the order was extended by five additional years, by means of a new order signed in June 2018.⁶⁴ More recently, on 23 June 2023, a new order establishing the fish refuge area and additional measures was published, with the same purpose of reducing interactions with sea turtles on the west coast of BCS (the “2023 Fish Refuge Order”).⁶⁵ This new order modifies the mortality limit for the loggerhead turtle (*C. caretta*) in the refuge area.⁶⁶ It should be noted that the factual record does not address effective enforcement measures for the 2023 Fish Refuge Order.

51. *Ibid.*, first article.

52. *Ibid.*, second article.

53. *Ibid.*, third article.

54. *Ibid.*, fourth article (plan for assessing the magnitude and effects of sea turtle bycatch in other fisheries), fifth and sixth articles (nesting refuge areas and restrictions on fishing and navigation along adjacent maritime corridors during breeding and spawning seasons), and ninth article (establishment of turtle nesting centers and refuge areas).

55. Turtle Refuge Order, preamble, at: <https://bit.ly/DOF_05-06-2018>.

56. *Ibid.*, first article.

57. *Ibid.*, second article.

58. *Ibid.*, third article.

59. Conanp, file no. DGFITI/0029/2024 (19 January 2023), National Protected Natural Areas Commission, annex at: <<http://ccc.org/files/sem/20240306/aal001.pdf>>.

60. Fish Refuge Order, preamble, at: <https://bit.ly/DOF_23-06-2016>.

61. *Ibid.*, first and second articles.

62. *Ibid.*, third, fourth, and fifth articles.

63. *Ibid.*, seventh article, paragraph VI.

64. Extension Order, at: <https://bit.ly/DOF_25-06-2018>.

65. 2023 Fish Refuge Order, at: <<https://bit.ly/3ZAdmGE>>.

66. *Ibid.*, sixth article, paragraphs VI and VII.

3. Description of the Species and the Area of Interest

3.1 Loggerhead Turtle

34. The loggerhead turtle is the common name for the species *C. caretta*, a marine reptile of the family *Cheloniidae* in the order Testudines, whose accepted taxonomic classification is as follows:⁶⁷

Kingdom:	<i>Animalia</i>
Phylum or division:	<i>Chordata</i>
Class:	<i>Reptilia</i>
Order:	<i>Testudines</i>
Family:	Cheloniidae
Genus:	<i>Caretta</i> (Rafinesque, 1814)
Species:	<i>Caretta caretta</i> (Linnaeus, 1758)

35. The loggerhead turtle is the largest of the hard-shelled turtles⁶⁸ and is characterized by its relatively large, reddish or yellowish to olive-brown head, with two pairs of prefrontal scales and a horny beak. Adults of the species measure from 85 to 100 centimeters and weigh from 77 to 154 kilograms. Its heart-shaped carapace on the dorsal part (back) has five central scutes bordered by five pairs of reddish brown lateral scutes, sometimes with yellowish borders. The species exhibits sexual dimorphism, with adult males being most readily distinguished from females by their thicker tails and their shorter ventral scutes.⁶⁹
36. The loggerhead turtle is a cosmopolitan species: its distribution—the widest of all the sea turtles in the family *Cheloniidae*—encompasses temperate, subtropical, and tropical waters the world over; it is found in the Pacific, Atlantic, and Indian oceans and in the Mediterranean (see Figure 2).⁷⁰ In Mexico, its distribution includes the Caribbean Sea and Gulf of Mexico—where important nesting occurs— and the North Pacific which is a habitat for growth, development, and maturity.⁷¹ Furthermore, it is a highly migratory species,⁷² moving between nesting sites and at sea foraging and development areas during different stages of its life. Particularly notable is the incredible transoceanic migration undertaken by *C. caretta* in the North Pacific: from the southeastern part of the Japanese archipelago to the coast of North America, especially along the Baja California peninsula (as explained in the following paragraphs).⁷³ As occurs with migration in the North Pacific, the loggerhead turtle migrations in the South Pacific reflect a trans-Pacific connection between nesting areas in Australia and New Caledonia and foraging areas in offshore waters of Chile and Peru.⁷⁴

67. Conanp (2016), “Loggerhead Turtle (*Caretta caretta*),” Mexico, 2 August 2016, at: <<https://bit.ly/3SS0BWJ>>; GBIF, “*Caretta caretta* (Linnaeus, 1758),” Integrated Taxonomic Information System, at: <www.gbif.org/en/species/8894817>.

68. National Geographic, “Loggerhead Sea Turtle,” ... <<https://bit.ly/40Utq6T>>.

69. P. P. Dijk Van et al. (2014), “Turtles of the World, 7th Edition: Annotated Checklist of Taxonomy, Synonymy, Distribution with Maps, and Conservation Status,” *Chelonian Research Monographs*, no. 5, 16 June 2014, at: <<https://bit.ly/3skS97g>>.

70. GBIF, “*Caretta caretta* (Linnaeus, 1758),” Integrated Taxonomic Information System, at: <<https://www.gbif.org/en/species/8894817>>.

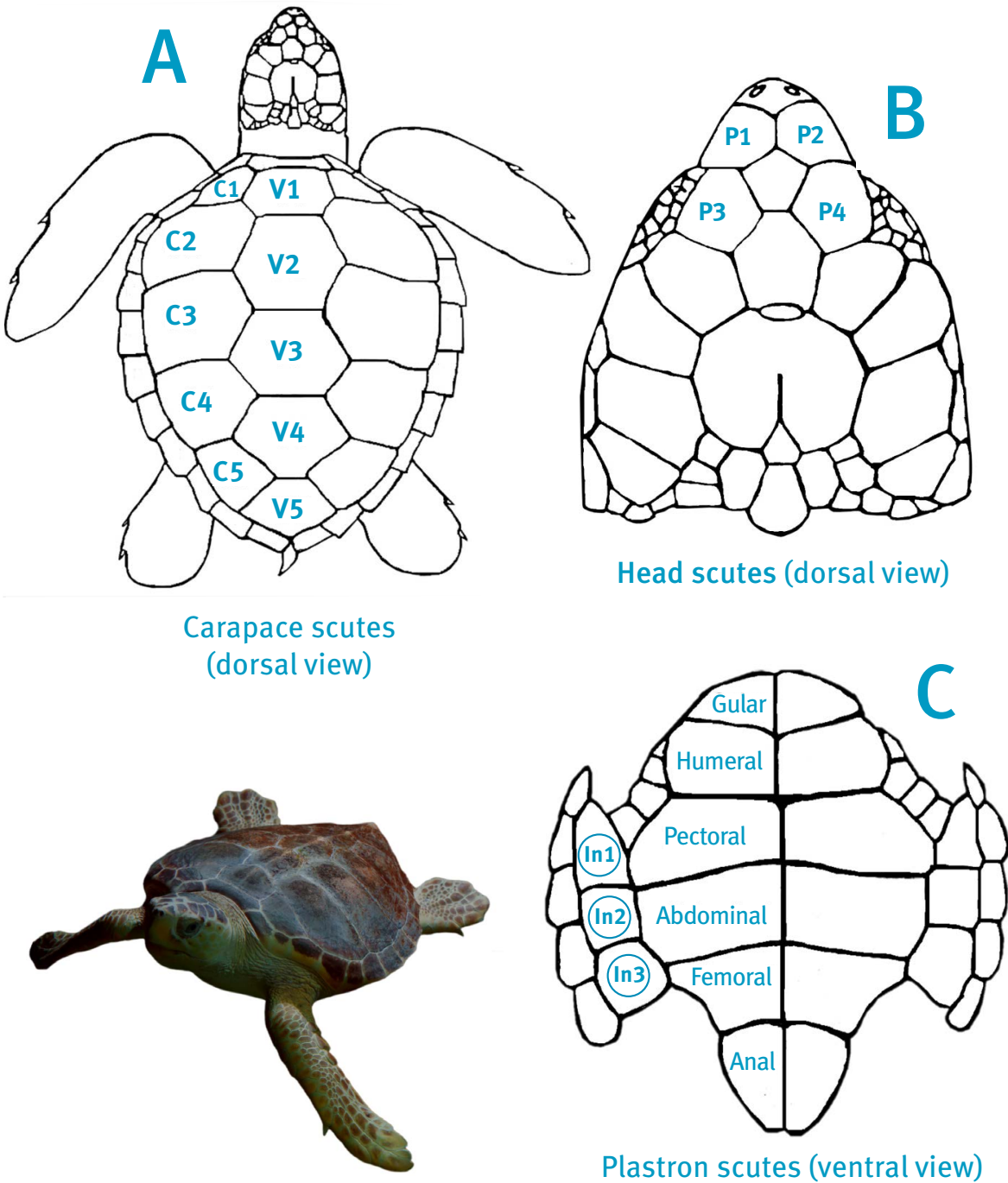
71. Conanp (2016), *op. cit.*, at: <<https://bit.ly/3SS0BWJ>>.

72. National Geographic, *op. cit.*, at: <<https://bit.ly/40Utq6T>>.

73. J. R. Spotila (2004), *Sea Turtles: A Complete Guide to Their Biology, Behavior, and Conservation*, Johns Hopkins University Press, Baltimore, MD p. 166 and 172. See also Conanp (2016), *op. cit.* at: <<https://bit.ly/3SS0BWJ>>.

74. M. C. Boyle et al. (2009), “Evidence for transoceanic migrations by loggerhead sea turtles in the southern Pacific Ocean,” *Proc. R. Soc. B.* 276: 1993-9, at: <[10.1098/rspb.2008.1931](https://doi.org/10.1098/rspb.2008.1931)>.

Figure 1. General appearance and distinctive features of the loggerhead turtle (*Caretta caretta*)



Note: General appearance and identifying marks of the loggerhead turtle: a) five central or vertebral scutes (V1-V5) and five pairs of lateral or costal scutes (C1-C5); b) four prefrontal scales on the head (P1-P4), and c) three inframarginal scutes (In1-In3).

Source: Diagrams produced from MarineBio (n.d.), "Loggerhead Sea Turtles," MarineBio Conservation Society, online at <<https://bit.ly/3sdhVdR>>. Photo by Wrangel, online at <<https://bit.ly/3FEBsHh>>.

Figure 2. Global Distribution Map of *C. caretta*



Source: GBIF (2023), *Caretta caretta* (Linnaeus, 1758), Global Biodiversity Information Facility, at: <<https://www.gbif.org/es/species/8894817>>.

37. The loggerhead turtle is a long-lived, slow-growing species with an estimated lifespan of up to 100 years. In the North Pacific, mating occurs in areas off the coast of Japan from late March to early June and the females nest from late April to early September. During the breeding season, females can nest every 12 to 17 days, with the number of eggs per nesting event varying from 40 to 170. The mean diameter of the eggs is 39.6 millimeters and the mean weight is 20.7 grams. Eggs are incubated for 45 to 80 days, depending on incubation temperature.⁷⁵
38. After hatching on the beaches of Japan, newborn turtles go into what might be called a frenzy: rapid, uninterrupted crawling movement that represents the beginning of migration toward the sea, often at night to reduce exposure to terrestrial and marine predators. Once in the water, hatchlings maintain a frenzy swim for up to 24 hours, by which they move further offshore in search of sargassum rafts that are used for protection and foraging. Upon reaching a specific size, the post-hatchling turtles swim eastward into the North Pacific high seas where they reside for decades or more as they grow and mature while foraging on a diversity of surface and midwater prey.⁷⁶ An unknown amount of loggerhead turtles in the central North Pacific continue southeastward, via thermal and current mediated pathways, into the waters of the southern California bight (USA) and along the coasts of the Baja California Peninsula, Mexico.⁷⁷ In particular, the Gulf of Ulloa off the southern Pacific coast of the Baja California peninsula represents an important feeding and development area where tens of thousands of juveniles and sub-adults⁷⁸ spend many years until they reach sexual maturity.⁷⁹ There is no consensus on the age of sexual maturity for *C. caretta*; different

75. J. R. Spotila (2004), *op.cit.*, at 170-171.

76. See B. E. Witherington (2002), "Ecology of neonate loggerhead turtles inhabiting lines of downwelling near a Gulf Stream front," *Marine Biology* 140: 843-853, DOI: 10.1007/s00227-001-0737-x, at: <<https://bit.ly/475Ewba>>.

77. See D.K. Briscoe, *et al.* (2021), "Thermal corridor connects endangered loggerhead sea turtles across the Pacific Ocean" *Frontiers in Marine Science* 8:630590, DOI: 10.3389/fmars.2021.630590, at: <<https://bit.ly/3UFbYST>>; C.D. Allen, *et al.* (2013) "Stable isotope analysis reveals migratory origin of loggerhead turtles in the Southern California Bight" *Marine Ecology Progress Series* 472:275-285, DOI: 10.3354/meps10023, at: <<https://bit.ly/3SFFtGU>> and M. Abecassis (2013), *et al.* "A model of loggerhead sea turtle (*Caretta caretta*) habitat and movement in the oceanic North Pacific" *PLoS One* September 2013, 8(9):e73274, DOI: doi.org/10.1371/journal.pone.0073274, at: <<https://bit.ly/49dv7iE>>.

78. J. A. Seminoff *et al.* (2014), "Loggerhead sea turtle abundance at a foraging hotspot in the eastern Pacific Ocean: implications for at-sea conservation," *Endangered Species Research*, vol. 24, pp. 207-220, at: <10.3354/esr00601>.

79. C.N. Turner-Tomaszewicz, C.N., *et al.*, (2015) "Age and residency duration of North Pacific loggerhead turtles (*Caretta caretta*) in an eastern Pacific Ocean" *Biological Conservation* 186:134-142, DOI: 10.1016/j.biocon.2015.03.015, at: <<https://bit.ly/3SDmloK>>

Photo 1. Loggerhead Turtle after hatching on beach in Okinawa, Japan



Source: Courtesy of Shawn Miller, Okinawa Nature Photography, “Racing Down to the Ocean,” at <<https://bit.ly/3sefs2G>>.

studies and estimates indicate a range from 12 and 30 years.⁸⁰ Once they reach maturity, loggerhead turtles begin their migratory journey back to the Japanese archipelago, where they will reproduce at intervals of 2 to 3 years and spend the rest of their lives.⁸¹

39. The loggerhead turtle is considered a “keystone species,” which means that other animals in its ecosystem depend on it for survival. While the loggerhead turtle is an omnivorous species, it becomes predominately carnivorous once it reaches the juvenile stage. An essential feature of its foraging activity consists of breaking the shells and carapaces of mollusks, crustaceans and other invertebrates with its strong jaws,⁸² which once digested and upon excretion, fall to the bottom of the ocean for other animals to consume as a source of calcium.⁸³
40. In the Gulf of Ulloa, hundreds of hours of direct observation reveal that loggerheads spend significant periods of time floating passively on the surface, for thermoregulation or perhaps to save energy.⁸⁴ Dive tag data show that loggerheads spend 35.5% of their time within 1.6 m, likely the great majority of this time directly at the surface.⁸⁵
41. *C. caretta* remains close to the surface of the sea to breathe and absorb solar radiation.⁸⁶ Ocean temperature is a factor in the metabolic rate of both juveniles and adults. Empirical evidence suggest that water temperatures below 15°C have an effect on sea turtle mobility and temperatures below 10°C induce hypothermia and as a consequence, lethargy.⁸⁷

80. See Semarnat (2018), *Programa de Acción para la Conservación de la Especie Tortuga Caguama (Caretta caretta)*, Secretaría de Medio Ambiente y Recursos Naturales, Comisión Nacional de Áreas Naturales Protegidas (Conanp) y Programa de las Naciones Unidas para el Desarrollo (PNUD), Mexico, p. 25, at: <<https://bit.ly/3FKKRgs>> [PACE-C. *caretta*].

81. J. R. Spotila (2004), *op. cit.*, p. 170-171.

82. Conanp (2016), *op. cit.*, at: <<https://bit.ly/3SS0BWJ>>.

83. National Geographic, *op. cit.*, at: <<https://bit.ly/40Utq6T>>.

84. W.J. Nichols, (2003) “Biology and conservation of sea turtles in Baja California, Mexico” PhD thesis, The University of Arizona; S.H. Peckham, (2011) “Demographic implications of alternative foraging strategies in juvenile loggerhead turtles (*Caretta caretta*) on the North Pacific Ocean” Marine Ecology Progress Series 425: 269–80, at: <<https://bit.ly/49mkgmn>>.

85. S. H. Peckham, *et al.* (2012) “Sightability of the North Pacific loggerhead sea turtle at the Baja California Surforaging hotspot” Draft Final Report JF133FIOSE3013 submitted to NMFS Southwest Region, Long Beach, CA, at: <<http://cec.org/files/sem/20240311/aan005.pdf>>.

86. C. A. Salinas Zavala, M. V. Morales Zárate y R. O. Martínez Rincón (2020), “An empirical relationship between sea surface temperature and massive stranding of the loggerhead turtle (*Caretta caretta*) in the Gulf of Ulloa, Mexico,” *Latin American Journal of Aquatic Research*, vol. 48, núm. 2, p. 214, at: <<https://bit.ly/49jYcJv>>, citing: J. Davenport, (1997), “Temperature and the life-history strategies of sea turtles,” *Journal of Thermal Biology*, 22: 479-488.

87. J. R. Spotila (2004), *op. cit.*, at 39.

Photo 2. Loggerhead Turtle (*C. caretta*)

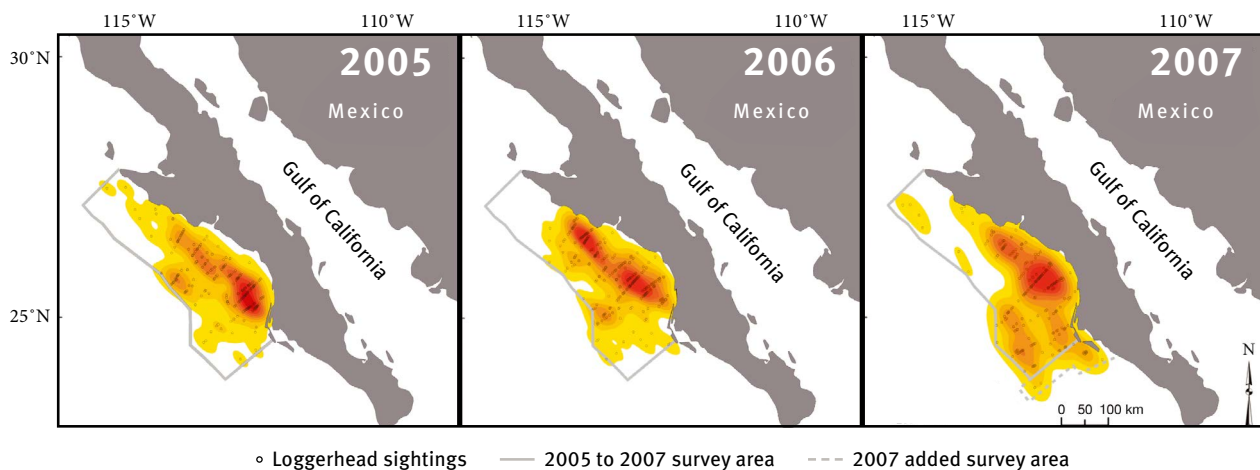


Source: Loggerhead sea turtle (*C. caretta*) – Alantobey, istock.

3.2 The loggerhead turtle in the Gulf of Ulloa

42. As mentioned earlier, the North Pacific loggerhead turtle shows a transoceanic migration pattern: a satellite telemetry study of loggerhead turtles off the west coast of the Baja California peninsula, conducted in 1996 and 1997, showed that loggerhead turtles present in the North Pacific came from nesting sites in Japan and followed a migratory route of approximately 11,500 km to reach their feeding sites off the coast of Baja California Sur, where the chelonian settles for up to two decades for growth, development and maturation.⁸⁸
43. Another satellite telemetry study conducted between January 1997 and November 2013 tracked 231 loggerhead turtle juveniles from waters near the Japanese archipelago and showed that juveniles of *C. caretta* actively travel to the central North Pacific, where—contrary to previous belief—they may stay for many years, until they reach sexual maturity, and then return to their hatch sites on the Japanese coast without having visited American Pacific waters. The results of two decades of monitoring indicate that of the 231 juveniles monitored, only one specimen migrated to the coasts of Baja California Sur, while the rest stayed in the open ocean, in the central part of the North Pacific. The authors of this study suggest several hypotheses, among them: 1) that a large proportion of *C. caretta* individuals spend their entire juvenile stage in pelagic waters of the North Pacific; 2) that a proportion of loggerhead turtles, perhaps because they have reached their maximum energetic capacity, prefer to halt their migration in the Pacific Ocean and return to habitats of high biological productivity near the coast of Japan; 3) that migratory routes may be linked to genetic components, or 4) that the variability of ocean surface temperature may inhibit or favor the movement and migration of juveniles toward the coasts of Baja California Sur.⁸⁹ That said—as mentioned in paragraph 38—there are numerous studies describing the reasons why and how *C. caretta* migrate from the central Pacific to North American shores (southern California and Baja California peninsula).

Figure 3. Loggerhead turtle abundance at the Gulf of Ulloa



Source: J. A. Seminoff *et al.* (2014), “Loggerhead sea turtle abundance at a foraging hotspot in the eastern Pacific Ocean: implications for at-sea conservation”, *Endangered Species Research*, vol. 24, pp. 207-220, DOI: 10.3354/esr00601, online at <<https://bit.ly/3w2Csn0>>.

88. W. J. Nichols *et al.* (2000), “Transpacific migration of a loggerhead turtle monitored by satellite telemetry,” *Bulletin of Marine Science* 67(3): 937-47, at: <<https://bit.ly/3FG92MN>>.

89. D. K. Briscoe *et al.* (2016), “Multi-year tracking reveals extensive pelagic phase of juvenile loggerhead sea turtles in the North Pacific,” *Movement Ecology* 4(23): 6-9, DOI: 10.1186/s40462-016-0087-4, at: <<https://bit.ly/3G0CBsV>>.

44. The populations of *C. caretta* that reach the Mexican Pacific are concentrated within a large coastal feeding area in the Gulf of Ulloa, BCS (see Figure 3). Telemetry studies and aerial censuses carried out in 2007 discovered the presence of juveniles and subadults of the species within an area of 15,194 km², with its “center” or point of greatest concentration lying only 32 km off the coast (see Figures 3 and 9).⁹⁰ The loggerhead turtle stays there, feeding and developing in the neritic habitats of the Gulf of Ulloa, until reaching sexual maturity (in the majority of cases around 25-30 years of age, although this may occur earlier, as of age 12, in some specimens).⁹¹ This phase of growth, development, and maturation, during which the species takes advantage of the high productivity of the waters of the Gulf of Ulloa to feed, may extend from 8 to 20 years of age.⁹² Upon reaching reproductive age, *C. caretta* specimens embark on the return transoceanic migration to the coasts of the Japanese archipelago to breed and nest. After its first breeding and nesting season on the Japanese coast, the loggerhead turtle no longer returns to the Gulf of Ulloa, instead moving into its permanent habitat along the coast of East Asia,⁹³ particularly in pelagic habitats near Japan.⁹⁴
45. As may be seen in Figure 4, the Gulf of Ulloa is located in the northern portion of the Mexican Pacific (between the coordinates 25–26° N and 112–113° W) and comprises an area of approximately 15,000 km² facing the municipalities of Comondú and Mulegé, BCS. Within this area, a restricted fishing zone has been defined (indicated with blue diagonal lines in Figure 4), coinciding with the distribution of *C. caretta*. At its southern end, the restricted fishing zone joins the Magdalena Bay lagoon complex and forms a part of the greater warm temperate ecoregion of the Southern Californian Pacific.⁹⁵ The Gulf of Ulloa is considered a warm temperate transition zone due to the convergence of masses of water from the north, central, and eastern tropical Pacific, as well as two important currents: the California Current (waters of low temperature and salinity with high concentrations of nutrients) and the Mexican (or Costa Rican) Coastal Current, with higher temperature and salinity but lower in nutrients).⁹⁶ For this reason, and also due to the phenomenon of seasonal upwelling, in which subsurface waters with higher nutrient content rise to the surface and are subsequently dispersed by the action of wind and tides,⁹⁷ the Gulf of Ulloa exhibits specific conditions that make it an area of high productivity and marine biodiversity, characterized by its shallow marine waters lying above a broad continental shelf that provides sufficient food for concentrations of *C. caretta* throughout the year, although highest productivity occurs between May and June.⁹⁸

90. PACE-*C. caretta*, at 20, at: <<https://bit.ly/3FKKRgs>>.

91. *Ibid.* at 25.

92. J. A. López Ramírez (2018), *Estimación de la mortalidad natural y caracterización ecológica de la tortuga amarilla Caretta caretta mediante una aproximación ecotrófica en el centro de actividad biológica del golfo de Ulloa, BCS, México*, Master’s Thesis, Centro de Investigaciones Biológicas del Noroeste, Mexico, at 2, at: <<https://bit.ly/47i6PDF>>.

93. O. Gaona Pineda and A. R. Barragán Rocha, eds. (2016), *Las tortugas marinas en México: logros y perspectivas para su conservación* (Mexico: Conanp, Endangered Species Conservation Program (Programa de Conservación de Especies en Riesgo—Procer)), at 40, at: <<https://bit.ly/46gD6Kz>>.

94. W. J. Nichols *et al.* (2000), *op. cit.*, at: 98 <<https://bit.ly/3FG92MN>>.

95. T. Wilkinson *et al.* (2009), *Marine Ecoregions of North America* (Montreal: Commission for Environmental Cooperation), at 107, at: <<https://bit.ly/3Gz9IUO>>.

96. J. A. López Ramírez (2018), *op. cit.*, at 1, at: <<https://bit.ly/47i6PDF>>.

97. P. del Monte Luna (2004), *Caracterización del centro de actividad biológica del Golfo de Ulloa, B.C.S., bajo un enfoque de modelación ecológica*, PhD dissertation in marine sciences (La Paz, Baja California, Mexico: Centro Interdisciplinario de Ciencias Marinas, Instituto Politécnico Nacional (IPN)), at 9, at: <<https://bit.ly/3MtS0p1>>.

98. Conanp (2016), *Las tortugas marinas en México: Logros y perspectivas para su conservación*, at 39, at: <<https://bit.ly/46gD6Kz>> .

Figure 4. Gulf of Ulloa



Note: The brown lines indicate the boundaries of the fish refuge. The area indicated in light green delimits the specific area where restrictions on fishing apply in relation to the use of certain types of nets and gear.

Source: Produced by the CEC Secretariat from public information.

46. A study on the diet and food habits of *C. caretta* juveniles shows that their diet changes when they migrate from pelagic habitats in the central zone of the North Pacific to the neritic and coastal pelagic habitats of Baja California. In the central zone of the North Pacific, the loggerhead turtle's diet is primarily composed of pelagic gastropods of the genus *Janthina* (present in 75% of stomachs) and the species *Carinaria cithara* (50%), as well as pelagic crustaceans and cirripeds of the genera *Planes* (56%) and *Lepas* (52%), respectively. In contrast, the remains found in the stomachs of dead specimens in the vicinity of the Baja California peninsula show that in the neritic waters of the Gulf of Ulloa, the diet of the loggerhead turtle is predominantly composed of fish of the genera *Prionotus* (present in 30% of stomachs), *Diplectrum* (23%), and *Synodus* (11%)—species often caught by local fishermen that tend to be discarded as nonsalable—as well as the crustaceans *Pleuroncodes planipes* or pelagic red crab (14%), *Platymera gaudichaudii* (6%), and *Hemisquilla ensigera* (5%).⁹⁹

99. S. H. Peckham et al. (2011), "Demographic implications of alternative foraging strategies in juvenile loggerhead turtles *Caretta caretta* of the North Pacific Ocean," *Marine Ecology Progress Series* 425: 273, at: <<https://doi.org/10.3354/meps08995>>.

47. A demographic study of loggerheads collected on the beaches of the Gulf of Ulloa, conducted in 2015 based on bone dating methods (skeletochronology), found juveniles ranging in age from 3 to 24 years. From this it could be inferred not only that the residency duration of the species in the area exceeded 20 years but also that its age of maturity was around 25 years. Considering the high rates of loggerhead turtle bycatch associated with fishing in the area, the authors of the study estimated a survival rate of only 10% for loggerhead turtle juveniles spending more than 20 years in their feeding habitat in the Gulf of Ulloa.¹⁰⁰
48. It has been estimated that the population of *C. caretta* in the Gulf of Ulloa amounts to approximately 43,000 individuals, with a density of 0.65 juveniles/km², calculated from measurements taken between 2005 and 2007. This density is the second-highest recorded in the world in terms of the concentration of turtles in a given area.¹⁰¹
49. During the years they spend foraging in the Pacific offshore of Baja California Sur, *C. caretta* juveniles and adults are potentially exposed to bycatch by nets and longlines that may cause significant mortality rates associated with small-scale and industrial fishing. Thus, the most recurrent threats identified as factors endangering the loggerhead turtles residing temporarily in the Gulf of Ulloa are bycatch in nets used to catch commercial species, direct catch of turtle specimens, and extreme climatic conditions that may affect the habitat of juveniles.¹⁰²
50. In any event, it should be mentioned likewise that during the long migration separating its two transoceanic life stages, first from Japan to the Gulf of Ulloa and second, many years later, back to the Japanese archipelago, loggerhead specimens are also exposed to ocean-atmospheric phenomena such as El Niño and La Niña that can cause extreme anomalies in mean ocean temperature and affect habitat and prey availability, which in turn may impact density and distribution of loggerheads in the Gulf of Ulloa.¹⁰³

3.3 Fishing in the Gulf of Ulloa

51. Fishing in the Gulf of Ulloa accounts for approximately 25% of inshore fisheries production for the entire state of Baja California Sur.¹⁰⁴ Carried out primarily by fishing communities in the municipalities of Comondú and Mulegé (with poverty rates of approximately 34.9% and 24.1%, respectively),¹⁰⁵ fishing in the Gulf of Ulloa is characterized by being multispecies, since various pelagic species are caught throughout the year: lobster, clam, abalone, shark, squid, crab, shrimp, snail, and octopus, among others. The number of boats in the area varies and is determined by the inshore fishing permits issued by Conapesca. As of 2022, the marine finfish fishery was still the largest in the region (661 boats, 197 permit holders), followed by the estuary shrimp fishery (338 boats, 88 permit holders), the squid fishery (294 boats, 90 permit holders), and the Pacific calico scallop fishery (290 boats, 126 permit holders).¹⁰⁶

100. C. N. Turner Tomaszewicz *et al.* (2015), at: <<https://bit.ly/3ZIxW7Z>>.

101. Conabio (2016), *op. cit.*, at 39, 48, at: <<https://bit.ly/46gD6Kz>>.

102. D. K. Wingfield *et al.* (2011), "The Making of a Productivity Hotspot in the Coastal Ocean," *PLoS ONE* 6(11), e27874 (analysis), November 2011, at: <[10.1371/journal.pone.0027874](https://doi.org/10.1371/journal.pone.0027874)>. See also: V. Koch, *et al.* (2013) "Estimating At-Sea Mortality of Marine Turtles from Stranding Frequencies and Drifter Experiments" *PLoS ONE*, doi: 10.1371/journal.pone.0056776, at: : <<https://bit.ly/49zXxmX>>; J. R. Monsinjon, *et al.* (2019) "The Climatic Debt of Loggerhead Sea Turtle Populations in a Warming World" *Ecological Indicators*, vol. 107, 105657, doi: 10.1016/j.ecolind.2019.105657 at: <<https://bit.ly/3uyOILC>>.

103. T. Eguchi *et al.* (2018), "Loggerhead Turtles (*Caretta caretta*) in the California Current: Abundance, Distribution, and Anomalous Warming of the North Pacific," *Frontiers in Marine Science* 5(452): 12 (6 December 2018), at: <<https://doi.org/10.3389/fmars.2018.00452>>.

104. Inegi (n.d.), "Censo de Población y Vivienda 2010," Mexico, at: <<https://bit.ly/46ffQwu>>.

105. Data corresponding to 2020, according to official estimates. Coneval (s/f), *InfoPobreza*, Consejo Nacional de Evaluación de la Política de Desarrollo Social, México, at: <<https://bit.ly/3uu4iaP>>.

106. Conapesca (2023), "Permisos y concesiones de pesca comercial para embarcaciones mayores y menores," Mexico, at: <<https://bit.ly/3tibhTG>>.

- 52 According to census data (2010), 1,228 fishermen that live in 21 fishing localities classified as moderately to highly disadvantaged due to the lack of drinking water, electricity, education, and health services are involved in inshore fishing in the Gulf of Ulloa.¹⁰⁷ For the majority of the communities in the region, fishing constitutes the principal source of income, in many cases being the only economic activity taking place in the area.¹⁰⁸
- 53 It is important to note that the social and economic vulnerability of the Gulf of Ulloa fishing communities has increased in the last two decades, in large measure as a consequence of the restrictions placed on fishing by instruments such as the Closed Season Order, the Fish Refuge Order, and the Turtle Refuge Order, issued with the objective of contributing to the conservation of marine turtles through specific regulations.¹⁰⁹

3.3.1 Fisheries production: boats, catch volumes, and commercial value

- 54 The Gulf of Ulloa is also a maritime transit zone for boats involved in fishing inside and outside of the region. Boats traveling through or fishing in the Gulf of Ulloa come from various ports in the states of Colima, Sinaloa, Sonora, Baja California, and Baja California Sur. In 2013, in the context of satellite monitoring of fishing boats on a national scale for purposes of oversight, surveillance, and control of extractive fishing activities and applicable fisheries management regulations, Conapesca recorded 196 fishing boats that spent 5 to 20 days fishing inside and outside of the Fish Refuge Area (see Figure 5).¹¹⁰ For 2020, similar monitoring recorded 76 fishing boats traveling through and/or fishing in the Gulf of Ulloa (see Figure 5^a), with periods of activity ranging from 5 to 25 days inside and outside of the Fish Refuge Area.¹¹¹ In both cases, fishing activity was more intense within the Fish Refuge Area.
55. According to Conapesca data, during the period from 2006 to 2022, fisheries production as determined from landing and production notices amounted to a mean annual total volume of 115,834 metric tons, of which 93,832 metric tons (81% of total catch) corresponded to finfish. Second and third place were occupied by the clam and squid fisheries, with 8% and 3%, respectively. The monetary value of fish production as a whole exceeded \$735 billion pesos, 44% of which corresponded to finfish, with an estimated value of nearly \$323 billion,¹¹² while clam, shrimp, and lobster accounted for 17, 14, and 12 percent, respectively (see Table 1 and Figure 6).¹¹³

107. Inegi (n.d.), *op. cit.*, at: <<https://bit.ly/46ffQwu>>.

108. C. A. Salinas Zavala *et al.* (2022), "Social Vulnerability of the Fishing Community to Restrictive Public Policies: Case Study the Gulf of Ulloa, Mexico," *Sustainability* 14(21): 13916, at: <[mdpi.com/2071-1050/14/21/13916](https://doi.org/10.3390/s142113916)>.

109. *Ibid.*

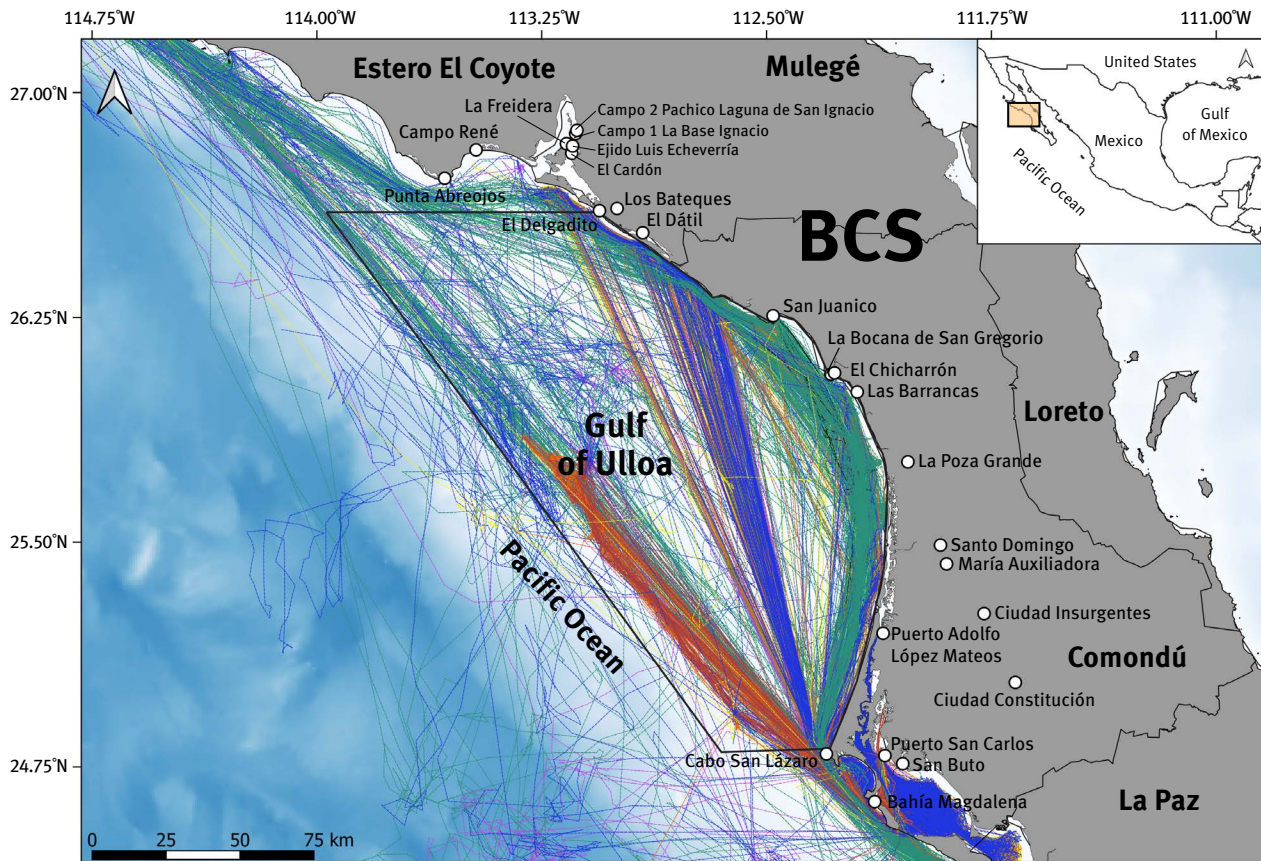
110. Conapesca (2013), "Reportes de posición del Sistema de Localización y Monitoreo Satelital de Embarcaciones Pesqueras 2013," open-source data, Mexico, at: <<https://bit.ly/46r1zNB>>.

111. Conapesca (2020), "Reportes de posición del Sistema de Localización y Monitoreo Satelital de Embarcaciones Pesqueras 2020," open-source data, Mexico, at: <<https://bit.ly/3ruKOSu>>.

112. \$737,779,677 MXP are equivalent to approximately \$42,989,315 USD or \$57,638,699 CAD, and \$322,924,542MXP are equivalent to approximately \$18,948,760 USD or \$25,530,155 CAD, according to Wise, Currency Converter, at: <<https://bit.ly/49q0J4D>> (7 February 2024).

113. Conapesca (2023), "Avisos de arribo, cosecha y producción," Mexico, at: <<https://bit.ly/48xsw3D>>.

Figure 5. Fishing boat routes in the Gulf of Ulloa during the period from January to December 2013, from satellite monitoring by Conapesca



Legend

- Gulf of Ulloa localities
- Fish Refuge Area
- Baja California Sur (BCS)

Number of boats by port

- Mazatlán, Sin. (150)
- Ensenada, BC (17)
- Guaymas, Son. (6)
- Puerto Topolobampo, Sin. (4)
- La Paz (cabo), BCS (3)
- San Blas, Sin. (2)
- Puerto San Carlos, BCS (2)

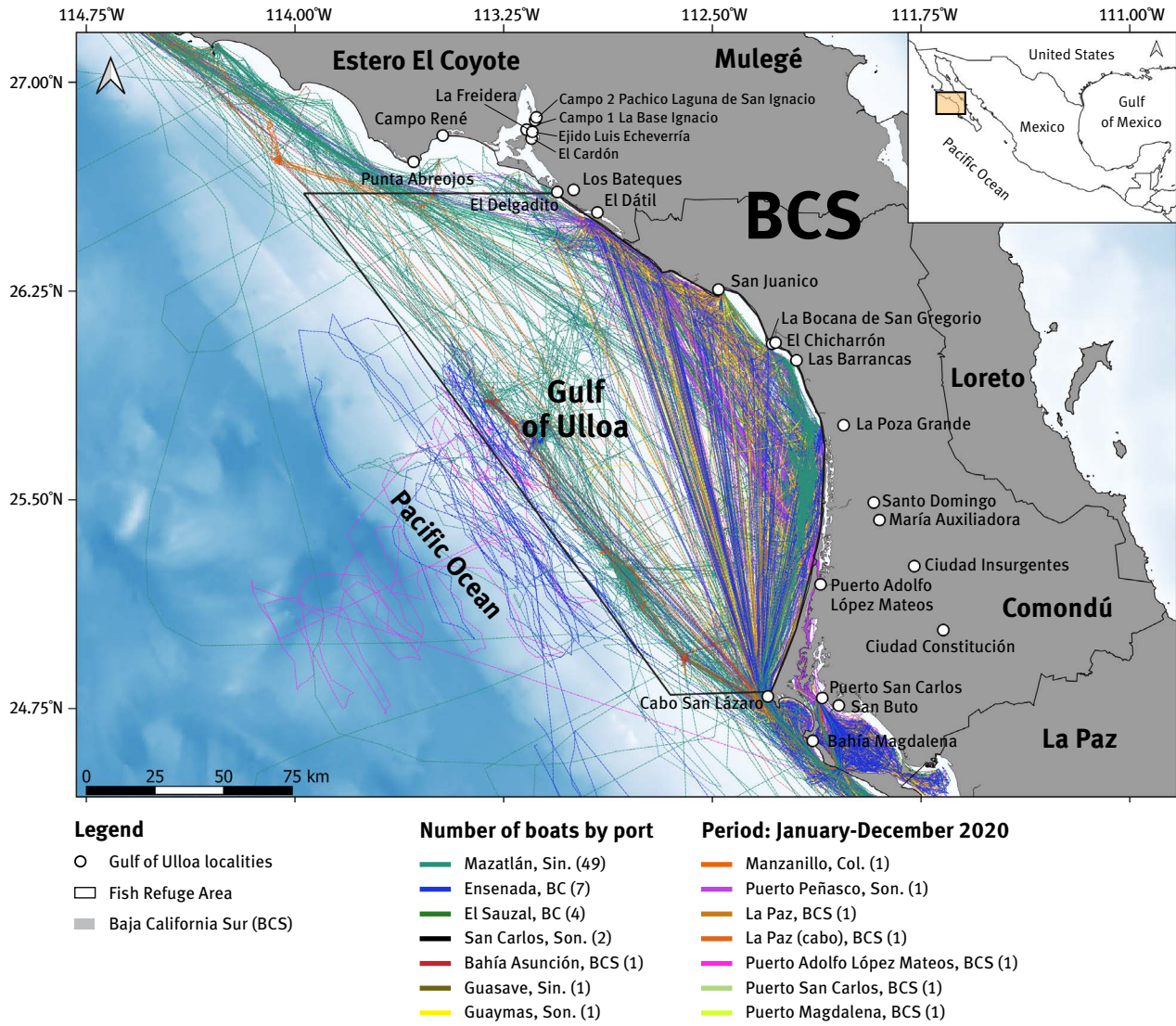
Period: January-December 2013

- La Paz, BCS (2)
- Puerto Adolfo López Mateos, BCS (2)
- Puerto Magdalena, BCS (1)
- Ciudad Constitución, BCS (1)
- Guasave, Sin. (1)
- Manzanillo, Col. (1)
- Puerto Yavaros, Son. (1)

Note: The lines represent individual fishing boat routes.

Source: CEC Secretariat, based on public information from Conapesca available online at <<https://bit.ly/42JicD3>>.

Figure 5a. Fishing boat routes in the Gulf of Ulloa during the period from January to December 2020, from satellite monitoring by Conapesca



Note: The lines represent individual fishing boat routes.

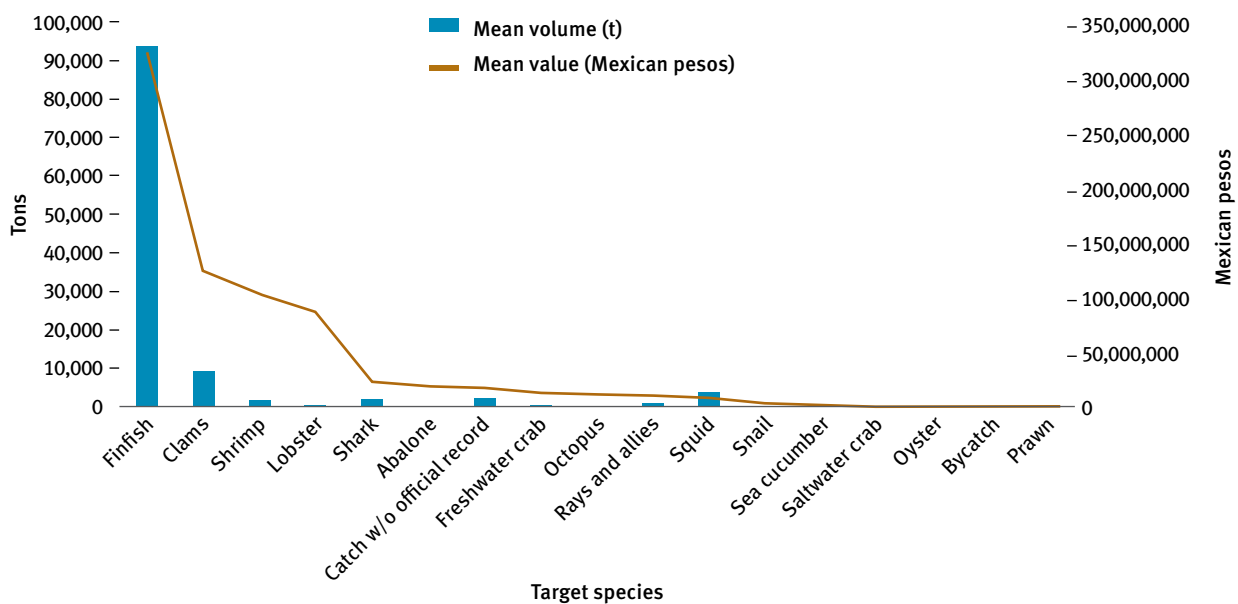
Source: CEC Secretariat, based on public information from Conapesca available online at <<https://bit.ly/49JD9zR>>.

Table 1. Mean annual volume and value of fisheries production in the Gulf of Ulloa

Target fishery	Mean volume (tons/year)	Mean value (million pesos/year)
Finfish	93,832	322,924,542
Clam	9,306	123,457,959
Shrimp	1,732	102,870,553
Lobster	515	86,663,027
Shark	1,886	22,691,092
Abalone	110	18,166,535
Catch without official record	2,320	16,396,776
Freshwater crab	577	12,673,053
Octopus	221	10,608,157
Rays and allies	1,029	9,701,315
Squid	3,871	7,557,280
Snail	334	2,457,270
Sea cucumber	74	1,399,806
Saltwater crab	13	148,752
Oyster	13	56,715
Bycatch	1	6,108
Prawns	0	737
Total	115,834	737,779,677

Note: Produced from data recorded by Conapesca in the Gulf of Ulloa for the period 2006–2022.
 Source: Conapesca (2023), “Avisos de arribo, cosecha y producción,” Mexico, online at <<https://bit.ly/48xsw3D>>.

Figure 6. Mean production and approximate monetary value of fisheries production in the Gulf of Ulloa (2006–2022)



Note: Produced by the Secretariat from data recorded by Conapesca in the Gulf of Ulloa in the period 2006–2022.
 Source: Conapesca (2023), “Avisos de arribo, cosecha y producción,” Mexico, online at <<https://bit.ly/48xsw3D>>.

3.3.2 Fishing gear

56. As indicated above, fishing in the Gulf of Ulloa is multispecies, meaning that the same fisherman may use different types of gear depending on the target fishery. According to the results of the most recent census carried out by Conapesca, in 2022, there were 22 different target fisheries in the Gulf of Ulloa using 16 different types of fishing gear, including traps, gillnets, and shark nets. There are a recorded 10,856 traps for octopus, crab, and some finfish species, as well as a total of 1,063 gillnets used mainly to catch marine finfish. These nets have lengths of 100 to 500 meters and drops varying from 3 to 50 meters (i.e., they can be let down to a depth of 50 meters below the surface); their mesh size varies from 101 to 228 millimeters. Although less common, shark nets, gillnets, trawlnets, seine nets, conical nets, purse seine nets, cast nets, hand lines, shark longlines, traps/pots, and jigs, as well as diving and manual harvest are also used (see Table 2).¹¹⁴



Photo: Center for Biological Diversity

114. Conapesca (2023), "Permisos y concesiones de pesca comercial para embarcaciones mayores y menores," at: <<https://bit.ly/3tibhTG>>.

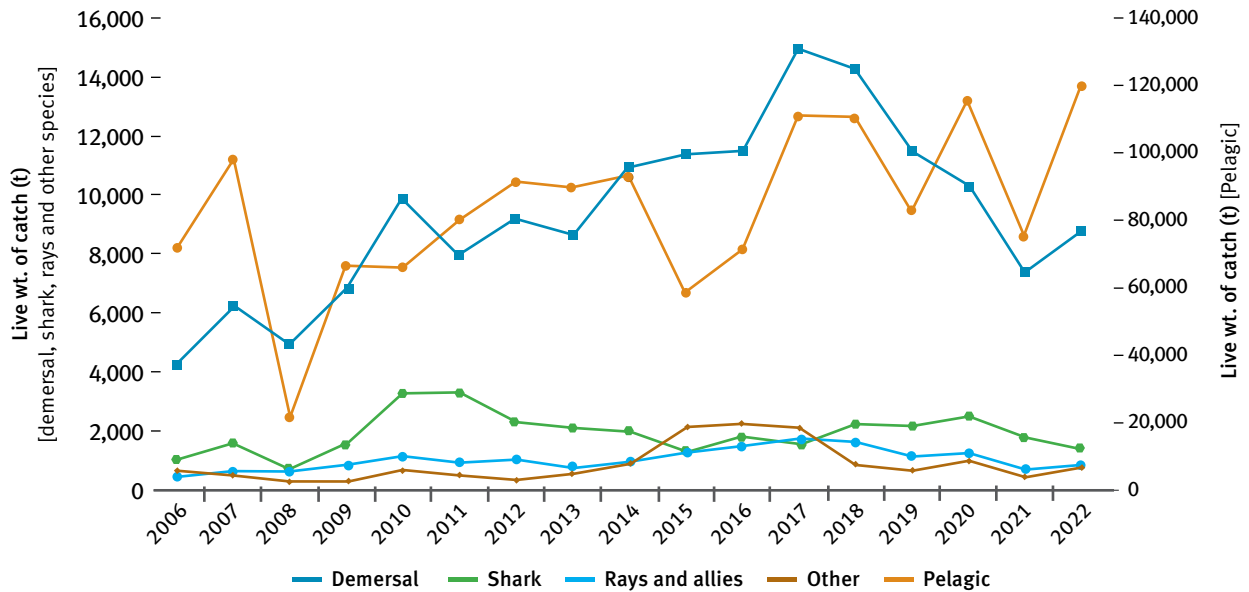
Table 2. Fishing gear used for the various commercial fisheries (demersal and pelagic species, sharks, rays) in the Gulf of Ulloa

Type of boat	Target species	Fishing gear	No. of gear units
Large	Humboldt squid	Jig	21
	Marine finfish spp.	Gillnet	2
		Trap	65
	Smaller pelagic spp.	Seine	3
	Shark	Longline (<i>cimbra</i>)	1
		Longline (<i>palangre</i>)	1
Menor	Abalone	Diving	11
	Ponderous dosinia	Diving	2
	Pacific calico scallop	Diving	296
	Chocolate clam	Diving	67
	Pacific geoduck	Diving	160
	Mangrove cockle	Diving	4
		Manual harvest	0
	Wave-ribbed venus	Manual harvest	0
	Humboldt squid	Jig	840
	Pacific wing-oyster	Diving	2
	Maura pen shell	Diving	73
	Estuary shrimp	Castnet	324
		“Magdalena I” trawl net	15
	Black murex	Suripera net	6
		Diving	16
	<i>Astraea undosa</i> (snail)	Diving	1
	Estuary finfish	Handline	8
		Handline	18
	Marine finfish spp.	Gillnet (<i>red agallera</i>)	925
		Seine	2
		Gillnet (<i>red de enmalle</i>)	29
		Trap	472
	Freshwater crab	Pot	343
		Trap	3955
	Lobster	Trap	3080
	Prawn	Castnet	1
		Prototype conical net	4
	Mullet	Gillnet (<i>red agallera</i>)	124
	Octopus	Pot	195
		Trap	3284
	Shark	Longline	62
		Gillnet (<i>red agallera</i>)	12
Gillnet (<i>red de enmalle</i>)		61	
Shark net		83	
Total	22 commercial fisheries	16 types of fishing gear	14,568 fishing gear units

Source: Produced by the Secretariat from fishing permit and concession data recorded by Conapesca in the Gulf of Ulloa. Cf. Conapesca (2023), “Permisos y concesiones de pesca comercial para embarcaciones mayores y menores.” open-source data, online at <<https://bit.ly/3tibhTG>>.

57. According to public data from Conapesca, the catch of pelagic and demersal finfish species in the Gulf of Ulloa increased considerably in the period 2006–2022 (see Figure 7). These fisheries use a larger number of gillnets that are associated with loggerhead turtle bycatch and are prohibited in the protected area under the Fish Refuge Order.¹¹⁵

Figure 7. Annual catch of demersal and pelagic finfish, sharks, and rays in the Gulf of Ulloa



Source: Figure produced by the Secretariat from data corresponding to the period 2006–2022, taken from Conapesca (2022), “Anuario estadístico de acuicultura y pesca,” 8 September 2022, online at <<https://bit.ly/3rLyQno>>.

Note: The values on the right vertical axis are in tons of pelagic organisms, which exceed by several thousand tons the catch of the other organisms presented in the figure.

115. Fish Refuge Order, seventh article: paragraph VII, at: <https://bit.ly/DOF_23-06-2016>.

4. *C. caretta* Mortality

58. According to the Submitters, during the period from 2017 to 2019, 889 loggerhead turtle specimens were found dead in the Gulf of Ulloa, BCS.¹¹⁶ The submission states that the number of deaths recorded increases the risk of extinction of the species, and that the Mexican authorities have not taken the measures necessary to halt or reduce the loss of the species.¹¹⁷
59. The Submitters cite a 2017 study conducted in the Gulf of Ulloa to obtain information on the possible causes of sea turtle mortality in the region. Even though the advanced state of decomposition of many of the carcasses found stranded made it difficult to perform necropsies that could yield conclusive evidence of the cause of death (nearly half of the study samples taken were categorized as “cause of death unknown”), the basic forensic techniques used showed that of the 93 samples studied 28% had died as a consequence of bycatch, while 22% had been caught for human consumption.¹¹⁸
60. In this regard, Mexico’s response states that fishing is not the main cause of sea turtle mortality.¹¹⁹ The Party in question contends that various factors and conditions can cause sea turtle death, including the presence of predators; collisions with boats; ingestion of anthropogenic waste or toxic pollutants; the nutritional conditions of specimens and populations, and various metabolic or infectious diseases.¹²⁰
61. The information reviewed by the Secretariat for the preparation of the factual record indicates that turtle stranding has been documented as a recurring phenomenon and that sea turtles are in general affected by various threats other than entanglement in fishing nets. One of these threats is hypothermia, a condition that can increase the risk of succumbing to predators or of collision with boats and can also, for example, make the organism more vulnerable to infectious diseases from which it eventually dies.¹²¹ Carried by the current, turtle carcasses or severely weakened individuals wash up on beaches, a phenomenon known as *stranding*.
62. The registry of strandings in the Gulf of Ulloa produced by Profepa from 2012 to 2020 shows that strandings of three species of sea turtles in the Gulf of Ulloa—green sea turtle (*Chelonia mydas*, classified by some authors as *C. mydas agassizii* or *C. agassizii*),¹²² olive ridley turtle (*Lepidochelys olivacea*), and loggerhead turtle (*C. caretta*)—occurred in every year of the period in question, with the loggerhead being the one regularly exhibiting the largest number of strandings (hundreds per year) compared to the others (see Figure 8.)

116. Submission, introduction and p. 7, at: <<https://bit.ly/3Ti6f2P>>

117. *Ibid.* at 1-2 and 13.

118. Cf. E. Reséndiz and M. M. Lara-Uc (2017), “Analysis of post mortem changes in sea turtles from the Pacific Coast of Baja California Sur using forensic techniques,” *Revista Bio Ciencias* 4(4): 1-2 (May 2017), DOI: 10.15741/revbio.04.04.06, at: <<https://bit.ly/49sxnU7>>.

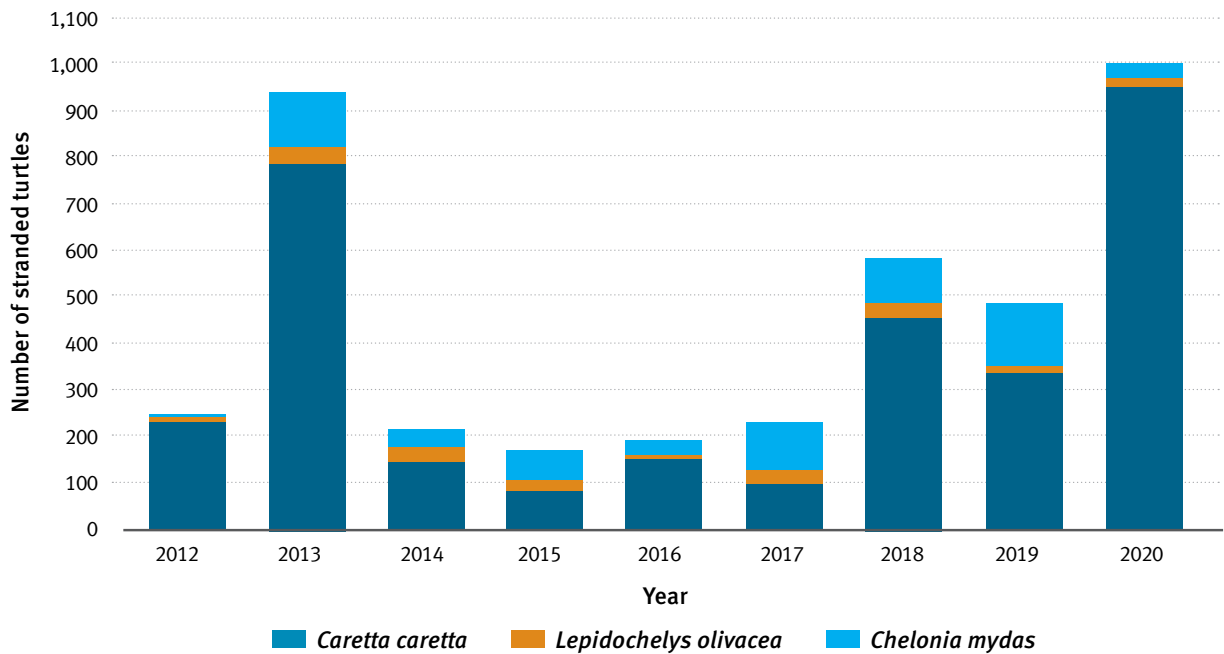
119. Response at 16, 21-2, at: <<https://bit.ly/4afFray>>.

120. *Ibid.* at 5, 8.

121. For example, in 2001, the North Carolina coast witnessed 360 sea turtle strandings, a figure that increased to 473 the following year. A similar phenomenon was observed in the Gulf of Ulloa in two periods: 2003–2006 and 2012–2014. Cf. C. A. Salinas Zavala, M. V. Morales Zárate, and R. O. Martínez Rincón (2020), *op. cit.*, at 214, at: <<https://bit.ly/49jYCjv>>.

122. According to the Integrated Taxonomic Information System (ITIS), the valid designation for the species is *Chelonia mydas* and the synonyms *C. mydas agassizii* or *C. agassizii* (used by some authors to designate the Pacific green turtle) are now considered invalid. See: “*Chelonia mydas* (Linnaeus, 1758),” ITIS, at: <<https://bit.ly/49Ge7BR>>.

Figure 8. Number of sea turtle strandings recorded by Profepa in the Gulf of Ulloa (2012–2020)



Source: Based on data contained in file no. PFPA/1.7/12C.6/2476/2023 of 5 September 2023, issued by the Office of the Federal Attorney for Environmental Protection (Procuraduría Federal de Protección al Ambiente—Profepa), online at <<http://cec.org/files/sem/20231103/aad001.pdf>>.

63. As background and context in relation to the recording and study of turtle strandings in the Gulf of Ulloa, it should be noted that loggerhead turtle research and conservation in the Mexican Pacific is relatively recent compared with long-term efforts and initiatives underway in the Gulf of Mexico and the Caribbean. Initial work on assessing the presence and abundance of *C. caretta* in the waters and off the coast of the Baja California peninsula started in 1990.¹²³ In 1997, while regular patrols were being conducted along San Lázaro beach, on the west coast of Magdalena Island across from Puerto Adolfo López Mateos, BCS, strandings of numerous loggerhead turtle specimens were documented. In the years that followed, an alarming increase in turtle strandings was recorded, leading to the conclusion that “bycatch in local fishing [may] be greatly contributing to the observed mortality of the species and causing a greater impact on the Pacific population.”¹²⁴
64. In 2001, the Loggerhead Turtle Project was launched (*Proyecto Caguama*, also called ProCaguama), formally initiating the survey of stranded turtles on San Lázaro beach. From 2003 onward, ProCaguama surveys were conducted daily during the summer and twice weekly during the rest of the year.¹²⁵ These censuses yielded an average of 500 carcasses per year along the 43-km of beach between López Mateos and Punta San Lázaro. These data were used to estimate that one dead turtle was found every 4-km stretch every day in the summer months, coinciding with the fishing season, suggesting a seasonal correlation with local fishing of finfish species.¹²⁶

123. PACE-*C. caretta* at 11, at:<<https://bit.ly/3FKKRgs>>.

124. *Ibid.* at 11-12.

125. *Ibid.* at 12.

126. *Ibid.*

65. The first field estimate of loggerhead turtle mortality caused by inshore or small-scale fishing with gillnets and bottom longlines in the Gulf of Ulloa was produced in 2005. Based on a telemetry study, “critical points” for loggerhead turtle bycatch in the Gulf of Ulloa were identified (see Figure 9).¹²⁷ Data from direct observation on fishing boats was used: on-board observers quantified bycatch from June to July for gillnet fishing and in September for bottom longlining. Minimum estimated mortality was determined in the following manner:
- For gillnets, the mortality rate was calculated on the basis of mean daily loggerhead turtle bycatch numbers recorded during the field assessments (0.65 individuals per boat) multiplied by the minimum number of boats active daily (9, for a range of 9-40 boats) and by the minimum number of days of fishing activity in 2005 (70, for a range of 70-110 days). The number corresponding to the percentage of turtles freed alive (27%) was subtracted from this result. Thus, the *minimum* number of *C. caretta* deaths caused by gillnet bycatch was estimated at 299.¹²⁸
 - For bottom longlines, mean daily loggerhead turtle bycatch recorded during the field assessments (3.7 individuals per boat) was multiplied by the minimum number of boats active daily (5, for a range of 5-6 boats) and by the minimum number of days of fishing activity in 2005 (40, for a range of 40-55 days). The number corresponding to the percentage of turtles freed alive (8%) was subtracted from this result. This yielded a *minimum* number of 680 *C. caretta* deaths caused by longlining bycatch.¹²⁹
66. Extrapolated to an annual cycle, the combined numbers calculated for each fishery (gillnetting and bottom longlining) point to *minimum* mortality of around 1,000 loggerhead turtles/year caused by interaction with fishing in the Gulf of Ulloa.¹³⁰



Photo: Schnapps2012 – istock

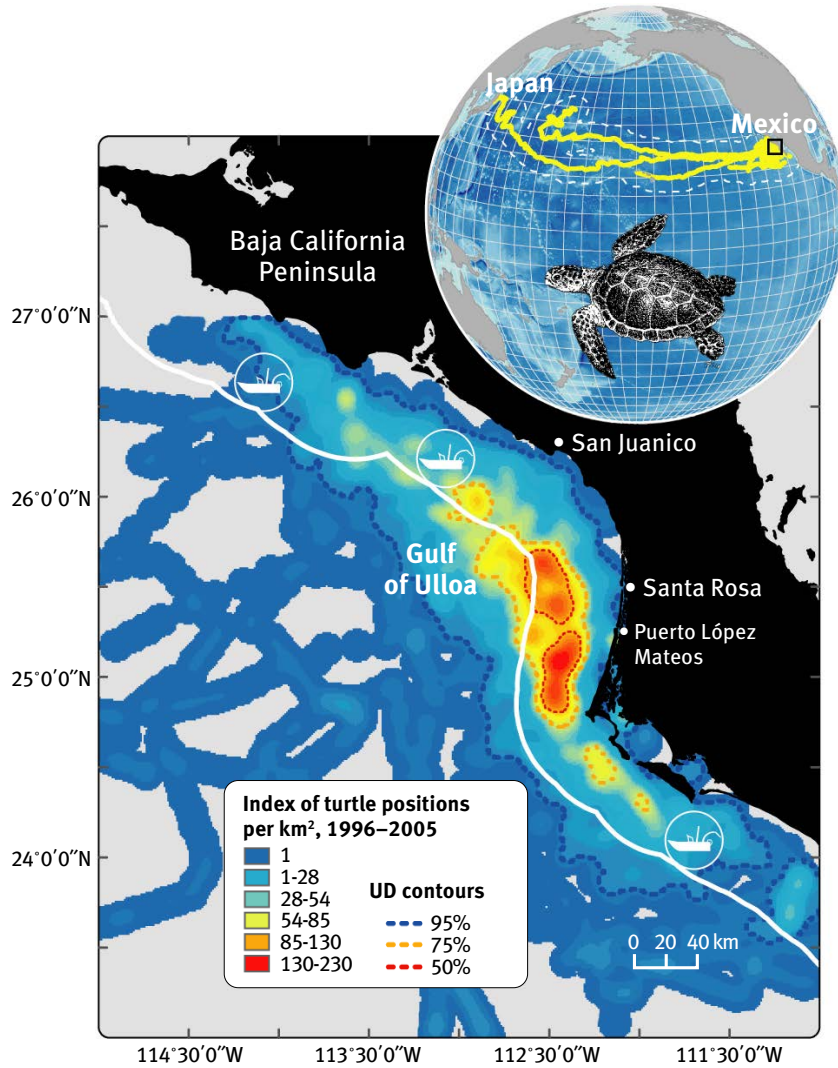
127. S. H. Peckham *et al.* (2007), “Small-scale fisheries bycatch jeopardizes endangered Pacific loggerhead turtles,” *PLoS ONE* 2(10), e1041, at: <<https://bit.ly/49hBp1B>>.

128. *Ibid.*

129. *Ibid.*

130. *Ibid.* Although the information corresponds to the period in question, the author of the study considers previous years as a reference. One must assume that conditions were similar.

Figure 9. Kernel density of loggerhead sea turtle habitat use in the Gulf of Ulloa and the northern Pacific



Note: Loggerhead turtle distribution kernels in the Gulf of Ulloa. The largest concentration of individuals is found within the area marked out in red, with its center located approximately 32 km off the coast, within the inshore fishing range of 55 km from the coast (indicated by the white line). DU = distribution of use.
 Source: S. H. Peckham et al. (2007), "Small-scale fisheries bycatch jeopardizes endangered Pacific loggerhead turtles," PLoS ONE 2(10), e104, online at <<https://bit.ly/49hBp1B>>.

67. Another study conducted in 2008 estimated an annual mortality rate of 1,500–2,950 loggerhead turtles on the Gulf of Ulloa, BCS using simulation methods and based on counts of turtle bycatch by two inshore fishing boats that were observed from 2005 to 2007, as well as turtle carcasses found on the beach in the period from 2003 to 2007. According to the results obtained, 0.25 loggerhead turtles were found stranded per kilometer per day along the 43 kilometers of San Lázaro beach during the fishing months (May-September) of that five-year period—according to the authors, this represents one of the highest recorded stranding rates in the world.¹³¹ The study suggested that the main cause of mortality is interaction with gillnets and longlines used by the inshore fishing fleet, although the authors also stated that human consumption and natural factors (including predation and disease) are other causes of *C. caretta* mortality.¹³²
68. According to the *Report on environmental sector actions for the protection of sea turtles in Mexico (January-December 2018)*, a report issued by Semarnat in 2019, monitoring and documentation of loggerhead turtle strandings conducted between 2013 and 2018 along San Lázaro beach on the Gulf of Ulloa yielded 785 loggerhead turtle specimens stranded in 2013, with the largest number being recorded during the period from May to September; that is, in the months of highest fishing activity in the area.¹³³ This number declined in 2014 to 145 specimens and even more the following year (80 specimens), coinciding, according to the report, with the entry into force of the first version of the Fish Refuge Order on 10 April 2015.¹³⁴
69. On 14 May 2018, the General Wildlife Branch (*Dirección General de Vida Silvestre*—LGVS) of Semarnat produced a technical study (*estudio técnico justificativo*—ETJ) justifying the declaration of the Gulf of Ulloa, BCS as a refuge area for the loggerhead turtle (*C. caretta*).¹³⁵ In addition to general information on the physical, bathymetric, and environmental characteristics of the area in question, the ETJ includes an analysis of the conservation status of the species as well as the issues, underlying socioeconomic aspects, and threats that have caused it to be endangered. With specific reference to loggerhead turtle strandings and mortality on San Lázaro beach, on the western side of Magdalena Island, the ETJ indicates a correspondence between the months of most frequent stranding and the season in which fishing takes place.¹³⁶ Furthermore, it states that according to the information available at the time the study was produced, the primary causes of sea turtle mortality linked to fishing gear around the world are a) trawlnets; b) pelagic and bottom longlining; c) gillnets and trapnets; d) entanglement in ropes for buoys or traps, and e) commercial and sport fishing lines and hooks.¹³⁷ Based on the results of this analysis, the ETJ ascertained the vital importance of establishing a loggerhead turtle refuge in the feeding and development area of this species in the Gulf of Ulloa, BCS.¹³⁸

131. S. H. Peckham *et al.* (2008), “High mortality of loggerhead turtles due to bycatch, human consumption and strandings at Baja California Sur, Mexico, 2003 to 2007,” *Endangered Species Research* 5: 171-183, at: <[10.3354/esr00123](https://doi.org/10.3354/esr00123)>.

132. *Ibid.* at 172.

133. Semarnat (2019), *Reporte sobre acciones del sector ambiental para la protección de las tortugas marinas en México, enero-diciembre 2018*, at 59 and 61 (Table 14), at: <<http://cec.org/files/sem/20231103/aaf005.pdf>> [2018 Report on Actions].

134. *Ibid.* at 59.

135. Response, Appendix 13, Semarnat (2018), *Estudio justificativo para declarar el golfo de Ulloa en Baja California Sur como área de refugio para la tortuga caguama o amarilla (Caretta caretta)*, General Wildlife Branch (*Dirección General de Vida Silvestre*), Wildlife Conservation Division (*Dirección de Conservación de la Vida Silvestre*), Office of the Deputy Minister of Management for Environmental Protection (*Subsecretaría de Gestión para la Protección Ambiental*), Mexico, at: <<http://cec.org/files/sem/20240306/aal003.pdf>> [ETJ Gulf of Ulloa].

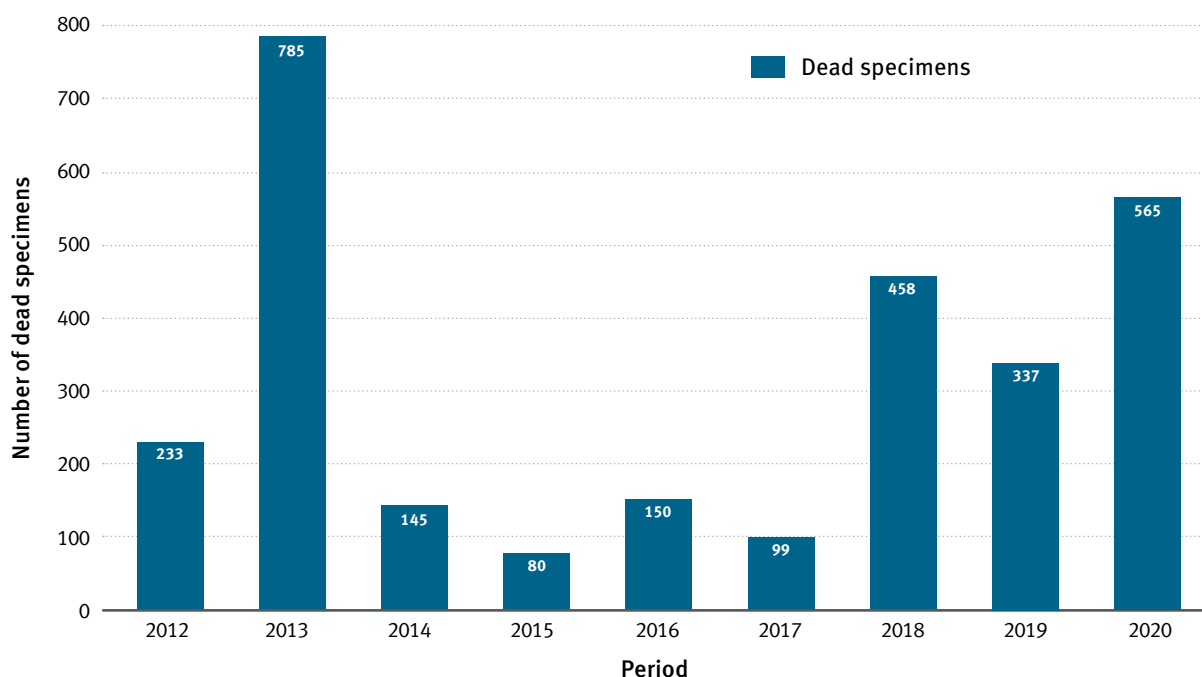
136. *Ibid.* at 24.

137. *Ibid.* at 25.

138. *Ibid.* at 4-5, 28-9. Cf. Turtle Refuge Order, preamble and Article 1, at: <https://bit.ly/DOF_05-06-2018>.

70. In addition to the mass loggerhead turtle strandings recorded in the Gulf of Ulloa in the period 2003–2007, similar unusual episodes were documented in 2012–2014 and in 2020–2021 based on the record of stranded turtles found both dead and alive with injuries of varying severity, during the weekly field trips to Magdalena Island by *Grupo Tortuguero de Las Californias, A.C. (GTC)*. Profepa-BCS personnel accompanied the group on these field trips.
71. Contingency verification reports prepared by Profepa and the report of dead specimens of *C. caretta* in the Gulf of Ulloa during the period 2012–2020 developed by the same entity, indicate the finding of more than 90 dead specimens per year, above the limits in the Fish Refuge Order,¹³⁹ with the exception of 2015 where 80 were reported.
72. According to Profepa’s information, the highest mortality events (i.e., more than 200 dead individuals)¹⁴⁰ occurred in 2012, 2013, 2018, 2019, and 2020, with 233, 780, 458, 337, and 565 dead individuals, respectively.¹⁴¹ It is worth mentioning, that for 2020 there is no data for the period from January to July and that

Figure 10. Strandings of *C. caretta* (2012–2020)



Source: Figure prepared by the Secretariat with information from: Profepa, file no. PFPA/1.7/12C.6/2508/2023, (11 September 2023), at: <<http://cec.org/files/sem/20231123/aaj005.pdf>>.

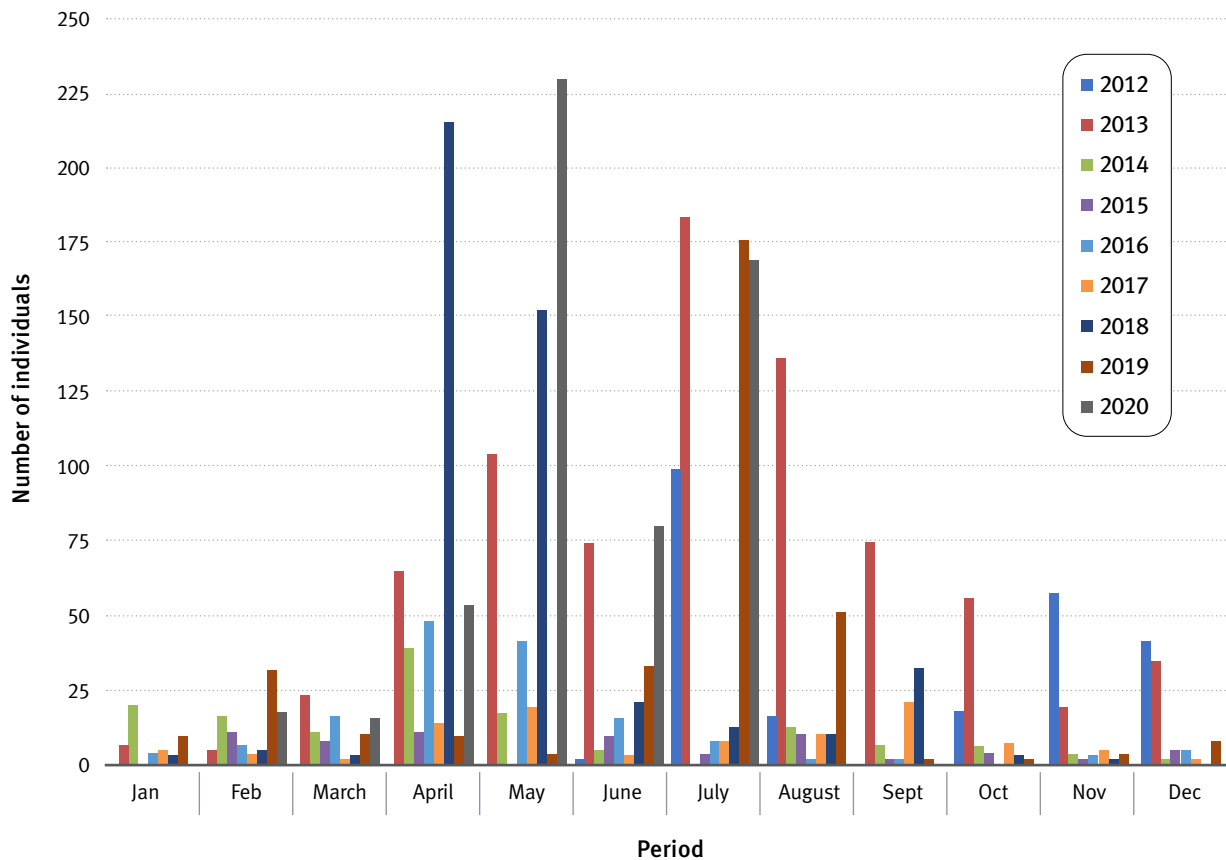
139. Profepa, file no. PFPA/1.7/12C.6/2508/2023 (11 September 2023), in response to information request no. 330024423001437, before the PNT, at: <<http://cec.org/files/sem/20231123/aaj005.pdf>> [Profepa’s Communication 2023]. For the limits on the number of specimens per year, see: Fish Refuge Order, seventh article: paragraph VI, at: <https://bit.ly/DOF_23-06-2016>.

140. Cfr. Programa de Ordenamiento Ecológico Marino y Regional del Pacífico Norte (POEMR-North Pacific) anexo 6.3 “Catálogo de criterios ecológicos,” pp. 26-27/46, at: <<https://bit.ly/47NiQkp>>.

141. Profepa’s Communication 2023, at: <<http://cec.org/files/sem/20231123/aaj005.pdf>>. It is noted that there is a typographical error in the number of specimens of *C. caretta* dead in 2012 indicated in the table of the official letter. The actual total of added values during the twelve months of the year is 233. This value corresponds to that presented in another official letter received from Profepa: <<http://cec.org/files/sem/20231103/aad001.pdf>>.

the report from Profepa does not include information from August to December, however, in the response to another request for information, Profepa indicates the stranding of 953 individuals in 2020,¹⁴² while Conanp in its report of mass strandings reported 1,087 individuals for the same year.¹⁴³ It is worth noting that the data collected by Profepa and Conanp do not match each other, and that there are some errors when adding the totals presented in various reports and documents consulted.¹⁴⁴ The months with the highest mortality (greater than 90) were April (2018), May (2012, 2013, 2018, and 2020), July (2013, 2019, and 2020) and August (2013) (see Figure 10a).

Figure 10a. Strandings of *C. caretta* (by month 2012–2020)



Source: Graph produced by the Secretariat from data contained in Profepa reports on contingency verification for the Gulf of Ulloa and reports on the discovery of dead *C. caretta* specimens, obtained in response to access to information requests filed with the PNT.

142. Profepa, file no. PFPA/1.7/12C.6/2476/2023 (5 September 2023), in response to information request no. 330024423001417 before the PNT, at: <<http://cec.org/files/sem/20231103/aad001.pdf>>.
143. Conanp, file no. F00.1.DRPBCPN.I.-643/2023 (11 September 2023), in response to information request no. 330008323000576 before the PNT, Appendix: “Reporte de varamientos masivos de tortugas amarillas en la isla Magdalena (enero-diciembre de 2020),” at: <<http://cec.org/files/sem/20231103/aah005.pdf>>;
144. Conanp, file no. DGC/DEPC/032/2022 (16 December 2022), in response to information request no. 330008322000829 ante la PNT, anexo: “Reporte de varamientos masivos de tortugas amarillas en la isla Magdalena (diciembre de 2020-agosto de 2022),” at: <<http://cec.org/files/sem/20231030/aab004.pdf>>; Conanp (2023), *Reporte de varamientos de tortugas en la playa San Lázaro, isla Magdalena*, registros obtenidos en recorridos efectuados entre diciembre de 2022 y abril de 2023, Comisión Nacional de Áreas Naturales Protegidas, at: <<http://cec.org/files/sem/20231030/aab011.pdf>>; Profepa’s Communication 2023, at: <<http://cec.org/files/sem/20231123/aaj005.pdf>>.

73. The episodes of highest recorded mortality of *C. caretta* occurred between the months of April and August.¹⁴⁵ As discussed above, one hypothesis that could explain the observed peaks in the number of stranded *C. caretta* specimens relates to possible interactions with nets used in inshore fishing in the Gulf of Ulloa (i.e., bycatch).¹⁴⁶ However, it is noteworthy that in 2020 and 2021 November was the month of most strandings, when inshore fishing yield in the area is lower.¹⁴⁷
74. The upturn in *C. caretta* mortality observed in the year 2020 (which does not appear in Figure 10 due to inconsistencies in the reported data) is documented in the *Report on environmental sector actions for the protection of sea turtles in Mexico (January-December 2020)*, issued by Semarnat in 2021.¹⁴⁸ According to the records submitted by Mexico, 953 loggerhead turtle strandings were recorded that year on San Lázaro beach, Gulf of Ulloa, which is higher than the number of 785 strandings in 2013 (approximately 21% more).¹⁴⁹ While a large part of this rise occurred between May and July (the months of greatest fishing activity in the area),¹⁵⁰ a total of 367 loggerhead turtles were stranded on Magdalena Island between 18 November and 10 December 2020 alone.¹⁵¹ Even though this mass stranding event caused the environmental authorities to commission a study to determine the possible presence of one or more toxic agents that might be affecting the population of *C. caretta* in the area,¹⁵² the same Semarnat report notes that local fisherman reported sightings of dead and live loggerhead turtle specimens at a distance of 30-40 nautical miles from the coast, in an area where large fishing vessels were seen fishing with nets used to catch swordfish, sailfish, and marlins, and tuna boats were seen using seine nets.¹⁵³
75. On another note, according to information from Conapesca, loggerhead turtle interactions with fishing nets recorded from 2017 to 2019 fluctuated as follows: 77 (2017), 18 (2018), and none (2019). Of the 92 interactions, 18 resulted in the death of individuals: 11 in 2017 and 7 in 2018 (see Figure 11).¹⁵⁴ In this regard, it should be noted that the absence of interaction records for 2019 contrasts with the number of loggerhead turtle strandings recorded by Profepa that same year (i.e., 337 individuals; see Figure 10 above).
76. In relation to other possible causes (including natural factors) of loggerhead turtle mortality in the Gulf of Ulloa, it is worth mentioning that when the appearance of some 800 dead loggerhead turtles was documented¹⁵⁵ from late August to October 2006 along 60 km of coastline on Magdalena Island and the smaller Santo Domingo Island in Magdalena Bay, in the Gulf of Ulloa, various hypotheses were formulated as to the cause of this mass mortality. The main hypotheses included: ocean temperature anomalies due to a La Niña phenomenon (<18 °C); the effects of Hurricane John, which hit Baja California Sur in early September 2006, with the resulting intense rainfall causing an increase in waste running off into the ocean; possible increases in pollutant concentrations in *C. caretta* feeding areas; bycatch during shrimp fishing activities; infection by parasites, and the presence of red tides. In all these cases, research

145. For conclusions on the months with the highest recorded mortality of *C. caretta*, see S. H. Peckham *et al.* (2008), *op. cit.*, Table 3, at 176, at: <10.3354/esr00123>.

146. S. H. Peckham *et al.* (2007), *op. cit.*, at: <https://bit.ly/49hBp1B>.

147. Conanp, file no. F00.1.DRPBCPN.I.-643/2023 (11 September 2023), in response to the request for information No. 330008323000576 before the PNT at: <http://cec.org/files/sem/20231103/aah014.pdf>; Semarnat (2020), *Reporte sobre acciones del sector ambiental para la protección de las tortugas marinas en México, enero-diciembre 2020*, Secretaría de Medio Ambiente y Recursos Naturales, p. 66, at: <http://cec.org/files/sem/20240306/aal004.pdf> [2020 Report on Actions].

148. 2020 Report on Actions, p. 71, at: <http://cec.org/files/sem/20240306/aal004.pdf>.

149. *Ibid.*

150. *Ibid.*

151. *Ibid.* at 79.

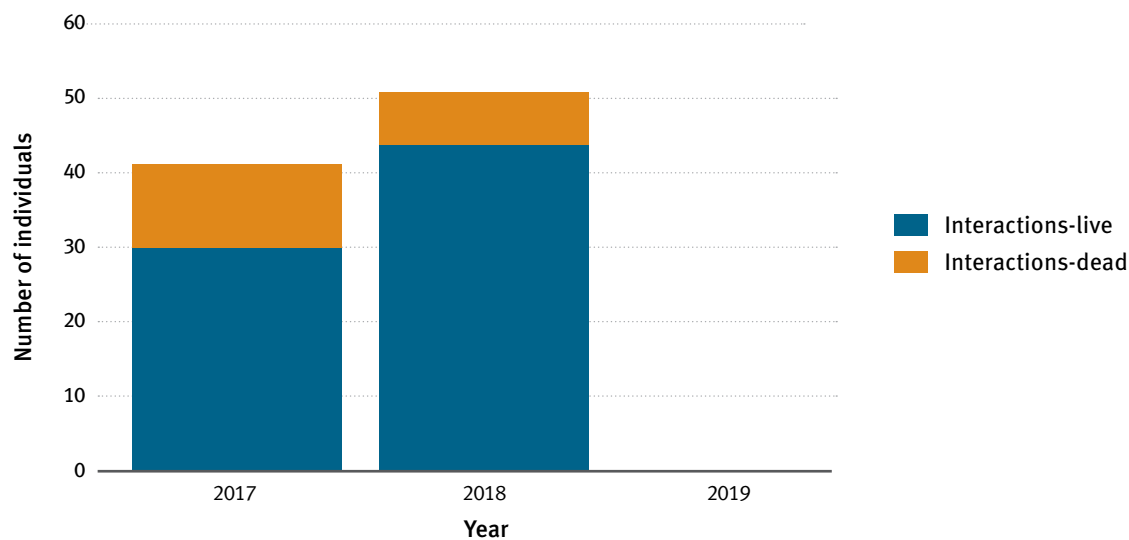
152. *Ibid.* at 66.

153. *Ibid.* The report does not indicate who has “seen” fishing activities in the area in question.

154. Conapesca, (19 February 2020), in response to information request no. 0819700004620 before the PNT, at: <http://cec.org/files/sem/20231123/aaj004.pdf>.

155. Cf. S. H. Peckham *et al.* (2008), *op. cit.*, Table 3, at 176, at: <10.3354/esr00123>.

Figure 11. *C. caretta* interactions with fishing nets in the Gulf of Ulloa (2017–2019)



Source: Conapesca, (February 19, 2020), in response to information request no.: 0819700004620 before the PNT, at: <<http://cec.org/files/sem/20231123/aaj004.pdf>>.

available to the Secretariat indicates that there is no single hypothesis or a combination of hypotheses explaining the mortality rate of *C. caretta*, mainly due to the absence of long-term continuity in the available assessments.¹⁵⁶

77. The unusual mass mortality recorded in July 2013¹⁵⁷ led Conanp and the Baja California Sur state government to commission an investigation into loggerhead turtle mortality on the Gulf of Ulloa, BCS by a technical working group composed of specialists from three academic and scientific institutions.¹⁵⁸ Jointly carried out by Interdisciplinary Center for Marine Sciences (*Centro Interdisciplinario de Ciencias Marinas—Cicimar*), Northwest Biological Research Center (*Centro de Investigaciones Biológicas del Noroeste—Cibnor*), and the Universidad Autónoma de Baja California (*Universidad Autónoma de Baja California—UABC*), the research aimed to ascertain the possible causes of *C. caretta* stranding and death and to create a reliable technical information and data base on the most relevant aspects of the phenomenon. In addition to an exhaustive review of published information on the subject, the research included a clinical and forensic study, with samples obtained in 2013 and 2014 of both live specimens sighted in the waters of the Gulf of Ulloa and stranded specimens found on San Lázaro beach.¹⁵⁹ The results of the clinical analysis (blood composition and chemistry, bacteriological and parasitological examinations, skin biopsy) of samples taken from 15 live turtles, necropsies performed on two carcasses, and forensic analysis of the degraded remains of 6 stranded specimens showed the existence of certain chronic infections and various “causal and potential agents of disease and even ... death,” as well as signs of drowning and death

156. A. Mancini and Proyecto Caparacho (2007), *Incidental Bycatch or Directed Harvest: Sea Turtle Mortality Rate and Causes in Baja California Sur, Mexico*, final report by Agnese Mancini, doctoral candidate, Universidad Autónoma de Baja California Sur, with Proyecto Caparacho, beneficiary of the Rufford Small Grants for Nature Conservation Fund, at 14, at: <<https://bit.ly/3sw171O>>. See also <<https://bit.ly/3LM6Reb>>.

157. Profepa’s records of turtle strandings on San Lázaro beach, Magdalena Island, BCS, indicate that on field trips conducted from January to December 2013, a total of 943 stranded turtles were found, of which 785 were *C. caretta*, with July being the peak month. Cf. 2018 Report on Actions, Tables 13 and 14, at 60-1, at: <<http://cec.org/files/sem/20231103/aaf005.pdf>>.

158. S. Lluch Cota, F. N. Melo Barrera, and E. A. Gómez Gallardo Unzueta (eds.) (2014), *Estudio sobre las causas de muerte de la tortuga amarilla (Caretta caretta) en la costa occidental de Baja California Sur (golfo de Ulloa)*, final research report, UABCS-Cicimar-Cibnor, Mexico, at: <<https://bit.ly/3R31Xv7>>.

159. *Ibid.* at 1-2.

from the cold (see Table 3); however, the cause of death could not be determined with certainty, in part because the advanced state of decomposition in which the remains were found made it difficult to carry out a conclusive analysis, and also because the small number of samples meant that the figures obtained are not representative of the loggerhead turtle population in the region.¹⁶⁰ Even though multiple etiologies (e.g. presence of multiple pathogens) were found in the live turtles analyzed, none of these predominated and all individuals were in good health and nutritional condition, with blood chemistry and biometry similar to those reported internationally and locally; therefore, the authors posited that the problem of *C. caretta* mass mortality recorded in the Gulf of Ulloa is due to multiple factors and that the possible causes, in addition to bycatch and interaction with fishing gear, include factors such as diseases and parasites, red tide intoxication, climate variability, and extreme environmental conditions.¹⁶¹

Table 3. Results of clinical and forensic analysis of sea turtle specimens in the Gulf of Ulloa

Specimens analyzed	Symptoms detected	Diagnosis
Fifteen live turtles (10 <i>C. caretta</i> and 5 <i>L. olivacea</i>)	Blood changes associated with chronic active infections (no definition of specific etiological agent: bacteria or blood parasites).	Chronic infection that may diminish the turtles' physiological capacity.
One dead specimen (<i>C. caretta</i>) found drifting	Chronic heart lesion compromising cardiac function, which could cause death by drowning or pulmonary aspiration of seawater.	Death by drowning, with no determination as to the causal factor (not linked to gillnets, but possibly to deep-sea fishing nets).
Second dead specimen (<i>C. caretta</i>) found stranded	Multiple etiologies: anisakiasis (zoonotic parasitic disease), fibropapillomatosis (first case of a loggerhead turtle with this condition recorded in northwestern Mexico), and a hibernoma (a benign tumor reported in animals after hibernation and with sudden changes of from food abundance to scarcity).	Cold stunning linked to continuous exposure to water temperatures under 14 °C, [†] although any one of the multiple etiologies detected could have caused severe illness or even death all by itself.
Six specimens partially devoured by scavengers (found stranded on the beach)	Abundant fat, indicating good body condition. No net-caused lesions observed.	Death possibly linked to low water temperatures (cold stunning).

[†] Note: Daytime water temperatures of 14-16 °C were reported on the days prior to the field trip of 24 March 2014, when six partially eaten turtles and one well-preserved dead specimen were found on San Lázaro beach. Therefore, based on the results of the forensic analysis, the cause of death was declared to be cold stunning.

Source: Table based on data taken from Amaury Cordero Tapia and Eduardo Reséndiz Morales (2014), "Muestreo de tortugas vivas y varadas: reporte médico forense," Appendix II, at 64-65, 72, in S. Lluch Cota, F. N. Melo Barrera, and E. A. Gómez Gallardo Unzueta, eds., *Estudio sobre las causas de muerte de la tortuga amarilla (Caretta caretta) en la costa occidental del Baja California Sur (golfo de Ulloa)*, final research report, UABCS-Cicimar-Cibnor, Mexico, online at <<https://bit.ly/40PF2bj>>.

160. *Ibid.* at 3 and Appendix II (at 33-5, 64-5).

161. *Ibid.* at 3-4, 10-11, 19-20, and Appendix II (at 65).

78. The findings of the UABCS-Cicimar-Cibnor technical specialists' group indicate that: i) interaction with fishing can hardly be associated with the major mass mortality events as a *sole cause* [emphasis added]; ii) in addition to fishing bycatch mortality, there are other factors that could have weakened the turtles' state of health and contributed to the rise in mass mortality observed in the region, and iii) similar events have occurred in the Gulf of Ulloa and other regions in previous years.¹⁶²
79. In 2014, Conapesca drafted the Comprehensive Fisheries Zoning Plan for the Gulf of Ulloa, Baja California Sur (*Programa integral de ordenamiento pesquero en el golfo de Ulloa, Baja California Sur*). The overall objective was to build a system of adaptive fisheries management that would both generate economic benefits for the local population and provide for the conservation of protected species affected by bycatch. This plan put forward several hypotheses and lines of enquiry concerning the possible causes of *C. caretta* mortality, as shown in Table 4 below.

Table 4. Causes of *C. caretta* mortality¹⁶³

Hypothesis	Lines of enquiry
Loggerhead turtle mortality is caused by the presence of a toxic or radioactive substance.	<ul style="list-style-type: none"> • Toxicological analysis of tissues and vital organs to detect the presence of heavy metals and/or chemicals (diesel, industrial waste, etc.) • Toxicological and histopathological analysis of dead turtles • Ecotoxicological studies of the entire region • Effect of radioactivity from disaster in Fukushima, Japan, 2011
Loggerhead turtle mortality is caused by environmental factors, changes in marine currents (and ultimately low temperatures) or the presence of red tides.	<ul style="list-style-type: none"> • Cruises to generate oceanographic data and identify environmental anomalies • Generation of a map of ocean and coastal currents to understand the dynamics of these phenomena in the region • Review of data and information on harmful algal blooms in recent years in order to determine the main species recorded • Studies to assess mortality caused by severe hypothermia
Loggerhead turtle mortality is caused by a disease (virus, bacteria, etc.) that may affect all or a large part of the population.	<ul style="list-style-type: none"> • Histopathology and blood biochemistry to identify fibropapillomatosis
Loggerhead turtle mortality is caused by interaction with fishing gear used by the small-scale fleet in the region.	<ul style="list-style-type: none"> • Technical assistance program for finfish and shark fisheries on smaller boats • Reinforcement of on-board observers program for the mid-sized and deep-sea shark fleet • Development of more selective fishing gear for the finfish fishery (e.g., traps)

162. The findings of the group of experts were included in *Reporte sobre acciones del sector ambiental para la protección de las tortugas marinas en México, enero-diciembre 2018*, issued by Semarnat in 2019. This report formed a part of the information submitted by Mexico to the United States government on the implementation of sea turtle protection measures with the aim of coordinating the measures taken in Mexico with the efforts undertaken in the United States. See 2018 Report on Actions, at 64-5, at: <<http://cec.org/files/sem/20231103/aaf005.pdf>>.

163. Conapesca (2014), *Comprehensive Fisheries Zoning Plan for the Gulf of Ulloa, Baja California Sur (Programa integral de ordenamiento pesquero en el golfo de Ulloa, Baja California Sur)*, National Aquaculture and Fisheries Commission, Mexico, pp. 9-10, at: <<http://cec.org/files/sem/20240306/aal005.pdf>> [Comprehensive Fisheries Zoning Plan].



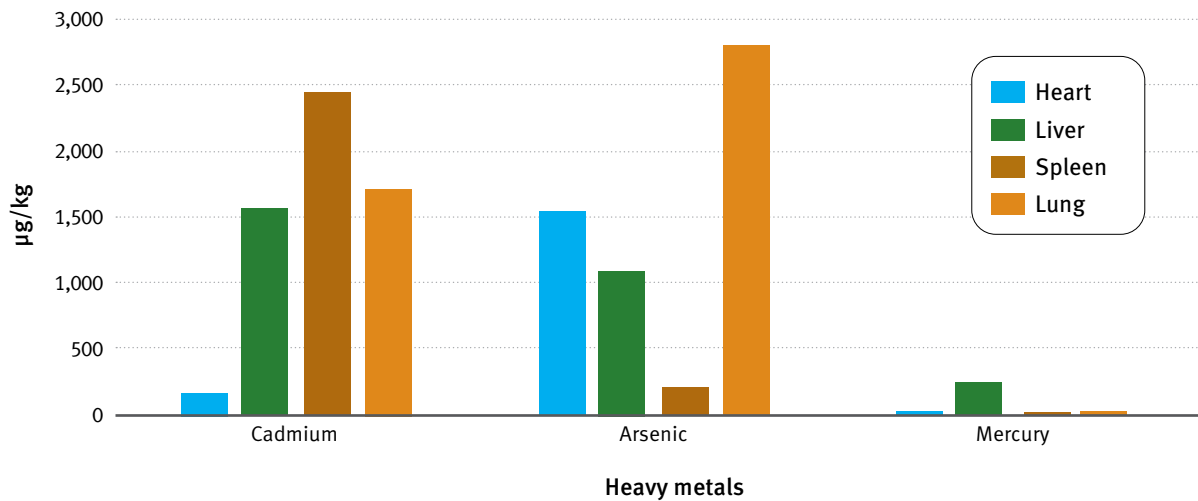
Photo: Center for Biological Diversity

80. In 2017, a study was published by C. P. Ley Quiñónez *et al.* (2017) on the presence of potentially toxic heavy metals in tissue samples from loggerhead turtles in the Gulf of Ulloa, BCS. The results showed the presence of zinc, cadmium, copper, manganese, nickel, and arsenic in blood samples taken from individual turtles. The heavy metal concentrations were determined to be low, and the turtles examined were said to be in “good physical condition,” but it was nonetheless suggested that the presence of arsenic and cadmium may pose a significant health risk to turtles in the region.¹⁶⁴
81. Another analysis of heavy metals potentially toxic to marine life was included in the *Report on actions taken by the environmental sector to protect sea turtles in Mexico*, a report issued in 2021. Further to the stranding of 367 *C. caretta* individuals on the beaches of Magdalena Island from 18 November to 10 December 2020, Profepa commissioned an analysis to detect the presence of pesticides and other chemicals in tissue samples taken from a loggerhead turtle specimen found in good condition. The analysis detected the presence of cadmium, arsenic, and mercury, albeit in concentrations below the levels considered toxic; as regards other elements (light metals such as aluminum, calcium, chromium, copper, magnesium, and selenium), the concentrations found were average for the species (see Figures 12 and 12a). The findings indicate that the heavy metal concentrations found in the tissue samples were below those reported for the species in other studies. This fact, coupled with the fact that tissues from only one individual were analyzed, made it impossible to establish a direct correlation with the turtle stranding and mortality episode in question.¹⁶⁵

164. C. P. Ley Quiñónez *et al.* (2017), “Associations between trace elements and clinical health parameters in the North Pacific loggerhead sea turtle (*Caretta caretta*) from Baja California Sur, Mexico,” *Environmental Science and Pollution Research* 24: 9530-7, at: <<https://bit.ly/45gdDj5>>.

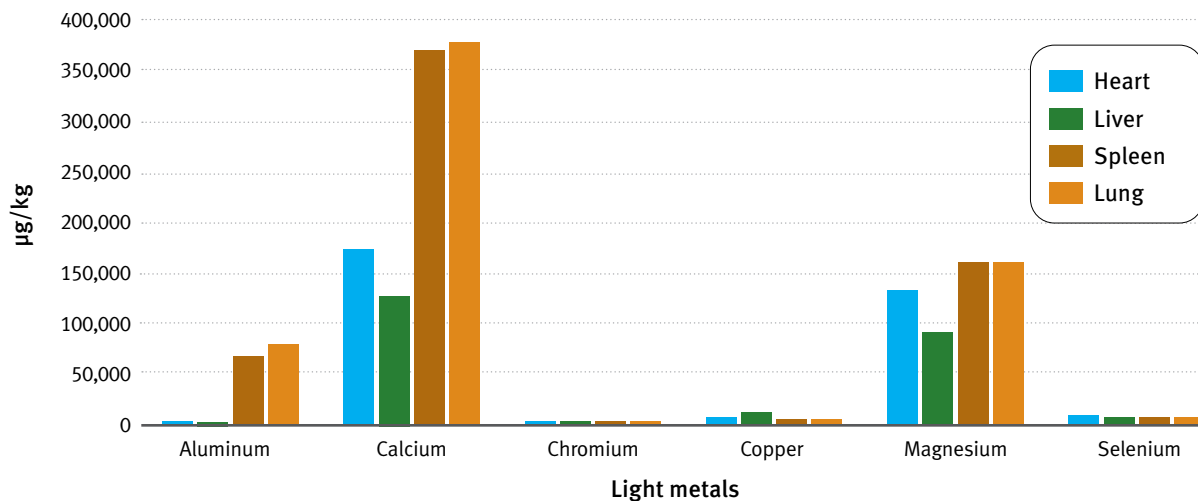
165. Semarnat (2021), *Reporte sobre acciones del sector ambiental para la protección de las tortugas marinas en México (enero-diciembre de 2020)*, Mexico, at 77-87, at: <<http://cec.org/files/sem/20231103/aaf007.pdf>>.

Figure 12. Concentration of heavy metals in a loggerhead turtle specimen found on San Lázaro beach, Gulf of Ulloa (November-December 2020)



Source: Semarnat (2021), *Reporte sobre acciones del sector ambiental para la protección de las tortugas marinas en México, enero-diciembre 2020*, Mexico, online at <<http://cec.org/files/sem/20231103/aaf007.pdf>>.

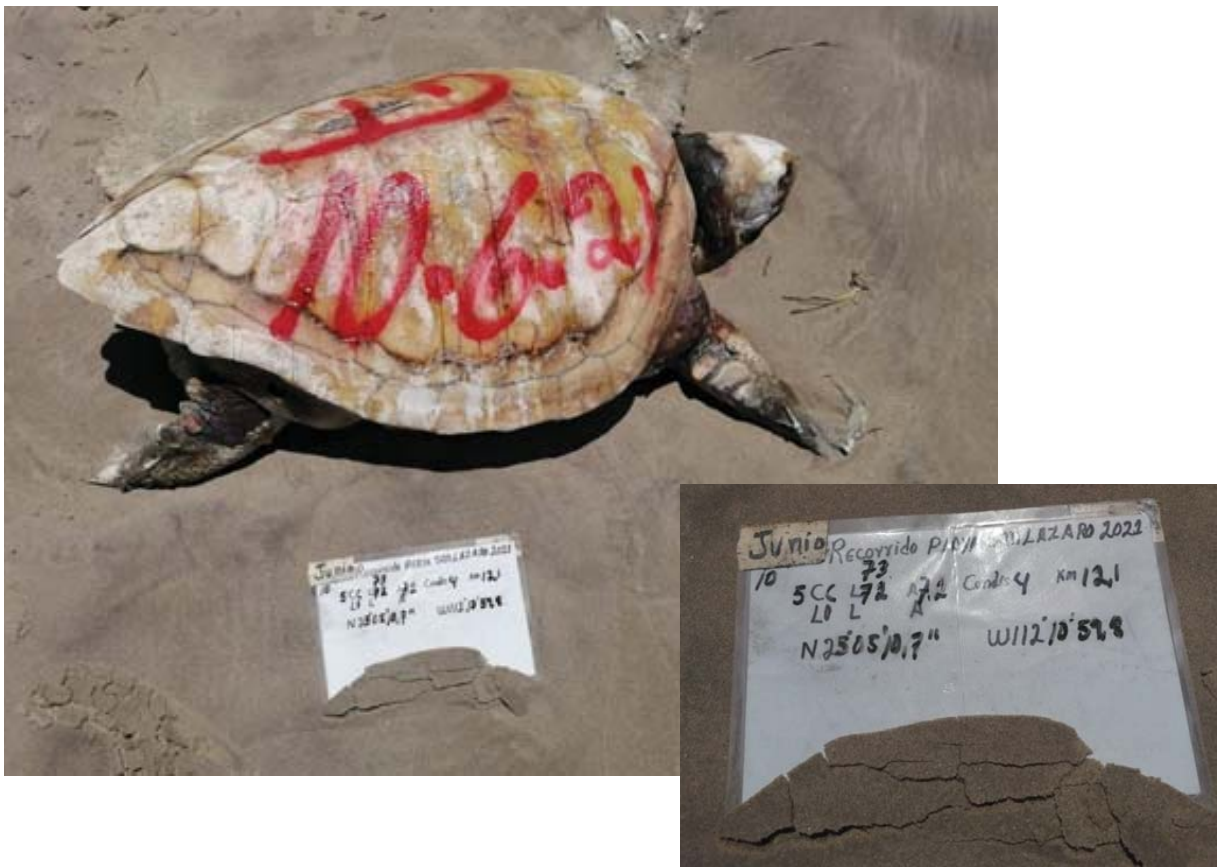
Figure 12a. Concentration of light metals in a loggerhead turtle specimen found on San Lázaro beach, Gulf of Ulloa (November-December 2020)



Source: Semarnat (2021), *op. cit.*, online at <<http://cec.org/files/sem/20231103/aaf007.pdf>>.

82. Another hypothesis put forward to explain the phenomenon of mass sea turtle strandings in the Gulf of Ulloa is that the presence of temperature anomalies in the water column in connection with La Niña events (sustained decrease in surface water temperature below 18-16°C) may have a lethal impact. While turtles can survive at water temperatures near 10°C, prolonged physiological lethargy as a result of prolonged periods at temperatures below 18°C reduces their motor capacity and affects their immune system, making them more vulnerable to infectious diseases. Empirical evidence suggests that temperatures below 10°C induce lethargy and shock, during which exposure to lethal factors increases.¹⁶⁶ This is consistent with information from the National Marine Fisheries Service (NMFS, also known as NOAA Fisheries), suggesting that temperatures below 10°C cause loggerhead sea turtles to enter into hypothermia.¹⁶⁷ In a state of hypothermia, the risk of predator attacks, boat collisions, and entanglement increases considerably, and with it the probability of death by drowning.¹⁶⁸

Photo 3. Markings on carcasses of loggerhead turtle (*C. caretta*) on San Lázaro beach, Magdalena Island, Comondú, BCS



Source: Conanp, *Reporte de varamientos masivos de tortugas amarillas (C. caretta) en isla Magdalena, BCS, 8 August 2021*, at: <<http://cec.org/files/sem/20231103/aah006.pdf>>.

166. C. A. Salinas Zavala, M. V. Morales Zárate y R. O. Martínez Rincón (2020), *op. cit.*, at 214-215, at: <<https://bit.ly/49jYCjv>>.

167. "Cold-Stunning and Sea Turtles – Frequently Asked Questions," NOAA Fisheries, at: <<https://bit.ly/3UDV72t>>.

168. C. A. Salinas Zavala, M. V. Morales Zárate, and R. O. Martínez Rincón (2020), *op. cit.*, at 214-15, at: <<https://bit.ly/49jYCjv>>.

Photos 4 and 5. Loggerhead turtle (*C. caretta*) carcasses with shell markings observed during the Secretariat's field trip



Loggerhead sea turtle (*C. caretta*) remains at San Lázaro beach, Magdalena Island, Comondú, BCS, observed and photographed on 19 July 2023 during the Secretariat's field trip. Photographs available at: <<http://cec.org/files/sem/20240313/ao002.zip>>.

83. In 2020, a group of researchers published the results of a correlation analysis between ocean surface temperatures and *C. caretta* mortality events recorded in the Gulf of Ulloa during two periods: 2003–2006 and 2012–2014. It is noted that the study in question was not conclusive and is supported on an empirical basis. The study suggests that for both periods, the largest number of loggerhead juvenile deaths took place after several consecutive days of ocean surface temperatures below the optimal range for the species (18–23°C). The results suggest that temperatures below 18°C increase the risk and vulnerability of turtles to infectious diseases and cause lethargy in individuals by diminishing their metabolic function, which affects their ability to escape predators and to avoid obstacles such as fishing nets.¹⁶⁹
84. To prepare a factual record, the Secretariat and an expert on marine biology made a field trip on 19 July 2023 to San Lázaro beach on the west coast of Magdalena Island, facing the community of Puerto Adolfo López Mateos in the municipality of Comondú, BCS. The Secretariat was able to observe loggerhead turtle carcasses (photos 4 and 5) whose shells were marked with the initials of Grupo Tortuguero de Las Californias, A.C. indicating that these specimens had already been counted and recorded during the routine monitoring conducted by that organization.

169. *Ibid.* at 214, 220, 223-4.

- 85 Two of the stranded loggerhead turtles observed during the Secretariat's field trip were found in an advanced state of decomposition (Photos 6 and 7). In both cases, the turtle's stomach protruded from the mouth, which is typical when the death was caused by drowning, although neither carcass exhibited marks caused by interaction with nets. It may be observed, however, that in the opinion of an expert consulted by the Secretariat, the state of decomposition of the carcasses would have made it unlikely to identify such marks.

Photos 6 and 7. Loggerhead turtles (*C. caretta*) in a decomposed state observed during the Secretariat's field trip



Loggerhead sea turtle (*C. caretta*) remains at San Lázaro beach, Magdalena Island, Comondú, BCS, observed and photographed on 19 July 2023 during the Secretariat's field trip. Photographs available at: <<http://cec.org/files/sem/20240313/aa002.zip>>.

- 86 Other studies have supported the idea that other sea turtles in the region are affected by bycatch. A study of the green turtle (*Chelonia mydas*, classified by some authors as *C. mydas agassizii*) established that mortality of this species was due to bycatch and to human consumption. The study results indicate that most of the green sea turtle carcasses were found in the summer months (when most inshore fishing takes place), and the authors stressed the need to address the threat of bycatch and clandestine fishing.¹⁷⁰
- 87 In this regard, observations of sea turtle remains reported by a resident of Baja California Sur suggest that the deaths were caused deliberately. On 4-5 August 2023, on the beaches at San Juanico, BCS, the remains of seven green turtles exhibiting lacerations on all four flippers and an incision on the neck were found. According to the testimony of a marine biology expert consulted by the Secretariat, the flippers were cut in order to recover the net, while the neck incision typically causes turtles to swallow water and sink to the bottom thus avoiding being found dead on the beach, although in some cases the carcasses tend to float and end up on the beach, as may be seen in Photo 8. The photographic documentation is in the Secretariat's archives.¹⁷¹

170. J. Senko *et al.* (2014), "Bycatch and directed harvest drive high green turtle mortality at Baja California Sur, Mexico," *Biological Conservation* 169: 24-30, at: <<https://bit.ly/49qlqNu>>.

171. Photographs of the remains of a green sea turtle (*Chelonia mydas*) in San Juanico, BCS (4-5 August 2023), at: <<http://cec.org/files/sem/20240313/aa001.zip>>.

- 88 It should be noted that a study has reported that loggerhead turtle mortality studies provide underestimates, since they are assessments based on the number of individuals found on the beach but do not take into consideration the number of bycaught specimens that end up at the bottom of the ocean.¹⁷² In addition, the largest number of deaths are reported to be juveniles, before reaching their sexual maturity and before their migration to nesting sites, rather than adults that have already gone through their reproductive phase.¹⁷³
- 89 The following sections present the measures implemented by the Party in question to enforce the environmental laws in question. In addition, information is presented on the various mechanisms and initiatives in Mexico for the protection of sea turtles, and specifically the loggerhead turtle.

Photo 8. Remains of a green sea turtle (*Chelonia mydas*) in San Juanico, BCS (4–5 August 2023)



Source: Photograph taken by a marine biology expert consulted by the Secretariat whose identity is confidential, at: <<http://cec.org/files/sem/20240313/aao001.zip>>.

172. “It is important to point out that assessments made on the basis of carapaces found on beaches and dump-sites are an under-estimate of real mortality rate as a lot of carapaces are hidden or thrown in the water” at: A. Mancini and Proyecto Caparacho (2007), *Op. cit.*, p. 5, at: <<https://bit.ly/3sw171O>>.

173. *Idem*.



5. Measures Taken by Mexico

5.1 Background

90. In recent decades, various instruments have been drafted and put into practice in Mexico to protect the loggerhead turtle and other turtle species, and these instruments contribute to the enforcement of some of the environmental provisions covered by this factual record. As part of the reference framework, to provide background, and to facilitate the reader's understanding of the enforcement measures taken by the Party in question, the following is a summary of these instruments, which are furthermore a partial reflection of multiple institutional efforts deployed at the national scale with a view to ensuring the protection and conservation of sea turtles in Mexico.
91. In 1986, the Order Establishing, as Reserve Zones and Sites of Refuge for the Protection, Conservation, Repopulation, Development, and Monitoring of the Various Species of Sea Turtle, the Places where These Species Nest and Spawn (*Decreto por el que se determinan como zonas de reserva y sitios de refugio para la protección, conservación, repoblación, desarrollo y control de las diversas especies de tortuga marina, los lugares en que anidan y desovan dichas especies*).¹⁷⁴ This order makes reference to studies whose findings led to the conclusion that various sea turtle species had been irrationally and improperly exploited, causing significant population declines.¹⁷⁵ The order established 16 reserve zones and refuge sites for the protection of nesting and breeding areas for various sea turtle species on beaches throughout the nation's territory. In these areas, catching, hunting, disturbing, or causing harm in any manner to sea turtle specimens nesting and breeding there, as well as collecting, possessing, or selling eggs or their byproducts, were totally prohibited.¹⁷⁶ In addition, the order placed a total ban on fishing or catching sea turtles by any means in waters adjacent to the refuge areas during the breeding season.¹⁷⁷
92. A few years later, in 1990, the Closed Season Order was promulgated. This created a total and indefinite closed season on all sea turtle species and subspecies in waters under federal jurisdiction in the Gulf of Mexico, the Caribbean Sea, and the Pacific Ocean, including the Gulf of California,¹⁷⁸ in addition to a strict ban on any harvesting, catching, hunting, disturbing, or harming of sea turtle specimens.¹⁷⁹ Regarding bycatch, the order provided that in such event, sea turtle specimens were to be returned to the water, regardless of their physical condition, whether alive or dead, possession thereof being prohibited.¹⁸⁰
93. In 1993, the Interministerial Commission for the Protection and Conservation of Sea Turtles (*Comisión Intersecretarial para la Protección y Conservación de las Tortugas Marinas*) was created. Some years later, in 2000, Mexico ratified the Inter-American Convention for the Protection and Conservation of Sea Turtles (IAC, in force as of May 2001).¹⁸¹

174. Government of Mexico (1986), "Decreto por el que se determinan como zonas de reserva y sitios de refugio para la protección, conservación, repoblación, desarrollo y control, de las diversas especies de tortuga marina, los lugares en que anida y desova dicha especie," Office of the President of the Republic, published in the DOF on 29 October 1986, at: <<https://bit.ly/48EQWYR>>.

175. *Ibid.*, preamble.

176. *Ibid.*, first and second articles.

177. *Ibid.*, ninth article.

178. Closed Season Order, at: <https://bit.ly/DOF_31-05-1990>.

179. *Ibid.*, second article.

180. *Ibid.*, third article.

181. Office of the President of the Republic, *Acuerdo por el que se crea con carácter permanente la Comisión Intersecretarial para la Protección y Conservación de las Tortugas*, published in the DOF on 2 December 1993, at: <<https://bit.ly/3sV5BiM>>.

94. The year 1994 marked the publication of the first Mexican official standard designating the terrestrial and aquatic species and subspecies of wild flora and fauna that are rare, endemic, threatened, endangered, or subject to special protection and establishing the specifications for their protection.¹⁸² In this standard (NOM-059), the loggerhead turtle (*C. caretta*) was listed in risk category “P” meaning endangered (*en peligro de extinción*), a category containing species or subspecies “whose area of distribution or population size has drastically declined, jeopardizing their biological viability throughout their range due to multiple factors such as drastic destruction or modification of their habitat ... overexploitation, disease, and predation.”¹⁸³ The 1994 version of NOM-059 was updated in 2001,¹⁸⁴ and again in 2010.¹⁸⁵ The 2010 version is the one currently in force; in it, the loggerhead turtle continues to be listed as endangered.¹⁸⁶
95. In 2013, NOAA Fisheries identified Mexico’s lack of a regulatory program comparable to that of the United States and aimed at reducing or minimizing bycatch of loggerhead turtles. Between 2013 and 2023, NOAA Fisheries issued various reports and certifications that encouraged Mexico’s production of reports on measures adopted for the protection of *C. caretta*, including those implemented in the Gulf of Ulloa by means of the Fish Refuge Order and the Refuge Area Order, issued in 2016 and 2018, respectively. In this regard, the submission references the certification process applied to Mexico by NOAA.¹⁸⁷ For its part, Mexico’s response to submission SEM–20-001 refers to the positive certification determination issued by the United States in 2016 in relation to the measures implemented by Mexico to reduce loggerhead turtle bycatch in the Gulf of Ulloa.¹⁸⁸
96. In 2014, the Priority Species and Populations Order¹⁸⁹ was published with the goal of determining priority species and promoting the conservation and recovery of a reasonable and attainable number of species of crucial importance that would serve to extend the benefits achieved to other species and critical habitats, thereby helping to ensure the permanence and ecological integrity of biodiversity.¹⁹⁰ The loggerhead turtle is one of the species included as a conservation priority on the list contained in this order.
97. In 2016, with the essential goal of contributing to the protection of populations of sea turtles, including the loggerhead turtle, Mexican official standard NOM-061-SAG-Pesc/Semarnat–2016 was published, setting specifications for sea turtle excluders used by the shrimp trawling fleet in waters under Mexican federal jurisdiction.¹⁹¹

182. NOM-059-ECOL-1994, *Que determina las especies y subspecies de flora y fauna silvestres terrestres y acuáticas en peligro de extinción, amenazadas, raras y las sujetas a protección especial, y que establece especificaciones para su protección*, published in the DOF on 16 May 1994, at: <<https://bit.ly/3tgSFU0>>.

183. *Ibid.*, sections 3, “Definiciones,” 3.6, “Categorías de riesgo,” and 5.2, “Especies de fauna silvestre terrestres y acuáticas” (lists).

184. NOM-059-ECOL–2001, *Protección ambiental-Especies nativas de México de flora y fauna silvestres-Categorías de riesgo y especificaciones para su inclusión, exclusión o cambio-Lista de especies en riesgo*, published in the DOF on 6 March 2002, at: <<https://bit.ly/3RQUYY9>>.

185. NOM-059-SEMARNAT–2010, *Protección ambiental-Especies nativas de México de flora y fauna silvestres-Categorías de riesgo y especificaciones para su inclusión, exclusión o cambio-Lista de especies en riesgo*, published in the DOF on 30 December 2010, at: <<https://bit.ly/46Zg9fd>>.

186. Cf. Amendment to appendix III, “Lista de especies en riesgo,” of NOM-059-SEMARNAT–2010, *Protección ambiental-Especies nativas de México de flora y fauna silvestres-Categorías de riesgo y especificaciones para su inclusión, exclusión o cambio-Lista de especies en riesgo*, published 14 November 2019, at: <<https://bit.ly/40GZFWU>>.

187. Submission, Appendix 1, “Contexto del hábitat de la especie y antecedentes México-Estados Unidos sobre la tortuga caguama (*Caretta caretta*)” at 3-5, at: <<https://bit.ly/3SWezGU>>.

188. Response at 19, at: <<https://bit.ly/4affFray>>.

189. Semarnat (2014), “Acuerdo por el que se da a conocer la lista de especies y poblaciones prioritarias para la conservación,” published in the DOF on 5 March 2014, at: <<https://bit.ly/3tjL0Eq>>.

190. *Ibid.*, preamble.

191. NOM-061-SAG-PESC/SEMARNAT–2016, *Especificaciones técnicas de los excludores de tortugas marinas utilizados por la flota de arrastre camaronera en aguas de jurisdicción federal de los Estados Unidos Mexicanos*, published in the DOF on 13 December 2016, at: <<https://bit.ly/45skV3B>>.

98. Between 2016 and 2023, Mexico took other measures and adopted various instruments to protect the loggerhead turtle, including the preparation, in 2018, of the technical study (estudio técnico justificativo—ETJ) necessary to justify the declaration of the Gulf of Ulloa, BCS, as a refuge area for *C. caretta*, whose results provided the basis for the establishment of the Refuge Area, and the drafting and implementation of the Species at Risk Conservation Plan (*Programa de Conservación de Especies en Riesgo—Procer*), the Marine and Regional Ecological Zoning Plan for the North Pacific (*Programa de Ordenamiento Ecológico Marino y Regional del Pacífico Norte—POEMR-North Pacific*), and the Loggerhead Turtle Conservation Action Plan (*Programa de Acción para la Conservación de la Especie Tortuga Caguama—PACE-C. caretta*). The enforcement of Procer, POEMR-North Pacific, PACE-C. *caretta*, and other instruments is addressed in section 5.4, while the measures adopted by Mexico for the effective enforcement of the Refuge Area Order (2018), the Fish Refuge in Order (2016), and its extension (2018) are presented in section 5.5.

5.2 Filing of complaints with the Office of the Attorney General of the Republic in connection with the death of loggerhead turtle specimens in the Gulf of Ulloa, BCS

99. The Submitters assert that despite the officially recorded bycatch numbers for loggerhead turtle specimens in the Gulf of Ulloa¹⁹² and notwithstanding the multiple citizen complaints received on this subject,¹⁹³ the Mexican authorities did not file any complaints with the Office of the Federal Public Prosecutor during the period from 2010 to July 2020 for acts relating to loggerhead turtle deaths in the region that might have involved the commission of environmental offenses.¹⁹⁴ The submission emphasizes that pursuant to Mexican criminal law, catching, harming, or killing any sea turtle specimen qualifies as a federal crime punishable by up to nine years in prison.¹⁹⁵
100. The Party in question indicated that in order to file a complaint with the Office of the Federal Public Prosecutor, there must be sufficient evidence to prove the *corpus delicti*, i.e., to demonstrate “the existence of a fact with all its constituent elements,” and that “it must be proved that the harm or killing of any turtle or mammal specimen was caused by one or more responsible persons.”¹⁹⁶ According to information from the Party in question, the capture of, harm to or deprivation of life of any turtle specimen is a crime according to LGEEPA Articles 182 and 420: fraction 1 of the Federal Penal Code, and for which a complaint may be filed before the Office of the Federal Public Prosecutor. However, in accordance with the process established in the National Code of Criminal Procedures, it has not been possible to reliably establish who has committed or participated in the commission of this crime. The Party reiterates that the revocation of permits or authorizations is not the appropriate sanction, since no loggerhead sea turtle is subject to taking legally.¹⁹⁷

192. According to the Submitters, the information provided by Profepa itself shows that between 2017 and 2019, 889 *C. caretta* specimens were involved in bycatch incidents, with 99 dead turtles recorded in 2017, 459 in 2018, and 331 in 2019, exceeding the thresholds for bycatch in both the technical study (ETJ) conducted to declare the Gulf of Ulloa as a refuge area for the loggerhead turtle and the POEMR-North Pacific. Cf. Submission at 7 and 12-13, at: <<https://bit.ly/3Ti6f2P>>.

193. *Ibid.* at 8.

194. *Ibid.* at 7 and 13.

195. *Ibid.* at 13.

196. Response at 7, at: <<https://bit.ly/4affFray>>.

197. Profepa, file no. PFFPA/5.3/2C.28.2/13632 (15 December 2023), at: <<http://cec.org/files/sem/20240306/aal006.pdf>>.

101. The provisions cited by the Submitters recognize the human right to a healthy environment (Art. 4 fifth paragraph of the Constitution); provide that where Semarnat becomes aware of “acts or omissions that could constitute offenses under the applicable law, it shall file the corresponding complaint with the Office of the Federal Public Prosecutor” (LGEEPA Art. 182, first paragraph); give Profepa the power to “take any relevant action before the competent authorities when it becomes aware of acts, facts, or omissions constituting violations of administrative or criminal law” (LGEEPA Art. 202, first paragraph); establish the mechanism for addressing and investigating citizen complaints filed with the authority (RI-Semarnat Art. 45 paragraph II), and give Profepa the powers to investigate and determine environmental offenses and to denounce acts, facts, or omissions involving the probable commission of environmental offenses to the Office of the Federal Public Prosecutor (Art. 45 paragraphs XI and XII).
102. According to the information available to the Secretariat for the preparation of the factual record, the Government of Mexico documented, within the framework of the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), various measures it has taken in relation to the protection and conservation of the seven turtle species listed in CITES Appendix I, which includes the most endangered species among CITES-listed animals and plants, including *C. caretta* and, therefore, prohibits their export for commercial purposes.¹⁹⁸ In the document submitted to CITES in 2021, Mexico refers to the filing of criminal complaints with the FGR in connection with deaths of sea turtle specimens in the states of Baja California, Jalisco, and Quintana Roo, but none in relation to the loggerhead turtle in Baja California Sur;¹⁹⁹ it states that Profepa is continuing to carry out surveillance, detection, and enforcement measures in relation to sea turtles, and indicates that Profepa is continuing to work in coordination with the FGR to apply criminal sanctions to those responsible for possession, transportation, or illegal trafficking in sea turtles.²⁰⁰
103. In regard to impacts on loggerhead turtle specimens along the coast of Baja California Sur, Mexico’s report to CITES mentions the discovery of 25 dead *C. caretta* specimens and one live specimen during the 2021 fishing season (January-August), without it being possible to clearly ascertain the cause of death, although it was not possible to rule out gillnets and other fishing gear as a cause.²⁰¹
104. The Secretariat did not find any information about the filing of criminal complaints with the FGR as a consequence of the death of loggerhead turtle specimens in the Gulf of Ulloa, BCS.²⁰²

5.3 Inspection and surveillance visits and the application of administrative sanctions in relation to the loggerhead turtle in the Gulf of Ulloa, BCS

105. The Submitters contend that between 2010 and mid-2020, an average of less than two inspection and surveillance visits per year were conducted and that these did not result in any criminal or administrative sanctions, nor did they give rise to the revocation or suspension of fishing authorizations, permits, concessions, or licenses by virtue of the high loggerhead turtle mortality, nor to the implementation of measures to protect and conserve the species.²⁰³ In the same period, the catch of 889 loggerhead specimens was documented and the Profepa office in Baja California Sur (Profepa-BCS) received 33 citizen complaints relating to *C. caretta* deaths.²⁰⁴

198. Conabio (2021), *Respuesta a la notificación a las partes 2021/065: Aplicación de las decisiones 18.210 a 18.217 sobre tortugas marinas (Cheloniidae spp. y Dermochelyidae spp.)* (Mexico: Semarnat), at: <<http://cec.org/files/sem/20231123/aa006.pdf>>.

199. *Ibid.* at 2.

200. *Ibid.*

201. *Ibid.* at 3.

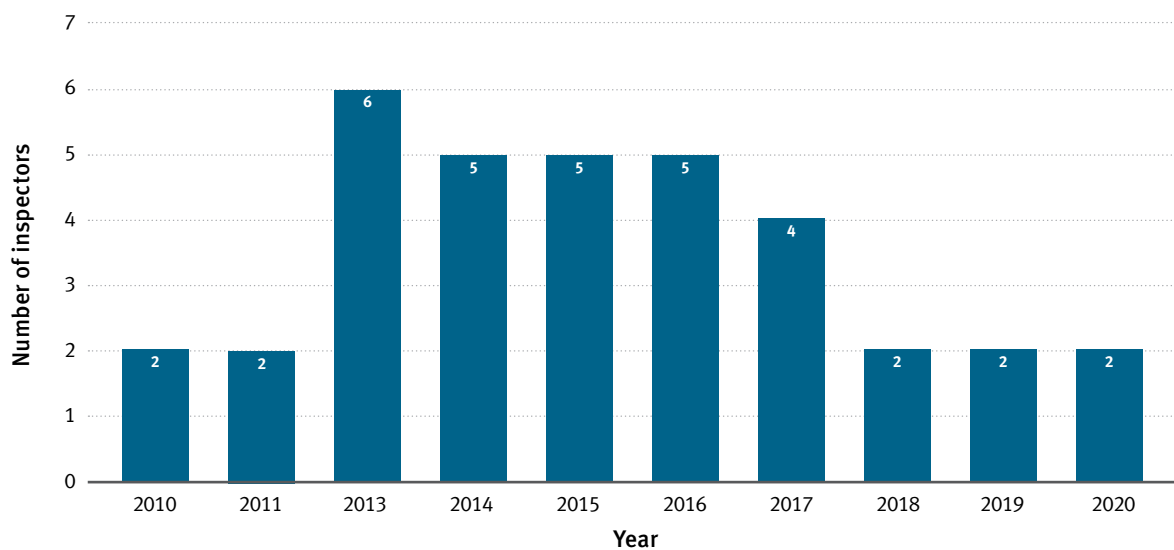
202. In relation to the lack of information on the filing of criminal complaints with the FGR, see Profepa’s Communication 2023, at: <<http://cec.org/files/sem/20231123/aa005.pdf>>; FGR, file no. FGR/UTAG/DG/004952/2023 (21 August 2023), in response to request for information no. 330024623002672 filed with the PNT, at: <<http://cec.org/files/sem/20231123/aa007.pdf>>.

203. Submission at 7, at: <<https://bit.ly/3Ti6f2P>>.

204. *Ibid.* at 8.

106. In this regard (inspection and surveillance visits, application of administrative sanctions), the Submitters cite provisions of the LGEEPA (Articles 5 paragraph XIX, 161, 171), the LGVS (Articles 9 paragraph XXI and 104), and the RI-Semarnat (Article 45 paragraphs I, V(a) and (c), VI, and X) that establish, as indicated above in section 2.2, “Environmental law in question,” the power of Semarnat, acting through Profepa, to monitor and promote compliance with both laws; to carry out acts of inspection and surveillance of such compliance, and in particular those necessary for the conservation of wildlife (including turtles, marine mammals, and other aquatic species at risk), and to apply relevant administrative sanctions where there are violations of the LGEEPA, its regulations, and any provisions arising from them, which may include applications to the competent federal, state, or municipal authorities for revocation of authorizations, permits, licenses, and concessions, as well as the implementation of safety, corrective, urgent, and/or restorative measures where there is an imminent risk of ecological disequilibrium or serious harm to natural resources.
107. The Party in question notes that the filing of a citizen complaint is not enough to determine a violation of environmental regulations, and that it is essential to carry out an inspection and identify the suspects. Likewise, the Party in question reiterates that in Mexico, the taking of any species of sea turtle is prohibited and therefore there is no possibility of granting authorizations for permits to take said species.²⁰⁵
108. The information to which the Secretariat had access for the preparation of the factual record indicates that between 2010 and 2020, the number of Profepa-BCS inspectors stationed in Puerto López Mateos and assigned to inspection and surveillance in that vicinity varied from a minimum of two to a maximum of six in 2013,²⁰⁶ the year of one of the largest loggerhead turtle stranding incidents (see Figure 10). In 2020, when the number of stranding events on San Lázaro beach exceeded that of 2013, there were two inspectors in this area of the Gulf of Ulloa.

Figure 13. Profepa-BCS inspectors assigned to Puerto Adolfo López Mateos (2010–2020)



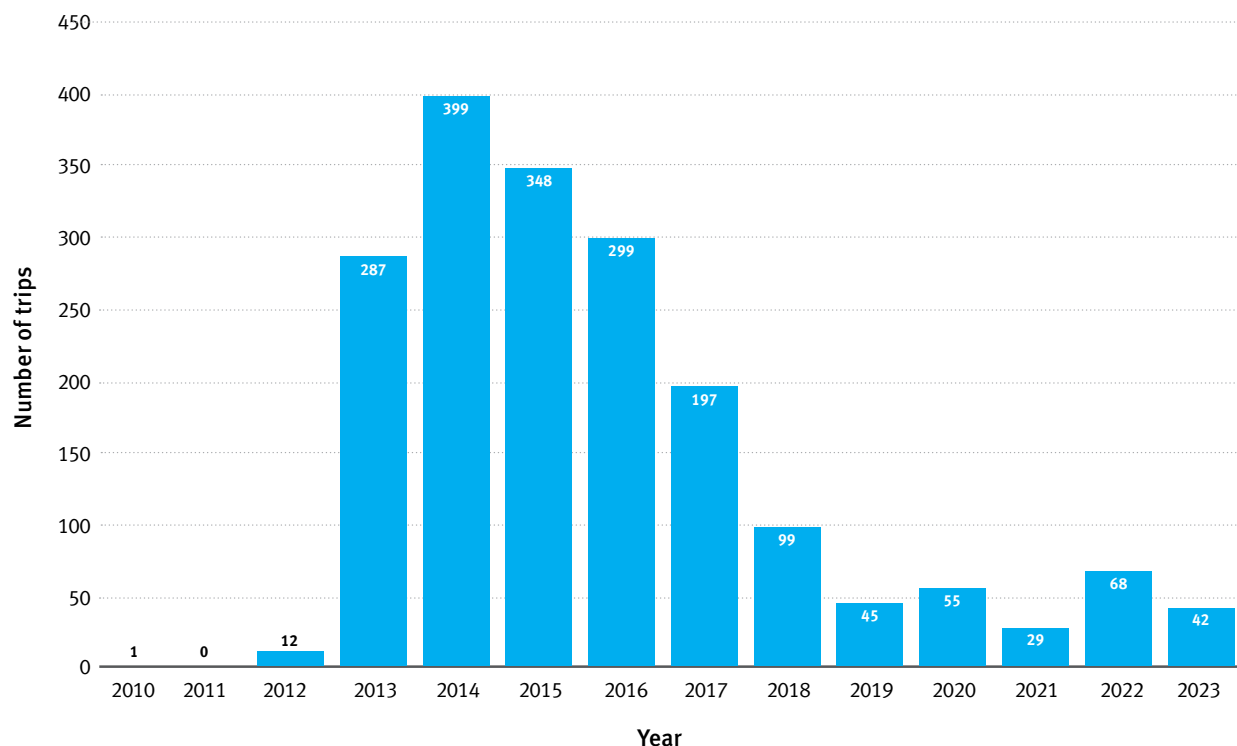
Source: Profepa, file no. PFPA/1.7/12C.6/2476/2023 (5 September 2023), in response to request for information no. 330024423001417 filed with the PNT, online at <<http://cec.org/files/sem/20231103/aad001.pdf>>.

205. Profepa, file no. PFPA/5.3/2C.28.2/13632 (15 December 2023), at: <<http://cec.org/files/sem/20240306/aal006.pdf>>.

206. Profepa, file no. PFPA/1.7/12C.6/2476/2023 (5 September 2023), in response to request for information no. 330024423001417 filed with the PNT, at: <<http://cec.org/files/sem/20231103/aad001.pdf>>.

109. During the meeting held by the Secretariat with the director of Profepa-BCS on 18 July 2023, she stated that Profepa has nine inspectors for the entire state, one of them permanently assigned to Puerto San Carlos, BCS. Further to the Secretariat’s verbal request, Profepa-BCS informed the Secretariat that it would not be possible to meet the inspector, nor would the inspector be available to accompany the Secretariat on its field trip.
110. The number of inspection and surveillance trips made by Profepa for the purpose of locating specimens of *C. caretta* on the beaches of Magdalena Island, Gulf of Ulloa between 2010 and 2023 varied over the years (see Figure 14).²⁰⁷ The inspection and surveillance trips increased from one in 2010 to 287 in 2013 (when nearly 1,000 loggerhead turtles stranded on San Lázaro beach were recorded) and 399 in 2014; however, from 2015 onward, the number of trips decreased to reach their lowest as follows: 45 in 2019, 55 in 2020 and 29 in 2021. A comparison of this data with the years of largest stranding incidents (cf. Figure 16) contrasts with the low number of trips and number of inspectors in 2019, 2020 and 2021.

Figure 14. Number of inspection and surveillance trips made by Profepa-BCS staff to detect *C. caretta* specimens on the Gulf of Ulloa (2010–2023)

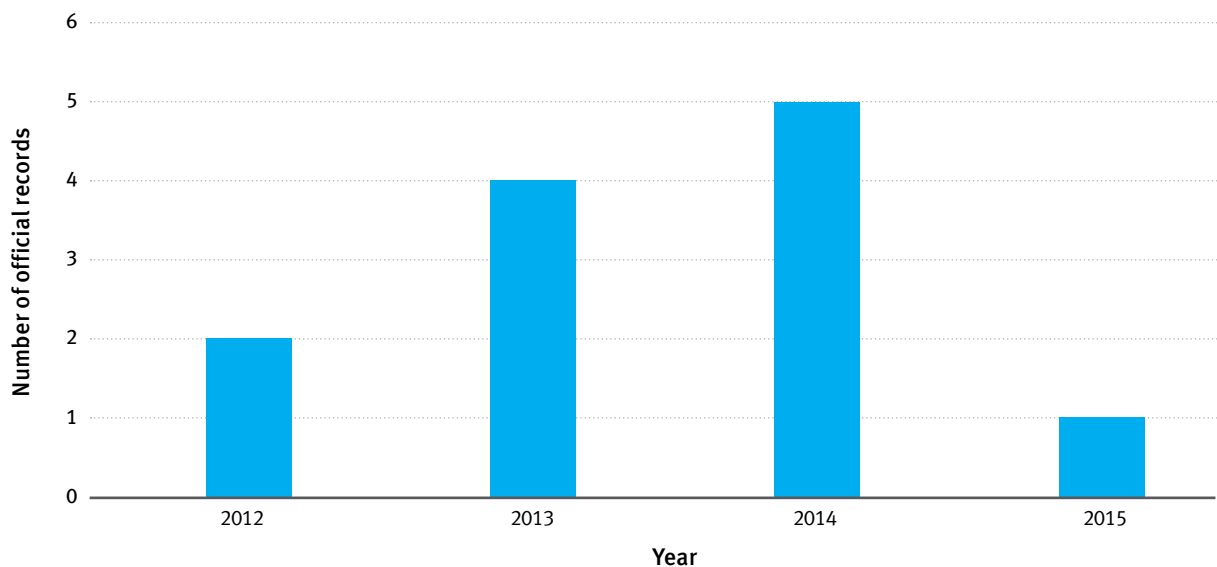


Source: Profepa, file no. PFPA/1.7/12C.6/2476/2023 (5 September 2023), in response to request for information no. 330024423001417 filed with the PNT, online at <<http://cec.org/files/sem/20231103/aad001.pdf>>.

207. *Ibid.*

111. Available information indicates that between 2012 and 2015, Profepa produced 12 detailed reports related to the detection of loggerhead turtle specimens in the Gulf of Ulloa (see Figure 15). None of the findings documented by Profepa in these reports resulted in administrative proceedings or sanctions.²⁰⁸
112. The reports produced by Semarnat on environmental sector measures for the protection of sea turtles in Mexico corresponding to 2021²⁰⁹ and 2022²¹⁰ state that Profepa is continuing its inspection trips to the beaches at San Lázaro, Gulf of Ulloa. However, neither one of the two documents contains additional information on the production of detailed records, nor information after 2015.
113. To recap, in the period 2012–2020, the number of stranded specimens of *C. caretta* recorded on the Gulf of Ulloa exceeded 100 specimens annually, except for 2015 and 2017, in which the recorded numbers were 80 and 99, respectively. During the period 2013–2020, Profepa-BCS had 2 to 6 inspectors in the Gulf of Ulloa area (no data was obtained for 2012).²¹¹ During this period, Profepa made 399 trips in 2014, declining to 55 in 2020 (see Figure 14 *supra*).

Figure 15. Detailed reports produced by Profepa in relation to *C. caretta* strandings on the Gulf of Ulloa (2012–2015)



Source: Profepa, file no. PFPA/1.7/12C.6/2476/2023 (5 September 2023), in response to request for information no. 330024423001417 filed with the PNT, online at <<http://cec.org/files/sem/20231103/aad001.pdf>>.

208. *Ibid.*

209. Semarnat, file no. SEMARNAT/UCVSDHT/UT/3556/2023 (2 October 2023), in response to request for information no. 330026723003521 filed with the PNT, Appendix 4, *Reporte sobre acciones del sector ambiental para la protección de las tortugas marinas en México (enero a diciembre de 2021)*, January 2022, at: <<http://cec.org/files/sem/20231123/aaj015.pdf>>.

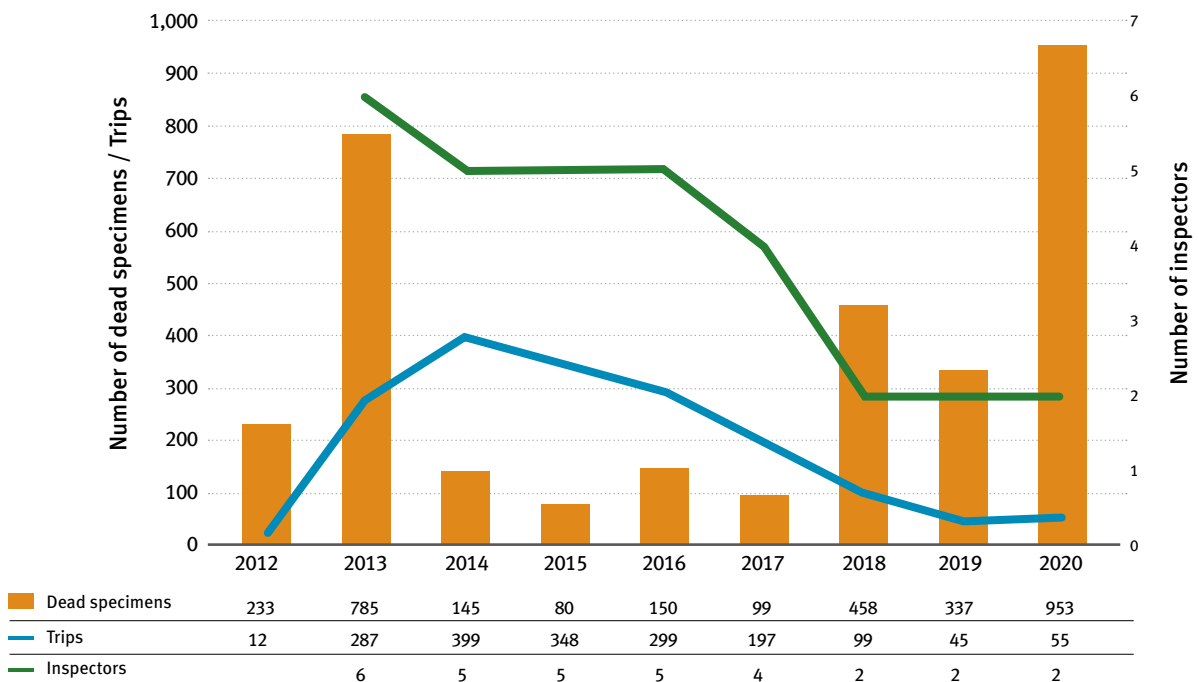
210. Semarnat, file no. SEMARNAT/UCVSDHT/UT/3556/2023 (2 October 2023), in response to request for information no. 330026723003521 filed with the PNT, Appendix 5, *Reporte sobre acciones del sector ambiental para la protección de las tortugas marinas en México (enero a diciembre de 2022)*, January 2023, at: <<http://cec.org/files/sem/20231123/aaj016.pdf>>.

211. Profepa, file no. PFPA/1.7/12C.6/0710/2020 (4 August 2020), in response to request for information no. 1613100058120 filed with the PNT, appendices, inspection reports for contingencies recorded on San Lázaro beach, Gulf of Ulloa, Puerto Adolfo López Mateos, municipality of Comondú, BCS, January 2019–June 2020, at: <<http://cec.org/files/sem/20231030/aab007.pdf>>; Profepa (2017), *Reporte de verificación de contingencias, playa San Lázaro, bahía de Ulloa, Puerto Adolfo López Mateos, municipio de Comondú, Baja California Sur*, at: <<http://cec.org/files/sem/20231123/aaj003.pdf>>; Profepa's Communication 2023, at: <<http://cec.org/files/sem/20231123/aaj005.pdf>>; Profepa, file no. PFPA/1.7/12C.6/2476/2023 (5 September 2023), in response to request for information no. 330024423001417 filed with the PNT, at: <<http://cec.org/files/sem/20231103/aad001.pdf>>.



Photo: Jason Cordell – istock

Figure 16. *C. caretta* strandings; trips and number of Profepa-BCS inspectors on Gulf of Ulloa (2012–2020)



Source: Produced by the Secretariat from data contained in Profepa reports:

- Number of dead specimens, Profepa, file no. PFPA/1.7/12C.6/2508/2023 (11 September 2023), *op. cit.*, online at <<http://cec.org/files/sem/20231123/aaj005.pdf>>.
- Number of trips, Profepa, file no. PFPA/1.7/12C.6/2476/2023 (5 September 2023), *op. cit.*, online at <<http://cec.org/files/sem/20231103/aad001.pdf>>.
- Number of inspectors, Profepa, file no. PFPA/1.7/12C.6/2476/2023 (5 September 2023), *op. cit.*, online at <<http://cec.org/files/sem/20231103/aad001.pdf>>.

5.4 Promotion, execution, updating, and evaluation of conservation activities on the Gulf of Ulloa, BCS

114. According to the Submitters, in the absence of technical/scientific information to serve as a basis for the design of relevant protection and conservation strategies and instruments, and having no mechanisms to review the effectiveness of the measures applied, the Mexican authorities are failing to guarantee the survival of the loggerhead turtle, which amounts to an attack on biological diversity.²¹² This is true, the Submitters assert, despite the fact that the Mexican government has acknowledged that the population of *C. caretta* has been undergoing a significant decline in recent years.²¹³
115. The Submitters assert that the large bycatch of loggerhead turtle specimens between 2017 and 2019 reflects serious deficiencies in the implementation of effective measures for the protection and conservation of the species, and that there is no plan to provide for the monitoring and effective enforcement of such measures.²¹⁴
116. Mexico's response states that Semarnat drafted and issued the POEMR-North Pacific, published in 2018, with the aim of preventing fishing impacts on the loggerhead turtle population.²¹⁵ Mexico notes that this plan distinguishes among zones, depths, and fishing gear in addition to permissible thresholds for mortality caused by interaction with fishing gear, and that these parameters were determined after consultation and agreement with regional stakeholders and also with reference to a population modelling study for *C. caretta* in the Gulf of Ulloa produced with the best information available at that time (2015).²¹⁶ The response further indicates that the ecological criteria initially established in the POEMR-North Pacific with regard to these thresholds are being modified in order to "ensure measures for the effective conservation of the loggerhead turtle on the basis of the international commitments undertaken by Mexico," and that the revised version will be published as soon as it is adopted, after a public consultation process.²¹⁷
117. In relation to the measures taken by Conanp, the response notes that in 2021, Conanp "resumed the drafting of a trinational plan among Mexico, the United States, and Japan for the recovery of the loggerhead turtle."²¹⁸ Similarly, with regard to the measures taken by Inapesca, the Party in question states that in May 2021 (the date of the response), Inapesca was in the process of preparing the Fisheries Management Plan (*Plan de Manejo Pesquero*) in accordance with the second transitory article of the Fish Refuge Order.²¹⁹
118. In this regard (the promotion and execution of conservation activities), LGVS Article 60, first paragraph provides that Semarnat shall promote and further the conservation and protection of species and populations at risk through various measures, while Article 62 provides that Semarnat shall implement programs for the conservation, recovery, reproduction, and reintroduction into their habitat of conservation priority species and populations. RI-Semarnat Article 70, for its part, provides that Conanp shall undertake activities for the conservation of ecosystems and their biodiversity (paragraph I); it shall implement the relevant conservation plans (paragraph III); it shall devise, promote, implement, and evaluate conservation projects for species and populations considered priorities (paragraph IV), and it shall administer refuge areas for the protection of aquatic species (paragraph XIII).

212. Submission at 13, at: <<https://bit.ly/3Ti6f2P>>.

213. *Ibid.* at 2.

214. *Ibid.* at 13.

215. Response at 13, at: <<https://bit.ly/4affray>>.

216. *Ibid.*

217. *Ibid.*

218. *Ibid.* at 16.

219. *Ibid.* at 17.

119. The information the Secretariat found in the process of preparing the factual record indicates that in 2008, Semarnat arranged for the formation of an interinstitutional group for the purpose of establishing protective measures for the loggerhead turtle. This initiative led to a project titled “Conservation of the Pacific loggerhead turtle (*Caretta caretta*): protection within its critical feeding and development habitat in Baja California Sur.”²²⁰ Implemented between 2009 and 2012 by *Grupo Tortuguero de las Californias*, A.C. (GTC), this project produced records of 577 *C. caretta* specimens stranded in the Gulf of Ulloa. The main results of the project were the conversion of fishing gear on 18 boats operated by five cooperatives in the Gulf of Ulloa to replace gillnets with hooks and lines, and the creation of a subsidiary project of participatory monitoring for loggerhead turtle protection in the Gulf of Ulloa.²²¹ The Party in question stressed that since it was not an official program, it was not mandatory.²²²
120. In 2009, the state and federal authorities agreed to develop a *fisheries zoning plan* and a *fisheries management plan* for the region, which would provide for the identification of all fishing gear in use in the region as well as the development of selective gear (traps for demersal species) in 2013 and 2014, respectively.²²³
121. Concerning the fisheries management plan, the information published in Mexico’s National Biodiversity Information System (*Sistema Nacional de Información sobre la Biodiversidad*—SNIB), operated by Conabio, indicates that as of June 2009 it was decided to begin the preparation of this plan under the coordination of the regional fisheries research center (Centro Regional de Investigación Pesquera or CRIP-La Paz), an entity reporting to Inapesca.²²⁴ However, this did not occur, purportedly “because Conapesca has not defined the Gulf of Ulloa [among] the priority sites of that agency.”²²⁵ In November 2011 Inapesca presented work plans and a participatory surveillance plan to be implemented by Conapesca and Profepa. Within this framework, the set of measures put forward by the GTC in its comprehensive proposal for conservation and protection of the Pacific loggerhead turtle was adopted.²²⁶ The Secretariat was unable to find any other information about gillnet replacement or about efforts underway to continue the participatory monitoring measures; nor was it possible to find, among the plans published by Inapesca, the “Finfish Fisheries Management Plan for the Region” (*Plan de Manejo Pesquero de Escama en la región*) to which the Fish Refuge Order refers.²²⁷
122. As for the Comprehensive Fisheries Zoning Plan for the Gulf of Ulloa, Baja California Sur (*Programa integral de ordenamiento pesquero en el golfo de Ulloa, Baja California Sur*) produced by Conapesca and published in 2014,²²⁸ it contained among its specific objectives “demonstrating that fishing is not the cause of loggerhead turtle deaths,” for which it proposed to take steps to verify fishing systems in the Gulf of Ulloa region and their adherence to the applicable regulations; to implement an on-board technical assistance project, and to establish measures to mitigate bycatch of loggerhead turtles and other protected species as a result of interaction with small-scale fishing gear.²²⁹ The hypotheses and lines of inquiry of this comprehensive plan are presented in Table 4, while information on the on-board technical assistance project is presented in section 5.5.2 (iii) of the factual record.

220. A. Esliman Salgado (2012), *Conservación de la tortuga caguama del Pacífico (Caretta caretta): protección dentro del hábitat crítico de alimentación y desarrollo en Baja California Sur*, Grupo Tortuguero de las Californias (GTC) and SNIB-CONABIO databases, project HQ003, Mexico, at: <<https://bit.ly/3ryfMsV>>.

221. *Ibid.*

222. UCAI, Comments from the Party in Question to the Draft Factual Record (30 January 2024).

223. Fish Refuge Order, preamble (recital 10), at: <https://bit.ly/DOF_23-06-2016>. It should be noted that the implementation of the measures set out within the framework of the Fish Refuge Order is discussed in section 5.5.2 of this factual record.

224. A. Esliman Salgado (2012), *op. cit.*, at: <<https://bit.ly/3ryfMsV>>.

225. *Idem.*

226. *Ibid.* See also PROPOSICIÓN CON PUNTO DE ACUERDO RELATIVO A LA PROTECCIÓN DE TORTUGA MARINA EN EL GOLFO DE CALIFORNIA, *Gaceta del Senado*, 21 March 2013, LXII/ISPO-110-1339/40024, presentation of reasoning, at: <<https://bit.ly/3ZQtK6a>> [Senate Proposal].

227. Cf. Inapesca (2021), “Acciones y programas: planes de manejo pesquero,” Mexico, 30 July 2021, at: <<https://bit.ly/3NfajPp>>.

228. Comprehensive Fisheries Zoning Plan, at: <<http://cec.org/files/sem/20240306/aal005.pdf>>

229. *Ibid.* at10.



Photo: Center for Biological Diversity

123. In June 2013, the Senate of the Republic urged Conanp to assess whether the Gulf of Ulloa could be declared a priority zone for loggerhead turtle recovery, in accordance with PACE-C. *caretta*, and to consider the viability of declaring it a protected natural area by virtue of being a feeding and distribution area for this endangered species.²³⁰ In addition, it urged Conanp and Conapesca to set up a compensation mechanism to reimburse local residents for the costs associated with loggerhead turtle conservation, and asked Conapesca to report on the progress and strategies of the Fisheries Management Plan for the Gulf of Ulloa, whose purpose is to minimize turtle bycatch by fishing gear in the vicinity of Puerto Adolfo López Mateos.²³¹ While it was possible to find information on economic incentives for loggerhead turtle conservation, it was not possible to identify federal government efforts to declare the Gulf of Ulloa area as a protected natural area in response to the Senate's recommendation. In this respect, the only information that the Secretariat was able to find was a specific initiative to designate the area in question a protected natural area under the proposed name "Dos Mares Biosphere Reserve."²³² Nevertheless, it should be noted that there are efforts documented in this factual record to declare a loggerhead turtle protection zone in the Gulf of Ulloa by means of the Refuge Area Order and the Fish Refuge Order.
124. From 2013 to 2016, within the framework of Procer, which was created in 2007 and later renamed the Species-at-Risk Recovery and Repopulation Program (*Programa de Recuperación y Repoblación de Especies en Riesgo*), Conanp funded a total of 10 projects, implemented in various regions of Mexico, to follow up on PACE-C. *caretta*. Of these, three focused on loggerhead turtle conservation in the Gulf of Ulloa: *Assessment of Fishing-Related Loggerhead Turtle Mortality in the Gulf of Ulloa* (2013); a project to monitor sea turtle feeding areas in the Mexican Northwest Pacific (2015), and *Sea Turtle Distribution and Condition in the Gulf of Ulloa and on San Lázaro Beach* (2016), this last one was carried out by the Autonomous University of Baja California (UABC) (see Table 5).²³³ The Secretariat did not find information on other loggerhead turtle conservation or recovery plans or projects developed, supported, or funded by Conanp within the framework of Procer after 2016.²³⁴

230. Senate Proposal, first point of agreement, at: <<https://bit.ly/3ZQtK6a>>. It should be noted that although the Senate's exhortation refers to the "Loggerhead Turtle (*Caretta caretta*) Conservation Action Plan," this plan was not published by Conanp until 2018.

231. *Ibid.*, second and third points of agreement.

232. The proponents of this initiative called for the creation of a protected natural area (PNA) classified as a biosphere reserve. This PNA would encompass a buffer zone extending 35 nautical miles offshore on both coasts of Baja California Sur, i.e., on both the Gulf of California and Pacific Ocean sides (BCS territorial seas). This zone would allow for small-scale or traditional fishing exclusively for local communities living in the zone at the time of declaration of the reserve. Between 36 and 50 nautical miles offshore, a core zone would be established where fishing would be totally prohibited with a view to protecting the marine ecosystem from the entry of industrial boats from other regions. See Mares de México (2023), "Organizaciones proponen la creación de la Reserva de la Biosfera 'Dos Mares,'" 26 July 2023, at: <<https://bit.ly/3MR3inF>>; Tierra Fuerte (2023), "Promueven la creación de la Reserva de la Biosfera Dos Mares, en BCS, para regular la pesca sustentable," 7 August 2023, at: <<https://bit.ly/3GsrxFb>>.

233. Conanp, file no. DGC/DESPC/030/2023 (8 September 2023), in response to request for information no. 330008323000561 filed with the PNT, at: <<http://cec.org/files/sem/20231103/aag001.pdf>>.

234. Although the Secretariat did not find information on plans and programs published after 2016, the same year the Fish Refuge Order was published (2016), the Order was amended and ratified in 2018 and in 2023.

Table 5. Species-at-Risk Recovery and Repopulation Program (Procer)

Year	Project name	Executing institution	Amount funded (pesos)
2013	Assessment of fishing-related loggerhead turtle mortality in the Gulf of Ulloa	Instituto Politécnico Nacional	900,000
2015	Monitoring plan for sea turtle feeding areas in the Mexican Northwest Pacific	Instituto Politécnico Nacional	250,000
2016	Sea turtle distribution and condition in the Gulf of Ulloa and on San Lázaro Beach	Universidad Autónoma de Baja California	1,712,500

Sources: Conanp (2021), “Programa de Recuperación y Repoblación de Especies en Riesgo (Procer) U25,” Mexico, 21 August 2021, online at <<https://bit.ly/3R5KIA3>>; Conanp (2013), *Programa de Conservación de Especies en Riesgo (Procer)*, quarterly physical and financial progress and goals report, fourth quarter 2013, Mexico, online at <<http://cec.org/files/sem/20231123/aaj019.xlsx>>; Conanp (2015), *Programa de Conservación de Especies en Riesgo (Procer)*, fiscal year 2015, quarterly physical and financial progress and goals report, Mexico, online at <<http://cec.org/files/sem/20231123/aaj018.pdf>>; Conanp (2016), *Programa de recuperación y repoblación de especies en riesgo*, species-at-risk conservation component, fiscal year 2016, Mexico, online at <<http://cec.org/files/sem/20231124/aak002.xlsx>>.

125. Concerning the implementation of PACE-C. *caretta*,²³⁵ published in 2018, in the Gulf of Ulloa, Conanp referred to limited participation in the program between 2017–2019, in particular by the Baja California Peninsula Pacific Islands Biosphere Reserve (*Reserva de la Biósfera de las Islas del Pacífico de la Península de Baja California*),²³⁶ a protected natural area since 2016, since the islands making up the reserve are not loggerhead turtle refuge or nesting sites, in addition to the fact that the Gulf of Ulloa, albeit adjacent, lies outside the boundaries of the protected natural area.²³⁷ Conanp notes that in any event, Profepa is responsible for implementing the action plan in coordination with the GTC.²³⁸ However, the Secretariat did not find additional documentation supporting or providing more details about coordination between Profepa and GTC.
126. During the preparation of the management plan for the Baja California Peninsula Pacific Islands Biosphere Reserve, and consistent with the measures set out in 2018 in PACE-C. *caretta*, Conanp began holding meetings in 2017 with fishing cooperatives and permit holders in the localities of Puerto Adolfo López Mateos, Puerto San Carlos, and Puerto Magdalena, on Magdalena Island, in order to review interactions between fishing activity and sea turtles and their possible relationship to the loggerhead turtle strandings recorded in the area. At these meetings, attended by municipal representatives as well as representatives of Profepa, Semar, and the captaincies of Puerto San Carlos and Puerto Adolfo López Mateos, fishermen were asked and invited to observe and comply with the closed seasons established for the species as well as to reduce the use of gillnets.²³⁹ The Secretariat did not find additional information related to the number and frequency of the meetings held, nor the results of the agreements reached at these meetings. Beyond that, Conanp stated that it had no reports or follow-up on the action plan.²⁴⁰

235. PACE-C. *caretta*, at: <<https://bit.ly/3FKKRgs>>.

236. See Office of the President of the Republic (2016), “Decreto por el que se declara Área Natural Protegida, con el carácter de reserva de la biosfera, la región conocida como Islas del Pacífico de la Península de Baja California,” published in the DOF on 7 December 2016, at: <<https://bit.ly/3QHHCLI>>.

237. Conanp, file no. F00.1.DRPBCPN.I.-643/2023 (11 September 2023), in response to request for information no. 330008323000576 filed with the PNT, at 4-5, at: <<http://cec.org/files/sem/20231103/aah014.pdf>>.

238. Conanp, file no. F00.1.DRPBCPN.I.-642/2023 (11 September 2023), in response to request for information no. 330008323000561 filed with the PNT, at 3, at: <<http://cec.org/files/sem/20231103/aag008.pdf>>.

239. Conanp, file no. F00.1.DRPBCPN.I.-643/2023 (11 September 2023), in response to request for information no. 330008323000576 filed with the PNT, at 67, at: <<http://cec.org/files/sem/20231103/aah014.pdf>>.

240. Conanp, file no. DGC/DESPC/031/2023 (8 September 2023), in response to request for information no. 330008323000576 filed with the PNT, at 4, at: <<http://cec.org/files/sem/20231103/aah009.pdf>>.

127. PACE-C. *caretta* covers loggerhead turtle protection in both the Gulf of Mexico and the Mexican Pacific and Caribbean regions; it acknowledges that the habitats occupied by the species “are different, and the issues as well,” and sets forth various strategies and measures applying to both the marine and land environments for the conservation and recovery of *C. caretta* populations throughout the nation’s territory.²⁴¹ The action plan contains 48 criteria and indicators of success for assessing achievement of the stated objectives²⁴² and while these are generic and not all of them revolve around protection of the North Pacific loggerhead turtle population, some are relevant within the framework of this factual record, as may be seen in the abbreviated version of the list of indicators presented below (Table 6).

Table 6. Criteria and indicators of the success of PACE-Caretta caretta

Indicators	
Knowledge	
1.	Diagnostic assessment of the situation and distribution of individuals
2.	Number of prior studies conducted
3.	Number of risk maps produced
4.	Number of incubation temperature and environmental monitoring plans in operation
5.	Number of projects using standardized protocols for recording biological, population, and environmental data
6.	Number of publications on the research conducted
7.	Continuity of biological monitoring of populations of the species on index beaches of the region
8.	Number of turtles tracked by satellite transmitter
Management	
9.	Number of coastal PNA management plans with measures to preserve turtle habitat
10.	Number of beaches with tourism control regulations
11.	Fisheries Zoning Plan for the Gulf of Ulloa
12.	Number of projects per region with technical opinions from protection committees and working groups
13.	Number of nesting management reports
14.	Manual of best tourism practices
15.	Number of concession holders adopting the best practices manual
16.	Agreements with Conapesca for study and modification of fishing gear impacting sea turtles
Restoration	
17.	Number of beaches with vegetation rehabilitation and coastal dune stabilization plans
18.	Number of beaches with mangrove rehabilitation plans in nesting zones
19.	Number of beaches with physical obstacles eliminated
20.	Number of fisheries characterized
21.	Number of beaches that have modified or eliminated their lighting system
22.	Social, economic, and environmental analysis of the fisheries sector in the region having an impact on the species
23.	Number of follow-up programs for monitoring restoration measures

241. PACE-C. *caretta* at 7-8, at: <<https://bit.ly/3FKKRgs>>.

242. *Ibid.*, section VII, “Criterios e indicadores de éxito,” at 41-2.

Table 6. Criteria and indicators of the success of PACE-*Caretta caretta* (cont.)

Indicators
Protection
24. Number of plans implemented for control of predators and exotic species
25. Number of beaches following international standards on environmental quality in the tourism sector
26. Number of beaches with PNA declaration
27. Protection coverage of 90% of nesting events on index beaches
28. Continuity of protection on index beaches
29. Management plan for X'Caçel-X'Caçelito beach implemented and updated
30. Number of amendments to the legal framework in relation to sea turtle conservation
31. Increase in number of interinstitutional agreements focused on sea turtle conservation
32. Number of surveillance committees formed
33. Number of inspection and surveillance operations carried out
34. Number of beaches, fishing and landing areas with inspection and surveillance operations
Culture
35. Analysis of environmental education programs on sea turtles in the region
36. Number of awareness-raising programs
37. Number of environmental education programs throughout the year
38. Number of sea turtle festivals
39. Number of “pride campaigns” operating
40. Number of events at which results of coordinated efforts are presented
41. Number of volunteers participating in various sea turtle conservation centers
42. Number of training workshops given
43. Communication and outreach measures to raise the profile of the species
44. Guidelines for drafting and implementing environmental education programs
Administration
45. Directory of primary sea turtle conservation stakeholders
46. Number of agreements among interested parties involved in conservation of the species and its habitat
47. Increase in financial and human resources applied to conservation programs and measures for the species
48. Number of goals reached with the development and implementation of the measures contained in the PACE for the species

Source: PACE-*Caretta caretta*, section VII, “Criterios e indicadores de éxito,” at 41-2, online at <<https://bit.ly/3FKKRgs>>.

128. The Secretariat was unable to find information on the implementation of PACE-C. *caretta* specifically in the Gulf of Ulloa area after its publication.²⁴³
129. With regard to the POEMR-North Pacific, developed for the purpose of establishing guidelines and forecasts governing the preservation, restoration, protection, and sustainable use of natural resources in specific areas of the North Pacific located in marine waters under national jurisdiction, and issued August 2018,²⁴⁴ the information consulted indicates that as part of the comprehensive planning process for the region, a turtle conservation-friendly fishing model was applied in certain environmental management units (*unidades de gestión ambiental*—UGA) of the Gulf of Ulloa (GU-02, GU-03, GU-04, GU-05, and GU-06), the goal of this model was to show “the evolution of environmental conflict between coastal gillnet groundfishing and loggerhead turtle (*Caretta caretta*) protection.”²⁴⁵ The model shows the effects of that fisheries generate on the loggerhead turtle population as a result of interaction with fishing gear and bycatch of juveniles during the season of highest aggregation.²⁴⁶ To this end, changes in the *C. caretta* population under various fishing effort and bycatch conditions were simulated, resulting in three scenarios: 1) in the *baseline* scenario, an increase in fishing effort would entail higher capture of loggerhead turtle juveniles, with cumulative effects over time that would lead to a considerable population decline; 2) the *contextual* scenario posits a high catchability coefficient and low initial loggerhead populations, so that the effects observed in the baseline scenario would be even more pronounced and the vulnerability (in terms of risk or probability of decline) of the juvenile population of the species would increase markedly, and 3) in the *strategic* scenario, the conflict between fishing in the Gulf of Ulloa and loggerhead turtle protection would be anticipated and prevented through the adoption of specific restrictions for each UGA and the application of ecological regulation criteria for the region.²⁴⁷
130. The baseline and contextual scenarios posited in the POEMR-North Pacific suggest that the loggerhead turtle population in the Gulf of Ulloa could remain viable, “provided that no more than a certain number of individuals are caught” and the catchability coefficient is reduced through the use of fishing gear that avoids turtle bycatch, as well as by avoiding the zone of maximum aggregation of juveniles during the period of highest turtle concentration or aggregation (May-August).²⁴⁸ The suite of measures put forward for the UGAs in question includes establishing a maximum threshold of *C. caretta* bycatch; protecting the habitat where the highest concentration of the species is found; implementing sustainable groundfishing practices with the use of selective gear; promoting the participation of fishermen in resource stewardship; giving precedence to coastal and marine ecosystem conservation over ocean floor mining, and designing and implementing regulations for sustainable use of deep-sea resources.²⁴⁹
131. The POEMR-North Pacific projected that the measures implemented would serve to minimize the risk of losing one fourth of the *C. caretta* population in the next 25 years.²⁵⁰

243. See Conanp, file no. DGC/DESPC/031/2023 (8 September 2023), in response to request for information no. 330008323000576 filed with the PNT, at 4, at: <<http://cec.org/files/sem/20231103/aah009.pdf>>.

244. Semarnat (2018), “Acuerdo por el que se da a conocer el Programa de Ordenamiento Ecológico Marino y Regional del Pacífico Norte,” published in the DOF on 9 August 2018, at: <<https://bit.ly/47NiQkp>> [POEMR-North Pacific].

245. *Ibid.*, section 4.1, “Mecanismos vitales”.

246. *Ibid.*

247. *Ibid.*

248. *Ibid.*

249. *Ibid.* annex 6.1 “Environmental management unit data sheets”, strategic scenarios in relation to environmental management units GU-02, GU-03, GU-04, GU-05, and GU-06.

250. *Ibid.*

132. Characterization, diagnostic assessment, and prediction of ecological conditions in the UGAs in question served to establish guidelines, strategies, criteria, and ecological indicators to minimize environmental conflict and foster sustainable development in the region of the North Pacific covered by the POEMR-North Pacific.²⁵¹ The following ecological criteria are relevant in relation to loggerhead turtle bycatch in the Gulf of Ulloa, since they set mortality limits that trigger restrictions on fishing activity in the protected area:²⁵²
- *Ecological criterion CB25: Total bycatch of loggerhead turtle in the Gulf of Ulloa may not exceed 200 individuals per year. Where this number is exceeded, all fishing activities that interact with *C. caretta* in environmental management units GU-03, GU-04, and GU-05 must be suspended until the following year.*
 - *Ecological criterion CB25 bis: During the period of maximum sea turtle aggregation (May-August), total loggerhead turtle bycatch within the Fish Refuge Zone may not exceed 90 individuals. Where this number is exceeded, commercial fishing with gillnets and longlines is suspended for the rest of the period in question.*
 - *Ecological criterion CB26: During the period of maximum aggregation (May-August), fishing is permitted: 1) with gillnets only at depths less than or equal to 15 meters, provided that loggerhead turtle bycatch in the Gulf of Ulloa does not exceed 200 individuals, and 2) at depths greater than 15 m only with fishing gear that does not interact with *C. caretta*.*
133. In this regard, Mexico's response states that in order to guarantee measures for effective loggerhead turtle conservation, based on the international commitments undertaken by Mexico, Semarnat proceeded to modify the ecological criteria of the POEMR-North Pacific²⁵³ regarding the permissible mortality thresholds for *C. caretta* due to fishing-related bycatch (in particular, criteria CB25, CB25 bis, CB26).²⁵⁴ As of the date of filing of the response, the revised version of this plan with the new ecological criteria, was pending publication.²⁵⁵ The POEMR-North Pacific was updated in August 2023.²⁵⁶
134. On another note, it should be mentioned that in 2022, the National Sea Turtle Conservation Plan (*Programa Nacional de Conservación de Tortugas Marinas—PNCTM*), whose original publication dates from 2000, was updated in order to align the conservation strategies for each sea turtle species inhabiting the coasts of Mexico with the National Protected Natural Areas Plan (*Programa Nacional de Áreas Naturales Protegidas*).²⁵⁷ A general framework for turtle protection in Mexico, the new PNCTM recognizes that the Gulf of Ulloa, BCS is a site of special importance for loggerhead turtle feeding and that the presence of juveniles near Isla de Guadalupe, Baja California has recently been noted. In addition, it indicates that the species *C. caretta* is listed in NOM-059 as “endangered” and on the Red List of the International Union for the Conservation of Nature (IUCN) as “vulnerable”²⁵⁸ although it should be noted that the North Pacific subpopulation is considered to be of “least concern” largely due to decades of work on nesting programs in Japan.²⁵⁹
135. The priority measures—direct and indirect, preventive and corrective—established by the PNCTM for the protection of sea turtle populations include:²⁶⁰

251. *Ibid.*, section 5.1, “Introducción” [to POEMR].

252. *Ibid.*, Appendix 6.3, “Catálogo de criterios ecológicos”.

253. POEMR-North Pacific, at: <<https://bit.ly/47NiQkp>>.

254. Response at 13, at: <<https://bit.ly/4afFray>>.

255. *Ibid.*

256. Semarnat (2023), *Acuerdo por el que se da a conocer la modificación al Programa de Ordenamiento Ecológico Marino y Regional del Pacífico Norte*, Secretaría de Medio Ambiente y Recursos Naturales, published in *DOF* on 11 August 2023, at: <<https://bit.ly/3sKm8pt>> [POEMR-North Pacific 2023].

257. Conanp (2022), *Programa Nacional de Conservación de Tortugas Marinas*, Mexico, summary and p. 12, at: <<https://bit.ly/3R9WP9M>>.

258. *Ibid.* at 38-39.

259. P. Casale and Y. Matsuzawa (2015) “*Caretta caretta* (North Pacific subpopulation)” The IUCN Red List of Threatened Species, at: <<https://bit.ly/3whNGUH>>.

260. *Ibid.* at 52.

- Ensuring and reinforcing the presence of technical staff on beaches operated by Conanp;
- Providing equipment, and maintaining equipment and infrastructure;
- Providing training and supervision for community technicians;
- Forming surveillance committees, and
- Installing signage at sites.

136. In addition, the plan provides for specific priority measures for monitoring sea turtle populations, as well as related biological and ecological indicators;²⁶¹ research promotion;²⁶² habitat protection, management, and restoration;²⁶³ characterization and evaluation of ecosystem services associated with sea turtles;²⁶⁴ coordination, interaction, and synergy among the competent bodies in order to achieve better conservation outcomes;²⁶⁵ fulfillment of agreements and commitments acquired under multilateral and international conventions signed by Mexico;²⁶⁶ updating conservation action plans (PACE) for the corresponding species;²⁶⁷ training for the technical staff participating in PNCTM implementation;²⁶⁸ promotion of community participation in monitoring and conservation,²⁶⁹ and delivery of environmental education.²⁷⁰



Photo: Andressa Aviz - istock

261. *Ibid.* at 53-4.
 262. *Ibid.* at 54-6.
 263. *Ibid.* at 56-8.
 264. *Ibid.* at 58-9.
 265. *Ibid.* at 60-1.
 266. *Ibid.* at 61-2.
 267. *Ibid.* at 62-3.
 268. *Ibid.* at 64-6.
 269. *Ibid.* at 67-8.
 270. *Ibid.* at 68-9.

137. According to the information provided by Mexico, as of the date of the Party Response, Conanp was in the process of developing a *protection plan* for the loggerhead turtle refuge area in the Gulf of Ulloa, BCS,²⁷¹ which should have been published 180 calendar days after publication of the Refuge Area Order (5 June 2018).²⁷² However, the process of developing the protection plan and presenting it for public consultation was “met with various challenges,”²⁷³ and the process appears to be stalled even now, primarily by budget cuts to the sector.²⁷⁴ On the other hand, the Party in question reported that it has carried out other additional actions, among which is the protection program through which observations, comments and requests from fishermen were taken into account,²⁷⁵ the Party in question did not provide information on the dates of such actions, nor on the publication of the protection program or its effectiveness.
138. In relation to the trilateral plan between Mexico, the United States, and Japan mentioned in Mexico’s response (see paragraph 117 *supra*), the information provided by the Party in question indicates that the plan, whose main purpose is to “generate up-to-date information on the biology and status of loggerhead turtle populations in the North Pacific” and to provide “a reference framework for identifying and addressing threats throughout its range,” was still under development in May 2021.²⁷⁶ That year, meetings were held where relevant national authorities of the three countries were present. Participating on behalf of Mexico were Conanp, Conapesca, and the International Affairs Coordinating Unit (*Unidad Coordinadora de Asuntos Internacionales—UCAI*) of Semarnat;²⁷⁷ representing the United States were the US Fish and Wildlife Service (USFWS) and the National Marine Fisheries Service (NMFS, also known as “NOAA Fisheries”), and representing Japan were the Fisheries Agency and the Ministry of the Environment.
139. As background to the trilateral plan, the seventh Conference of the Parties (COP7) of the Inter-American Convention for the Protection and Conservation of Sea Turtles (IAC) resolved in 2015 that Mexico and the United States would undertake to work with Japan to formulate a trilateral plan for the recovery of the North Pacific loggerhead turtle population. Another commitment assumed at COP7 was the filing of annual updates on progress achieved on developing the plan in question.²⁷⁸ In addition, it was agreed at a subsequent meeting (COP10) that all parties to the IAC whose fisheries interact with sea turtles would set in motion measures aimed at monitoring and mitigating bycatch and resulting death and would identify opportunities for technical and financial collaboration to this end.²⁷⁹
140. The Secretariat did not find any additional information on the status or anticipated date for the signing and implementation of the trilateral plan between Mexico, the United States, and Japan.²⁸⁰

271. Response at 16, at: <<https://bit.ly/4affFray>>. See also Appendix 8, Conanp, file no. DGOR/0301/2021 (26 April 2021), in response to memorandum no. DAJ-143/2021, point 4, at 2, at: <<https://bit.ly/3sPv5xX>> [Oficio Conanp 2021].

272. Refuge Area Order, second transitory article, at: <https://bit.ly/DOF_05-06-2018>.

273. Response at 16, at: <<https://bit.ly/4affFray>>.

274. *Ibid.*, Appendix 8, Conanp, *op. cit.*, point 4, at 2; at: <<https://bit.ly/3sPv5xX>>.

275. Conanp, file no. DGFITI/0029/2024 (19 January 2024), annex, National Protected Natural Areas Commission (*Comisión Nacional de Áreas Naturales Protegidas*), at: <<http://cec.org/files/sem/20240306/aal001.pdf>>.

276. Response at 16, at: <<https://bit.ly/4affFray>>.

277. *Ibid.*, Appendix 10, Conanp file no. DAJ/176/2021 (14 May 2021), Se remite información, to director of Legal Affairs Coordinating Unit (*Unidad Coordinadora de Asuntos Jurídicos*) of Semarnat, at: <<https://bit.ly/3SWpbpr>>.

278. IAC (2015), *Seventh Conference of the Parties*, held 24-26 June 2015 in Mexico City, Resolution CIT-COP7-2015-R3, at: <<https://bit.ly/3RaoabR>>.

279. IAC (2022), *Tenth Conference of the Parties*, held 15-17 June 2022 in Panama, Resolution CIT-COP10-2022-R7, at 2-3, at: <<https://bit.ly/3N0XDvf>>.

280. Conanp, file no. F00.1.DRPBCPN.1-642/2023 (11 September 2023), at: <<http://cec.org/files/sem/20231103/aag008.pdf>>; Conanp, file no. DGC/DESPC/030/2023 (8 September 2023), at: <<http://cec.org/files/sem/20231103/aag001.pdf>>.

5.5 Enforcement of the Closed Season Order, the Refuge Area Order, and the Fish Refuge Order

141. The Submitters assert²⁸¹ that Mexico is failing to effectively enforce the Closed Season Order, which enacts “a total and indefinite closed season” on all sea turtle species inhabiting national waters under federal jurisdiction, including the loggerhead turtle;²⁸² the Refuge Area Order, which provides for the establishment of a refuge area for protection of the loggerhead turtle in the Gulf of Ulloa, BCS,²⁸³ and the Fish Refuge Order, which places restrictions on the use of nets and suspends certain fishing activities in a large area of the Gulf of Ulloa.²⁸⁴
142. In its response, the Party in question reports on various measures taken within the framework of these three instruments to reduce interaction between fishing and sea turtles in the Gulf of Ulloa.²⁸⁵ In addition, regarding the effectiveness of the orders to reduce loggerhead turtle mortality caused by bycatch, Mexico states that after three years of fisheries regulation measures implemented in the region through on-board technical assistance programs and video recording systems, “it was documented and demonstrated that fishing was not the primary cause of sea turtle mortality recorded on the west coast of Baja California Sur since the maximum number of 90 dead specimens proven to have been caused by fishing was not reached.”²⁸⁶
143. The following sections present some important background and contextual information in relation to the application of the orders in question and their scope, in addition to discussing the various actions taken to enforce the measures, provisions, and guidelines set out in the three instruments in question with a view to protecting and conserving the loggerhead turtle in the Gulf of Ulloa. Also addressed are aspects relating to the on-board technical assistance program and the adoption of sustainable fishing alternatives in the region.

5.5.1 Background and context in relation to the Refuge Area Order and the Fish Refuge Order

144. In its response, Mexico highlights multiple measures that were implemented to reduce loggerhead turtle bycatch within the framework of the Refuge Area Order and the Fish Refuge Order,²⁸⁷ which are addressed below in this section. The Party in question further states that “...on 1 September 2016, Mexico received positive certification from the United States government for its measures to reduce loggerhead turtle bycatch in the Gulf of Ulloa, Baja California Sur.”²⁸⁸ As discussed above (see paragraph 95 *supra*), from 2013 to the present, Mexico has been submitting annual reports to NOAA Fisheries on measures adopted to protect sea turtles in Mexico, including those implemented for conservation of *C. caretta* in the Gulf of Ulloa by means of the Fish Refuge Order and the Refuge Area Order.²⁸⁹ NOAA Fisheries, in turn, submits biannual reports to the US Congress on fishing that is either illegal, unreported, or unregulated in nations or by entities with which the United States can collaborate for sustainable fisheries management and

281. Submission, *introduction*, at: <<https://bit.ly/3Ti6f2P>>.

282. Closed Season Order, preamble, at: <https://bit.ly/DOF_31-05-1990>.

283. Refuge Area Order, first article, at: <https://bit.ly/DOF_05-06-2018>.

284. Fish Refuge Order, third, fourth, and fifth articles, at: <https://bit.ly/DOF_23-06-2016>.

285. Response at 15, at: <<https://bit.ly/4afFray>>.

286. *Ibid.* at 19.

287. *Ibid.* at 10-12, 15-17, 19-21.

288. *Ibid.* at 19, at: <<https://bit.ly/3tpZL8F>>.

289. Cf. Submission, Appendix 1, “Contexto del hábitat de la especie y antecedentes México-Estados Unidos sobre la tortuga caguama (*Caretta caretta*),” at 3-4, at: <<https://bit.ly/3SWezGU>>.

conservation of protected marine species.²⁹⁰ The United States, acting through NMFS, carries out a process of identification,²⁹¹ consultation,²⁹² and certification.²⁹³ The status of the loggerhead turtle in the North Pacific, and more specifically bycatch thereof as a result of fishing in the Gulf of Ulloa, has been discussed in NOAA Fisheries' reports:²⁹⁴

- i) In 2013, the report identified as an alleged deficiency in Mexico the lack of a regulatory program comparable to that of the United States to reduce or minimize *C. caretta* bycatch in the North Pacific.²⁹⁵
- ii) In 2015, a negative certification determination was issued because the relevant regulatory measures had not been adopted.²⁹⁶
- iii) In 2016, a positive certification determination was issued after Mexico adopted regulatory measures to reduce bycatch of loggerhead turtle by commercial fishing, including restrictions on fishing nets, on-board monitoring activities, and the establishment of a refuge area with a mortality threshold for specimens of the species, and guaranteed that these would be implemented and enforced.²⁹⁷
- iv) In 2018, Mexico extended the Fish Refuge Order.²⁹⁸
- v) In 2021, based on to the high *C. caretta* mortality officially recorded in 2018 (459 turtles), as well as the corresponding figures for 2019 (331 specimens) and the first six months of 2020 (351 turtles from January to June), NOAA Fisheries again identified a lack of effective measures taken by Mexico to reduce bycatch and protect the loggerhead turtle. The NOAA Fisheries report emphasized that the protective measures adopted were not being effectively implemented in a manner comparable to those existing in the United States.²⁹⁹
- vi) In 2023, Mexico again received a negative certification determination by virtue of having failed to provide documentary evidence to support the assertion that its regulatory program had been effectively implemented since 2018.³⁰⁰
- vii) In November 2023, Semar issued directives aimed at mitigating illegal loggerhead turtle fishing, ordered the deployment of land surveillance patrols, and proposed a collaboration agreement with Sea Shepherd Conservation Society.³⁰¹

290. NOAA Fisheries (2023), "Report on IUU Fishing, Bycatch, and Shark Catch," at: <<https://bit.ly/46sd3zm>>.

291. *Ibid.* By means of the identification process, the US authority identifies entities or countries involved in bycatch of protected living marine resources.

292. NOAA Fisheries (n.d.), "Laws & Policies, Magnuson-Stevens Act: International Provisions of the MSA Reauthorization Act," at: <<https://bit.ly/3MWdvyX>>. The United States conducts consultations with the identified nations in order to address the activities that led to the identification. The consultation process can take up to two years. The process is aimed at urging the nation in question to take measures to address the problems detected. Once the measures are implemented, a certification determination can be issued and included in the report to the US Congress.

293. "Certification" consists of a determination that takes account of whether the country in question has adopted the measures necessary to address the problems identified. *Positive certification* means that the country has undertaken regulatory measures comparable to those of the United States and that it has an operating management plan to collect data for the purpose of correcting the situation. Where this is not the case, *negative certification* means that the nation in question has not implemented measures comparable to those of the United States. The certification determination is published in NOAA Fisheries' biennial report to the US Congress. Consultations with countries that have received a negative result continue in order to offer them opportunities to implement corrective measures. Cf. Code of Federal Regulations (United States): 50 CFR § 300.203(e)(1)(i)-(ii), at: <<https://bit.ly/3Rov5OY>>.

294. Cf. Submission, Appendix 1, "Contexto del hábitat de la especie y antecedentes México-Estados Unidos sobre la tortuga caguama (*Caretta caretta*)," at 6-7, at: <<https://bit.ly/3SWezGU>>.

295. NOAA Fisheries (2021), *Improving International Fisheries Management: 2021 Report to Congress*, August 2021, at 33, at: <<https://bit.ly/3MQtsqE>>.

296. *Ibid.*

297. *Ibid.*

298. *Ibid.*

299. *Ibid.* at 34. Note that the figures shown are from NOAA's report to the U.S. Congress.

300. NOAA Fisheries (2023), *Improving International Fisheries Management: 2023 Report to Congress*, August 2023, at 31-2, at: <<https://bit.ly/3ukCcPa>>.

301. Semar, file no. Oficio S3/SSPCC.- 408/23 (28 November 2023), at: <<http://cec.org/files/sem/20240308/aam002.pdf>>.

145. Some authors of research on the topic³⁰² have posited that the regulatory measures adopted by the Government of Mexico as a result of the US certification process concerning loggerhead turtle bycatch in the Gulf of Ulloa (and more specifically the promulgation of the Fish Refuge Order) have led to a climate of uncertainty with respect to the mechanisms implemented at the national level, and also to a lack of agreement among direct stakeholders as to the course of action to be followed or the possible “solutions” to the problem.³⁰³ The regulatory provisions for loggerhead turtle protection in the Gulf of Ulloa were established under the premise that fishing is the main threat causing strandings of *C. caretta* and other marine species in the region.³⁰⁴ While bycatch and interaction with fishing gear represent a constant threat, the results of the study by Bojórquez Tapia *et al.* (2021) reveal that the various approaches to the drafting and implementation of protective measures would only be acceptable to inshore fishermen if participatory planning methods and processes were applied.³⁰⁵ Applying an exploratory modeling and data analysis process, the study interpreted the positions of local fishermen with respect to *C. caretta* mortality caused by bycatch in the Gulf of Ulloa. The study found that inshore fishermen believe that their activities are not the main cause of loggerhead turtle mortality. The authors stress that it is indispensable to obtain the trust of stakeholders and interest groups in the face of a complex socio-ecological-technological-institutional problem, one that is riddled with uncertainties as to the efficacy of the measures applied.³⁰⁶
146. The study authors conclude that the uncertainty created as a result of the application of regulatory mechanisms led to the hardening of the different positions between the authorities and the affected communities. The authors therefore stress the importance of maximizing consensus and minimizing conflict, openly recognizing the protection of *C. caretta* juveniles as an essential priority, but also taking account of the socioeconomic reality of the Gulf of Ulloa.³⁰⁷

5.5.2 Measures implemented within the framework of the Closed Season Order, the Refuge Area Order, and the Fish Refuge Order

i. Scope of the orders

147. The **Closed Season Order**, published 31 May 1990 in the DOE, recognizes that despite various measures implemented by Mexico (creation of turtle nesting centers, decreased consumption of turtles by fishing cooperatives, establishment of a regime of partial closed seasons in 1973 and 1983, declaration of 16 reserve zones in the Gulf of Mexico and the Pacific Ocean in 1986, determination of catch quotas), the impact of industrialization and the increase in human settlements and tourism has negatively affected sea turtle populations and impeded their full recovery.³⁰⁸ For these reasons, it places a *total and indefinite closed season* on all sea turtle species and subspecies in waters under federal jurisdiction of the Gulf of Mexico, the Caribbean Sea, and the Pacific Ocean.³⁰⁹ In addition, it stipulates a strict prohibition on “harvesting, catching, chasing, disturbing, or harming in any manner all sea turtle species and subspecies,” including the loggerhead turtle in the Pacific Ocean.³¹⁰

302. Cf. L. A. Bojórquez Tapia *et al.* (2021), “Application of Exploratory Modeling in Support of Transdisciplinary Inquiry: Regulation of Fishing Bycatch of Loggerhead Sea Turtles in Gulf of Ulloa, Mexico,” *Frontiers in Marine Science* 8 (6 April 2021): 643347, at: <<https://bit.ly/4a1z77h>>.

303. *Ibid.*, background.

304. In this regard, Article 4 of the General Law of Fisheries and Aquaculture (*Ley General de Pesca y Acuicultura*) defines bycatch as “the extraction of any species not included in the respective concession or permit, occurring by chance.”

305. *Ibid.*, discussion and conclusion.

306. *Ibid.*

307. *Ibid.*

308. Closed Season Order, preamble, at: <https://bit.ly/DOF_31-05-1990>.

309. *Ibid.*, first article.

310. *Ibid.*, second article.

148. The **Refuge Area Order**, issued in June 2018, establishes a refuge area for the loggerhead turtle in the Gulf of Ulloa, BCS, recognizing the species' interaction with fishing activities in the area, the incidence of loggerhead mortality associated with certain fishing gear, and also the fact that *C. caretta* is listed as a species whose protection and conservation is of concern in various domestic and international regulatory instruments, including Appendix I of CITES; the IUCN Red List, as endangered, and Mexican official standard NOM-059 in the category "endangered."³¹¹
149. Issued in 2016 and supplanting the Order establishing a fish refuge area and measures to reduce possible interaction between fishing and sea turtles on the west coast of Baja California Sur (*Acuerdo por el que se establece una zona de refugio pesquero y medidas para reducir la posible interacción de la pesca con tortugas marinas en la costa occidental de Baja California Sur*) (published 10 April 2015),³¹² the purpose of the Fish Refuge Order is reducing the interaction between fishing and sea turtles in waters under federal jurisdiction in the Gulf of Ulloa. To this end, it places various restrictions on the use of nets, and also suspends certain commercial and sport/recreational fishing activities in a zone established as a "temporary partial fish refuge."³¹³ Among these restrictions is a ban on trawlnets throughout the fish refuge area and, in the "specific area of fishing restrictions," a ban on the use of gillnets with mesh greater than 15.2 cm throughout the year, on gillnets with mesh between 10.8 and 15.2 cm from May to August (the months during which the greatest presence of sea turtles is observed in the region), and on longlines fitted with J-hooks.³¹⁴ In particular, this order stipulates a loggerhead turtle mortality limit of 90 specimens per year for commercial fishing operations in the refuge area.³¹⁵ The original two-year period of effectiveness was extended by five additional years by means of an extension order signed in June 2018.³¹⁶ More recently, in June 2023, an update of the Fish Refuge Order was published,³¹⁷ with new measures, most notably a modification of the mortality limit: the 2023 order now provides that the limit on loggerhead turtle mortality caused by commercial fishing in the refuge area is to be established within the framework of PACE-C. *caretta* and in coordination with competent authorities and accredited research bodies.³¹⁸
150. The Secretariat did not find information on the efficacy of the measures set out in the Fish Refuge Order. As to the fish refuge areas, it should be noted that these can be established for the following purposes: promoting the conservation and preservation of populations of the various species of aquatic flora and fauna present in waters under national jurisdiction; encouraging the sustainable use of aquatic resources by reconciling fishing with the imperatives of protection, and protecting aquatic species where the need exists.³¹⁹ Fish refuges provide for four different types of refuge areas: permanent total, temporary total, permanent partial, and temporary partial; in order to evaluate the merits of establishing a refuge area and to determine the category to be assigned, Conapesca shall request a technical opinion from Inapesca.³²⁰ The permanence, modification, or elimination of established refuge areas depends on a determination produced by Conapesca with reference to the technical opinion of Inapesca and taking into consideration the results of any studies conducted for the purpose of assessing the results of the objectives established for the refuge area in question.³²¹

311. Refuge Area Order, preamble, at: <https://bit.ly/DOF_05-06-2018>. Note that the IUCN Red List classification cited in the Refuge Area Order refers to what was in place in 2018. Currently the loggerhead turtle subpopulation in the North Pacific is considered to be of "Least Concern" on the IUCN Red List.

312. Fish Refuge Order, fourth transitory article, at: <https://bit.ly/DOF_23-06-2016>.

313. *Ibid.*, first, second, third, and fourth articles.

314. *Ibid.*, third article.

315. *Ibid.*, seventh article, paragraph VI.

316. Extension Order, at: <https://bit.ly/DOF_25-06-2018>.

317. Fish Refuge Order 2023, at: <<https://bit.ly/3ZAdmGE>>.

318. *Ibid.*, sixth article, paragraphs VI and VII. It should be noted, however, that while PACE-C. *caretta* presents criteria and indicators of successful conservation and recovery of turtle populations, it does not contain guidelines on the basis of which to place limits on bycatch or mortality in the Gulf of Ulloa.

319. Cf. Mexican Official Standard NOM-049-SAG/PESC-2014, *Que determina el procedimiento para establecer zonas de refugio para los recursos pesqueros en aguas de jurisdicción federal de los Estados Unidos Mexicanos*, published in the DOF on 14 April 2014, sections 0.4, 0.7, and 4.1, at: <<https://bit.ly/3QTcpoO>>.

320. *Ibid.*, sections 4.2 and 4.4.

321. *Ibid.*, section 4.8.

ii. Mortality limit within the framework of the POEMR-North Pacific

151. The limits and criteria set out in the POEMR-North Pacific (see paragraphs 129-33)³²² are relevant for the purposes of the implementation of the Refuge Area Order and the Fish Refuge Order, both of which place restrictions on fishing that are to be implemented in the region in order to reduce interactions between fisheries and sea turtles.
152. In 2021, a proposal was published for public consultation on an updated version of the POEMR-North Pacific with new ecological criteria that trigger the suspension of fishing activity in the region, in compliance with a court order from April 2019 that required the amendment of ecological criteria CB25, CB25 *bis*, and CB26 of the POEMR-North Pacific.³²³
153. The aforementioned three criteria were to be amended, with a substantial adjustment to two of them, and in both cases (CB25 and CB26), the limit on loggerhead turtle bycatch in the Gulf of Ulloa was reduced from 200 to a maximum of 90 dead specimens per year. Where this threshold is reached, fishing is to be suspended throughout the region until the following year. Criterion CB25 *bis*, with some changes to its wording, retains the limit of 90 dead *C. caretta* individuals as a result of interaction with fishing gear within the Fish Refuge Area during the period of maximum turtle aggregation (May-August), which coincides with the months of greatest fishing activity.³²⁴
154. According to the information consulted, the executive committee of the POEMR-North Pacific decided to eliminate the reference to the maximum acceptable mortality threshold for the loggerhead turtle in the Gulf of Ulloa from the ecological criteria of the zoning plan in a special session held on 28 March 2023.³²⁵ The Party in question indicated that this decision was made following a public consultation.³²⁶
155. The amended version of the POEMR-North Pacific was finally published on 11 August 2023.³²⁷ The updated versions of ecological criteria CB25, CB25 *bis*, and CB26 now provide that loggerhead turtle mortality caused by interaction with commercial fishing gear in the Gulf of Ulloa, and within the Fish Refuge Area (CB25 *bis*), “shall be supervised and verified,” and that in any event, the federal and local authorities:
shall, by mutual agreement with the deep-sea and inshore fishing sectors, define the monitoring and supervision mechanism to prevent sea turtle mortality due to fishing and agree upon the measures to be taken when turtle mortality due to this activity is verified.³²⁸
156. In addition, the new version of ecological criterion CB26 provides that during the period of maximum aggregation (May-August), the use of gillnets is allowed at depths less than 15 meters as long as it is not demonstrated that the death of *C. caretta* specimens is due to interaction with commercial fishing gear in the Gulf of Ulloa.³²⁹

322. POEMR-North Pacific, at: <<https://bit.ly/47NiQkp>>.

323. Semarnat (2021), “Aviso por el que se informa al público en general la modificación al Programa de Ordenamiento Ecológico Marino y Regional del Pacífico Norte,” published in the DOF on 20 July 2021, at: <<https://bit.ly/46zEYxG>> [Public Notice on Amendment of POEMR-North Pacific]. See also Eighth District Administrative Court of Mexico City, *Sentencia en el juicio de amparo indirecto núm. 1076/2018-I* (7 February 2019), at: <<http://cec.org/files/sem/20240306/aal007.pdf>>. The judgment in question, further to an amparo motion (*juicio de amparo*) filed against the POEMR-North Pacific for alleged insufficient technical justification, ordered Semarnat to revise ecological criteria CB25, CB25 *bis*, and CB26 of the POEMR-North Pacific:

taking into consideration the international commitments adopted by the Government of Mexico, as well as the internal regulations and technical studies conducted in this regard, with a view to establishing the measures necessary to achieve the objectives of protection, conservation, and recovery of sea turtle populations, and specifically those of the loggerhead turtle (*Caretta caretta*), in order to ensure that the risk of loss of the population is maintained at acceptable levels.

324. Public Notice on Amendment of POEMR-North Pacific, at: <<https://bit.ly/46zEYxG>>.

325. Cf. 2023 Fish Refuge Order [published 23 June 2023], preamble, at: <<https://bit.ly/3ZAdmGE>>.

326. UCAL, Comments from the Party in Question to the Draft Factual Record (30 January 2024).

327. Semarnat (2023), “Acuerdo por el que se da a conocer la modificación al Programa de Ordenamiento Ecológico Marino y Regional del Pacífico Norte,” published in the DOF on 11 August 2023, at: <<https://bit.ly/3sKm8pt>>.

328. *Ibid.*, appendix.

329. *Ibid.*

157. Moreover, on 23 June 2023, a new Fish Refuge Order was published,³³⁰ which states that by virtue of eliminating (in March 2023) the POEMR-North Pacific’s reference to the maximum acceptable threshold of mortality of loggerhead turtle specimens, the mortality limit would be henceforth set within the framework of PACE-*C. caretta*.³³¹ This latter action plan does not set any mortality limit for loggerhead turtle specimens.³³²

iii. On-board technical assistance program

158. In 2014, an *on-board technical assistance program* was implemented, in which technical/scientific observers accompany the small-scale fleet in the Gulf of Ulloa in order to record and monitor fishing operations on board smaller boats, with the aim of determining the existence of interactions with sea turtles, in particular *C. caretta*.³³³ The On-board Technical Assistance Program (*Programa de Asistentes Técnicos a Bordo*—OTA Program) was originally included in the Comprehensive Fisheries Zoning Plan for the Gulf of Ulloa, Baja California Sur as one of the lines of inquiry necessary to corroborate or rule out the hypothesis that loggerhead turtle deaths are being caused by interaction with small-scale fishing gear used in the region’s inshore finfish and shark fisheries.³³⁴
159. One specific objective of the OTA Program consisted of generating information and accurate data to ascertain the degree of interaction between inshore fishing and sea turtles due to the proximity of fishing to the turtles’ area of distribution, as well as measuring bycatch and associated mortality. In the initial period, from September to December 2014, the OTA Program managed to monitor fishing operations with technical/scientific observers onboard on 40-80% of boat trips in the central and southern zones of the Gulf of Ulloa.³³⁵
160. With the promulgation of the first version of the Fish Refuge Order in 2015, the OTA Program was modified to include a system for video recording of fishing operations as an alternative technology associated with satellite monitoring of boats in those cases where an observer was not present.³³⁶ It could not be determined from the information available to the Secretariat whether mechanisms were put in place to ensure the impartiality of the data generated.
161. During the eighth meeting of the Conference of the Parties (COP8) of the Inter-American Convention for the Protection and Conservation of Sea Turtles held in Buenos Aires, Argentina in June 2017, the Mexican delegation made a document available to the participants with information on measures taken by Mexico to protect the North Pacific loggerhead turtle population in the Gulf of Ulloa, including results obtained by the OTA Program since its inception, such as the fact that on-board observers covered all fishing operations on approximately 49% of trips by the inshore fleet, and that video recording had been carried out on over 60% of the fleet’s trips, making it possible to obtain an accurate record of interactions between fishing gear and turtles and, in particular, a record of specimens that died as a result of these interactions.³³⁷ This document states that three years after the inception of the program, a database had been compiled with

330. 2023 Fish Refuge Order, preamble, at: <<https://bit.ly/3ZAdmGE>>.

331. *Ibid.*, sixth article.

332. Cf. PACE-*C. caretta*, at: <<https://bit.ly/3FKKRgs>>.

333. Fish Refuge Order, preamble, at: <https://bit.ly/DOF_23-06-2016>.

334. Comprehensive Fisheries Zoning Plan at 9-10 and section 4.2, pp. 23-34, at: <<http://cec.org/files/sem/20240306/aal005.pdf>>.

335. Fish Refuge Order, preamble, at: <https://bit.ly/DOF_23-06-2016>.

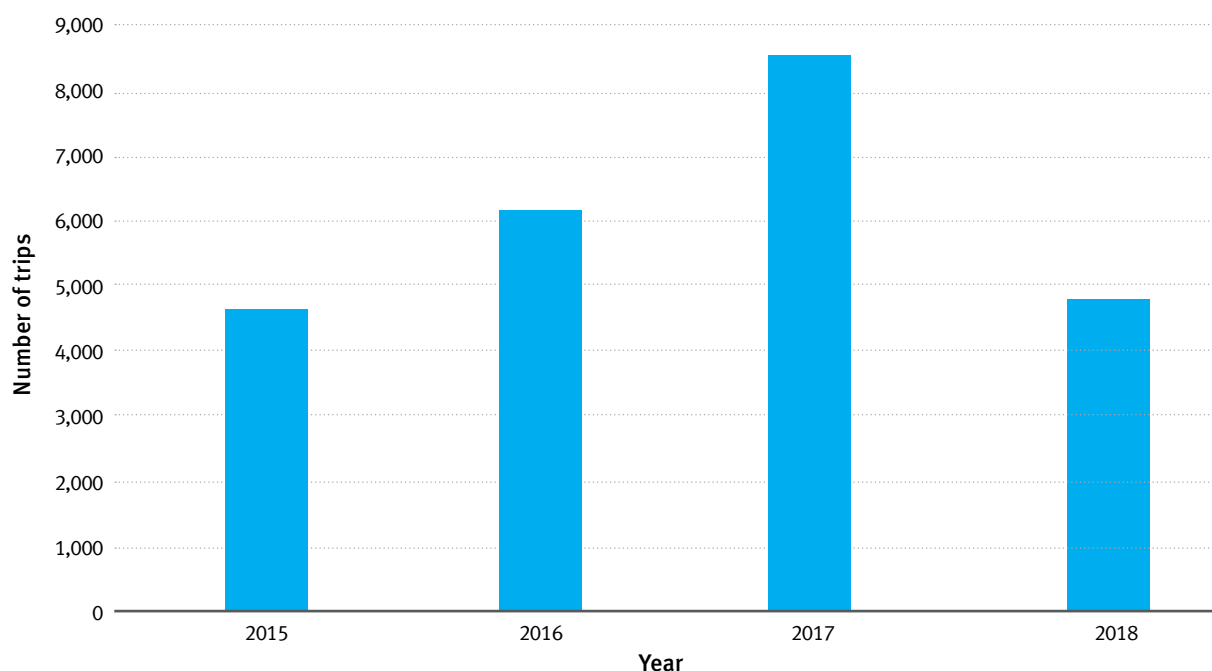
336. Sagarpa (2015), “Acuerdo por el que se establece una zona de refugio pesquero y medidas para reducir la posible interacción de la pesca con tortugas marinas en la costa occidental de Baja California Sur,” published in the DOF on 10 April 2015, eighth article, at: <https://bit.ly/DOF_10-04-2015>.

337. Government of Mexico (2017), *Pliego de instrucciones para la delegación mexicana*, in the context of the Eighth Conference of the Parties (COP-8) of the Inter-American Convention for the Protection and Conservation of Sea Turtles held 28-30 June 2017 in Buenos Aires, Argentina, at 3-4 and Appendix 1, “Información sobre las acciones de México para la protección de las tortugas marinas,” at 11, at: <<https://bit.ly/46EQQ16>>.

approximately 21,500 records of fishing operations, with a “maximum number of [six] individuals killed by fishing per year” having been recorded.³³⁸ While it is concluded that “fishing is not the main cause of loggerhead turtle [*C. caretta*] mortality,” the mandatory nature of the OTA Program is emphasized, along with its video recording component.³³⁹

162. Meanwhile, the information provided by Conapesca indicates that in the period 2015–2018, there were technical assistants on board during a total of 24,313 boat trips made by the inshore fleet in the Gulf of Ulloa.³⁴⁰ The documentation to which the Secretariat had access does not include the results from implementation of the OTA Program beyond 2018.

Figure 17. Inshore fleet trips in the Gulf of Ulloa with on-board technical assistants (2015–2018)



Source: Produced from data contained in Conapesca, unnumbered file (5 September 2023), in response to request for information no. 330008123000460 filed with the PNT, online at <<http://cec.org/files/sem/20231103/aae001.pdf>>.

163. In the period from 2015 to 2018 when the OTA Program was in effect, 908 loggerhead turtles were observed in the ocean, 865 live and 43 dead (floating in the water, without the cause of death having been ascertained); additionally, 126 interactions between *C. caretta* and fishing gear were recorded, of which 27 resulted in specimens killed as bycatch (see Figure 18).³⁴¹

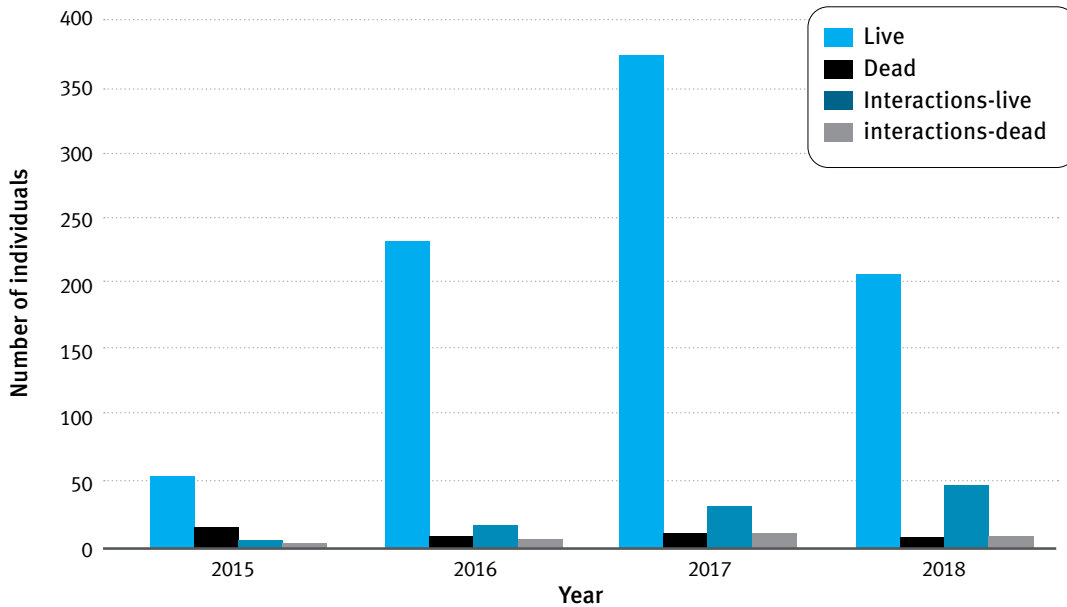
338. *Ibid.*, Appendix 1, at 11-12.

339. *Ibid.*, Appendix 1, at 12.

340. Conapesca, unnumbered file (5 September 2023) in response to request for information no. 330008123000460 filed with the PNT, at: <<http://cec.org/files/sem/20231103/aae001.pdf>>.

341. *Ibid.*

Figure 18. *C. caretta* individuals observed live or dead and interactions with fishing gear, according to on-board technical assistance records (2015–2018)



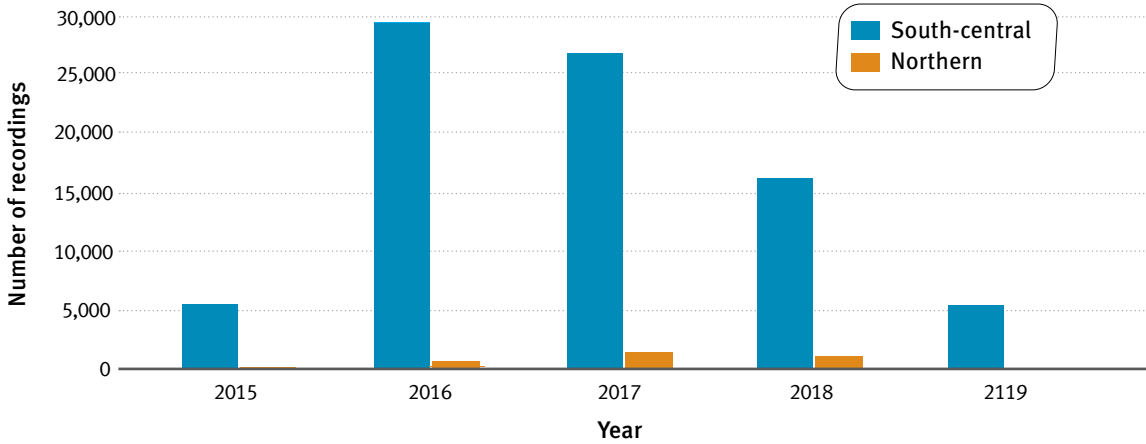
Note: Produced from data contained in Conapesca, unnumbered file (5 September 2023), in response to request for information no. 330008123000460 filed with the PNT, online at <<http://cec.org/files/sem/20231103/aae001.pdf>>.

164. The information provided by Conapesca on the project involving video recording systems for fishing operations indicates that during the period 2015–2019, there was coverage of the operations of all the units dedicated to finfish and shark fishing that did not have technical assistants on board. For this project, 416 video cameras were installed on the same number of small inshore boats out of the ports of Adolfo López Mateos, María Auxiliadora, Santo Domingo, La Poza Grande, Las Barrancas, El Chicharrón, San Juanico, El Dátil, El Delgadito, La Freidera, Estero el Cardón, and Punta Abrejos. A total of 86,956 recordings were made in the south-central and northern regions of the Gulf of Ulloa (see Figure 19).³⁴² It should be noted, however, that the Conapesca document does not specify the analysis method, nor does it give details on processes to ensure the quality or impartiality of the information produced.
165. The information provided by Conapesca indicates that after a review of the 86,956 recordings, it was only possible to identify 10 turtles involved in any interaction with fishing gear used in the shark and finfish fisheries (see Figure 20), yielding an interaction rate of 0.001%,³⁴³ calculated by dividing the number of dead turtles by the number of trips made from 2015 to 2019. It is unknown whether the same program involving video recording systems for fishing operations was implemented after 2019, nor is there information on the processes followed to ensure the quality of the data produced.

342. *Ibid.*

343. *Ibid.*

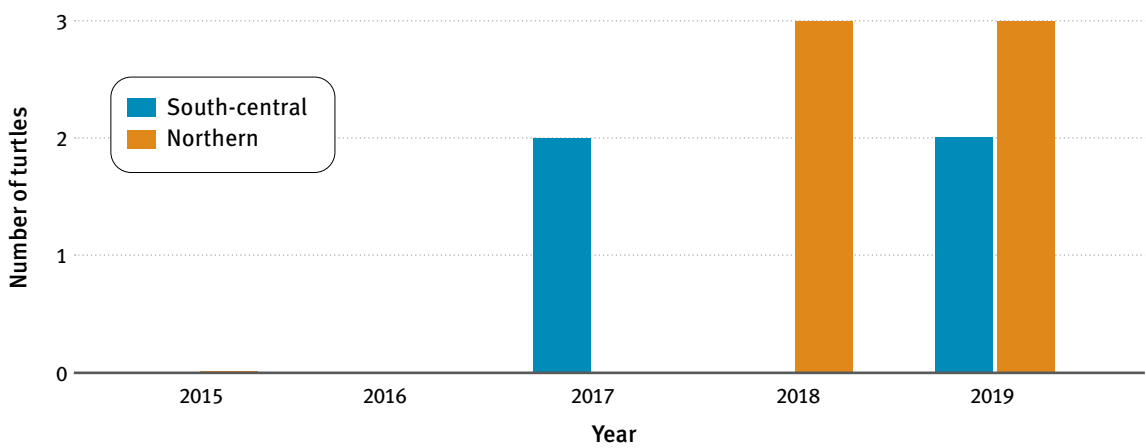
Figure 19. Number of video recordings produced on inshore boats in the Gulf of Ulloa (2015–2019)



Source: Produced from data contained in Conapesca, unnumbered file (5 September 2023), in response to request for information no. 330008123000460 filed with the PNT, online at <<http://cec.org/files/sem/20231103/ae001.pdf>>.

Note: For computation of the number of recordings, the information was divided into two regions of the Gulf of Ulloa, south-central and north.

Figure 20. Number of *C. caretta* individuals observed interacting with fishing gear as part of the program for video recording on small inshore boats (2015–2019)



Source: Produced from data contained in Conapesca, unnumbered file (5 September 2023), in response to request for information no. 330008123000460 filed with the PNT, online at <<http://cec.org/files/sem/20231103/ae001.pdf>>.

v. Alternatives for the inshore fisheries in the Gulf of Ulloa

166. In 2012, a biotechnological assessment of alternative fishing gear for inshore fishing in the Gulf of Ulloa was conducted as part of a joint project between Grupo Tortuguero de las Californias (GTC), the World Wildlife Fund (WWF), *Pronatura A.C.*, and Inapesca. Since finfish species in the region can be caught using a variety of gear, it considered the potential for testing and implementing biotechnological alternatives to manage fishing effort in such a way to achieve sustainable use.³⁴⁴ The goal of the study was to find strategies to minimize the impact of fishing gear and bycatch on non-target species, including the loggerhead turtle. Typical gillnets adapted with light reflectors were used in an attempt to decrease, in fact, to minimize, turtle bycatch. The results showed that the use of light on the fishing net did not decrease the probability of turtle bycatch. The study concluded by pointing to the need for continued assessment of various alternatives the following year (in 2013).³⁴⁵
167. In 2015, with funding from the former Ministry of Agriculture, Livestock Production, Rural Development, Fisheries, and Food (*Secretaría de Agricultura, Ganadería, Desarrollo Rural, Pesca y Alimentación*—Sagarpa, today Sader), the Northwest Biological Research Center (*Centro de Investigaciones Biológicas del Noroeste*—Cibnor) conducted a study that gave rise to the publication of a technical report on measures to mitigate loggerhead turtle bycatch from small-scale fishing equipment in the Gulf of Ulloa. Among the main recommendations of this study are the following:
- Establish turtle handling and release practices that include procedures for reviving the animal and returning it to its habitat.
 - void fishing in areas with surface temperatures less than 16 °C.
 - Stop using squid as bait and use fish instead.
 - Increase the size of the buoy rope used by longliners.
 - Modify the design of the gillnet and avoid the use of mooring lines.
 - Develop nets made from smaller-diameter thread so that turtles can break the thread and escape.
 - Set nets perpendicular to the coastline in order to reduce interactions with turtles.³⁴⁶
168. In 2017, a study was published on the decision by the Government of Mexico to implement various regulatory measures aimed at reducing bycatch of loggerhead turtles in the context of small-scale fishing in the Gulf of Ulloa, in order to achieve protective measures for this species comparable to those existing in the United States. The results indicate that the restrictions imposed caused a substantial decrease in incomes for inshore fishermen in the region. The study suggests the need for better assessment of the political and socioeconomic consequences of the application of these types of measures that are adopted by countries that have signed trade agreements. In addition, the study suggested the need to create transparency mechanisms to allow for domestic and international public awareness of the available information on bycatch arising from fishing activities.³⁴⁷
169. Although there is information on the actions of various organizations and individuals in Baja California Sur,³⁴⁸ the Secretariat was unable to identify additional publicly available information on Mexico's efforts to assess fishing gear alternatives from 2017 to the present.

344. Inapesca (2012), *Evaluación biotecnológica de artes de pesca alternativas en la pesquería ribereña del golfo de Ulloa B.C.S. para evitar la captura incidental de especies no objetivo*, preliminary measures, technical report (Mexico: Sagarpa), at 16, at: <<http://cec.org/files/sem/20240306/aal009.pdf>>.

345. *Ibid.*

346. Cibnor, file no. UT-002/22 (24 January 2022), in response to requests for information nos. 330005122000001, 330005122000002, 330005122000003, 330005122000004, 330005122000005, and 330005122000006 filed with the PNT, appendix, M. Ramírez Rodríguez, S. J. Reyes Fiol, and J. A. Romero Niebla (2015), *Medidas para mitigar la captura de tortuga amarilla en los equipos de pesca artesanal en el golfo de Ulloa, B.C.S.*, technical report (Mexico: Sagarpa, Conapesca), at: <<http://cec.org/files/sem/20231123/aaj017.pdf>>.

347. J. Senko, L. D. Jenkins, and S. H. Peckham (2017), "At loggerheads over international bycatch: Initial effects of a unilaterally imposed bycatch reduction policy," *Marine Policy* 76 (February 2017): 200-9, at: <<https://bit.ly/49KwBSt>>.

348. For information on sea turtle conservation efforts in Baja California Sur by individuals and organizations, see G. Tiburcio Pintos (2016), *Interacciones históricas entre los seres humanos y las tortugas marinas en la región del golfo de California*, tesis de doctorado en Ciencias Sociales, Universidad Autónoma de Baja California Sur, México, at 284-298, DOI: 10.13140/RG.2.2.15377.35681, at: <<https://bit.ly/48NBG88>>.

6. Ongoing Commitment to Transparency

170. Factual records provide detailed information regarding asserted failures to effectively enforce environmental laws in North America that may assist submitters, the USMCA/CUSMA Parties, and other segments of the public with an interest in the matters addressed. This factual record draws no conclusions regarding Mexico's alleged failures to effectively enforce its environmental law, as asserted by the Submitters, nor does it draw conclusions regarding the effectiveness of Mexico's enforcement efforts.
171. In accordance with USMCA/CUSMA Article 24.28(3), this factual record was produced "without prejudice to any further steps that may be taken" in regard to submission SEM-20-001 (*Loggerhead Turtle*).³⁴⁹
172. Pursuant to USMCA/CUSMA Article 24.28(7), the Environment Committee shall consider this factual record in light of Chapter 24 and the Agreement on Environmental Cooperation among the Governments of the United States of America, the United Mexican States, and Canada, and "may provide recommendations to the Council on whether the matter raised in the factual record could benefit from cooperative activities."
173. In addition, pursuant to USMCA/CUSMA Article 24.27(8), Mexico may provide updates to the Council and the Environment Committee on this factual record, as appropriate.

349. USMCA/CUSMA Article 24.28(3), at: <https://dof.gob.mx/2020/SRE/T_MEC_290620.pdf>.



APPENDICES

Appendix 1

COUNCIL RESOLUTION: 23-01

4 April 2023

Instructions to the Secretariat of the Commission for Environmental Cooperation (CEC) regarding submission SEM-20-001 loggerhead turtle (*Caretta caretta*), which asserts that the Mexican environmental authorities are failing to effectively enforce provisions of the Political Constitution of the United Mexican States (*Constitución Política de los Estados Unidos Mexicanos*—CPEUM), the General Law of the Ecological Balance and the Protection of the Environment (*Ley General del Equilibrio Ecológico y la Protección al Ambiente*—LGEEPA), the General Wildlife Law (*Ley General de Vida Silvestre*—LGVS), the Internal Regulations of the Ministry of Environment and Natural Resources (*Reglamento Interior de la Secretaría de Medio Ambiente y Recursos Naturales*—RI-SEMARNAT), the Agreement Establishing a Ban on Marine Turtle Species and Subspecies in the Waters of Federal Jurisdiction of the Gulf of Mexico and the Caribbean Sea, as well as in the Pacific Ocean, including the Gulf of California (*Acuerdo por el que se establece veda para las especies y subespecies de tortuga marina en aguas de jurisdicción federal del Golfo de México y Mar Caribe, así como en las del Océano Pacífico, incluyendo el Golfo de California*—“Closed Season Agreement”); the Agreement establishing the area of refuge for the loggerhead turtle (*Caretta caretta*) in the Gulf of Ulloa, in Baja California Sur (*Acuerdo por el que se establece el área de refugio para la tortuga amarilla (Caretta caretta) en el Golfo de Ulloa, Baja California Sur*—“Turtle Refuge Agreement”); and the Agreement Establishing the Fishing Refuge Area and New Measures to Reduce the Possible Interaction of Fishing with Sea Turtles on the West Coast of Baja California Sur (*Acuerdo por el que se establece la zona de refugio pesquero y nuevas medidas para reducir la posible interacción de la pesca con tortugas marinas en la costa occidental de Baja California Sur*—“Fish Refuge Agreement”), regarding the protection and conservation of the loggerhead turtle (*Caretta caretta*), a species whose conservation is a priority, and which is endangered by extinction.

THE COUNCIL:

CONSIDERING that the Submissions on Enforcement Matters (SEM) process and the preparation of factual records is now governed by Articles 24.27 and 24.28 of the United States-Mexico-Canada Agreement (USMCA) and the new Agreement on Environmental Cooperation (ECA) between the three countries, which superseded the North American Environmental Cooperation Agreement (NAAEC);

AFFIRMING that the SEM process, which may include the preparation of factual records, is designed to increase public participation and promote transparency and openness on issues related to the effective enforcement of environmental law in Canada, Mexico, and the United States;

RECOGNIZING that the purpose of a factual record is to provide an objective presentation of the facts relevant to the assertion(s) set forth in a submission, and will generally outline the history of the environmental enforcement issue raised in the submission, the relevant legal obligations of the Party, and the actions of the Party in fulfilling those obligations;

HAVING CONSIDERED submission SEM-20-001, dated 17 December 2020, filed by the submitters, and Mexico’s response, dated 28 May 2021;

HAVING REVIEWED the Secretariat's Notification, dated 27 July 2021, presenting its reasons to recommend the preparation of a factual record, with respect to the effective enforcement of: Article 4 (fifth paragraph) of the CPEUM; Article 5: Section XIX, 161, 171, 182 (first paragraph) and 202 (first paragraph) of the LGEEPA; Article 5: Section III, 9: Sections X and XXI, 60 (first paragraph), 60 bis 1 (first paragraph), 62, 104 of the LGVS; Articles 45: Sections I, II, V, subparagraphs a) and c), VI, X, XI and XII and 70: Sections I, III, IV and XIII of the RI- SEMARNAT; the Closed Season Agreement; the Turtle Refuge Agreement and the Fish Refuge Agreement;

PURSUANT TO Article 2.3 of the ECA, and taking into account the Council's policy of providing its reason(s) for the instructions to prepare a factual record and publication of the reasoning on the SEM public registry;

HEREBY UNANIMOUSLY DECIDES:

TO INSTRUCT the Secretariat to prepare a factual record on the effective enforcement of the following provisions:

- A. Article 4 (fifth paragraph) of the CPEUM, 182 (first paragraph), 202 (first paragraph) of the LGEEPA, and 45: Sections II, XI and XII of the RI SEMARNAT on the alleged failure to file complaints with the Federal Public Prosecutor (*Fiscalía General de la República*) for the death of specimens of the loggerhead turtle (*Caretta caretta*) in the Gulf of Ulloa, Baja California Sur, for the period 2010 to July 2020;
- B. Articles 5: Sections XIX, 161 and 171 of LGEEPA; 9: Section XXI, and 104 of LGVS; 45: Sections I, V a) and c), VI and X of RI SEMARNAT; with regard to the conduct of an average of 2 inspection and monitoring visits per year and the failure to impose administrative sanctions related to the loggerhead turtle in the Gulf of Ulloa, Baja California Sur, during the period 2010-July 2020;
- C. Articles 60 (first paragraph) and 62 of the LGVS and 70: Sections I, III, IV and XIII of the RI SEMARNAT, regarding the promotion and development of conservation activities, their updating and evaluation, in the Gulf of Ulloa, Baja California Sur, during the period 2017 to 2019;
- D. The Closed Season Agreement, the Turtle Refuge Agreement, and the Fish Refuge Agreement, with respect to the effectiveness of instruments to reduce by-catch and the alleged lack of mechanisms to review the measures implemented.

APPROVED BY THE COUNCIL:

Stephen de Boer
Government of Canada

Miguel Ángel Zerón Cid
Government of the United Mexican States

Jane Nishida
Government of the United States of America



Appendix 2

Submission SEM-20-001 (*Loggerhead turtle*)

Submission filed with the Commission for Environmental Cooperation pursuant to the provisions of Chapter 24 of the United States-Mexico-Canada Agreement

Failure to effectively enforce environmental law for the protection and conservation of the Loggerhead Turtle (*Caretta caretta*), a species listed as endangered

Submitters

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UNOFFICIAL TRANSLATION

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INTRODUCTION

This submission has been filed under Article 24 of the United States-Mexico-Canada Agreement by the Mexican Center for Environmental Law (*Centro Mexicano de Derecho Ambiental A.C.—CEMDA*) and the Center for Biological Diversity (“the Submitters”) with the purpose of petitioning the Commission for Environmental Cooperation (CEC) to prepare a factual record documenting the systematic failure to comply with and effectively enforce environmental law, on the part of the Ministry of the Environment and Natural Resources (*Secretaría del Medio Ambiente y Recursos Naturales—Semarnat*), acting in coordination with the Federal Attorney for Environmental Protection (*Procuraduría Federal de Protección al Ambiente—Profepa*), the National Commission for Protected Natural Areas (*Comisión Nacional de Áreas Naturales Protegidas—Conanp*) and the National Commission for the Knowledge and Use of Biodiversity (*Comisión Nacional para el Conocimiento y Uso de la Biodiversidad—Conabio*), in relation to the due protection and conservation of the loggerhead turtle (*Caretta caretta*), an endangered species.

We, the Submitters, have an interest in effective compliance with environmental law in relation to the protection and conservation of the loggerhead turtle (*Caretta caretta*) by virtue of the societal purpose, which we share, of promoting the preservation and conservation of ecosystems and biodiversity, and the preservation and restoration of ecological balance. In effect, ours is a collective, qualified, current, real and legally relevant interest in that we seek compliance with the law and the protection of the loggerhead turtle, cognizant that failure to do so will negatively impact biodiversity and ecological balance, thereby jeopardizing the right to a healthy environment, which is essential to the fulfillment of other human rights.

Specifically, Mexican authorities have failed to effectively enforce environmental law for the protection and conservation of the loggerhead turtle (*Caretta caretta*), an endangered species, which is a priority for conservation. In effect, **from 2017 to 2019, 889 loggerhead turtle specimens were caught in the Gulf of Ulloa, Baja California Sur.** Said fact demonstrates that there exists no effective compliance with the following provisions of environmental law: **Article 4 of the Political Constitution of the United Mexican States (*Constitución Política de los Estados Unidos Mexicanos—“the Constitution”*)**; **Articles 5 paragraph XIX, 161, 171, 182 and 202 of the General Ecological Balance and Environmental Protection Act (*Ley General de Equilibrio Ecológico y la Protección al Ambiente—LGEEPA*)**; **Articles 5 paragraphs I, II, III and IX, 9 paragraphs I, VII, X, XV, XXI, 60, 60 bis 1, 61, 62 and 104 of the General Wildlife Act**

(*Ley General de Vida Silvestre*—LGVS); Articles 2 paragraph III and 10 of the Federal Environmental Liability Act (*Ley Federal de Responsabilidad Ambiental*—LFRA); Articles 5, 45 and 70 of the Internal Regulation of the Ministry of the Environment and Natural Resources (*Reglamento Interior de la Secretaría de Medio Ambiente y Recursos Naturales*—RI-Semarnat); Articles II and IV of the Inter-American Convention for the Protection and Conservation of Sea Turtles; Articles 7, 8 and 14 of the Convention on Biological Diversity; Article 11 of the Additional Protocol to the American Convention on Human Rights in the Area of Economic, Social and Cultural Rights (Protocol of San Salvador); the Order establishing a closed season on sea turtle species and subspecies in waters under federal jurisdiction in the Gulf of Mexico and the Caribbean, as well as in the Pacific Ocean, including the Gulf of California (*Acuerdo por el que se establece veda para las especies y subespecies de tortuga marina en aguas de jurisdicción Federal del Golfo de México y Mar Caribe, así como en las del Océano Pacífico, incluyendo el Golfo de California*—“the Closed Season Order”); the Order on publicizing the list of priority species and populations for conservation (*Acuerdo por el que se da a conocer la lista de especies y poblaciones prioritarias para la conservación*—“the Priority Species Order”); Official Mexican Standard NOM-059-Semarnat-2010, Environmental Protection -Native wildlife species of Mexico - Risk categories and specifications for the inclusion, exclusion or change in category of species - List of threatened species; and the Action Program for the Conservation of the Loggerhead Turtle Species (*Programa de Acción para la Conservación de la Especie Tortuga Caguama*).

Statement of the problem

In the North Pacific, loggerhead turtles emerge from nesting beaches in Japan and travel to juvenile habitats in the waters of the north central Pacific. An unknown proportion then travels to the eastern Pacific, where there exists a feeding “hotspot” off the Pacific coast of the Baja California Peninsula.¹ This area is characterized by an abundance of marine species that are exploited using different fishing methods and equipment, which sometimes affect sea turtle populations. As attests recorded cases of thousands of stranded or dead specimens, a phenomenon associated with bycatch and fishing for human consumption.²

In fact, the location with the highest incidence of mortality in Mexico is the Gulf of Ulloa, where hundreds of turtles and other animals are found dead every year.³ According to Profepa’s official data, there were 789 loggerhead turtle deaths from 2017 to 2019. More specifically, 331 loggerhead turtles were found dead in 2019, along with specimens of other species, including 10 dolphins, 15 sea lions, 131 black sea turtles (*Chelonia agassizii*), 18 olive ridley sea turtles (*Lepidochelys olivacea*) and 6 whales. In 2018, 459 loggerhead turtle and 97 black sea turtle deaths were recorded. Finally, in 2020, yet another 351 loggerhead turtle deaths were recorded between January and June.⁴

Other causal factors of sea turtle mortality exist, including, notably, natural predators, vessel collisions,⁵ ingestion of anthropogenic marine litter and toxic contaminants,⁶ environmental factors, nutritional conditions and metabolic and infectious diseases,⁷ as well as others which have not been documented in the region.

1. Heather Welch, E.L. Hazen, D.K. Briscoe, S.J. Bograd, M.G. Jacox, T. Eguchi, ... & H. Bailey, “Environmental indicators to reduce loggerhead turtle bycatch offshore of Southern California,” *Ecological Indicators* 98, 9 (2019): 657-664.
2. Eduardo Reséndiz and María Lara-Uc, “Analysis of post mortem changes in sea turtles from the Pacific Coast of Baja California Sur using forensic techniques,” *Revista Bio Ciencias* 4, 4 (2017): 1-14.
3. Reséndiz, “Analysis of post mortem...”; S. H. Peckham, D. Maldonado-Díaz, V. Koch, A. Mancini, A. Gaos, M.T. Tinker, & W.J. Nichols, “High mortality of loggerhead turtles due to bycatch, human consumption and strandings at Baja California Sur, Mexico, 2003 to 2007,” *Endangered Species Research* 5, 2 (2018): 171-183.
4. Profepa’s response to information request 1613100053220, which included a species mortality report from Playa San Lázaro, Gulf of Ulloa, for the years 2017 to 2020 <<https://bit.ly/32stEp0>>.
5. Thierry M. Work, G.H. Balazs, M. Wolcott and R. Morris, 2003. “Bacteraemia in free-ranging Hawaiian green turtles *Chelonia mydas* with fibropapillomatosis,” *Diseases of Aquatic Organisms* 53, 1 (2003): 41-46.
6. Jennifer M. Keller, J.R. Kucklick, A. Stamper, C. Harms and P.D. McClellan-Green, “Associations between organochlorine contaminant concentrations and clinical health parameters in Loggerhead Sea turtles from North Carolina, USA,” *Environmental Health Perspective* 112, 10 (2004): 1074-1079.
7. Thierry M. Work and G. H. Balazs, “Pathology and distribution of sea turtles landed as bycatch in the Hawaii-based North Pacific pelagic long line fishery,” *Journal of Wildlife Diseases* 46, 2 (2010): 422-432.

In a 2017 study⁸ on the causes of sea turtle mortality in the Gulf of Ulloa region, the cause of death for 28% of the specimens analyzed was attributed to bycatch. Another 22% was attributed to fishing for human consumption. In the remaining 50%, it was not possible to determine⁹ the cause of death due to the specimens' advanced states of decomposition.

The Government of Mexico has recognized that the loggerhead turtle population in the north Pacific "is experiencing a significant reduction in its numbers in recent years" and that it is considered "endangered" by the IUCN. The Mexican government has determined that: "the death of over 92 subadults [among loggerhead turtles] per year, in the Pacific Ocean as a whole, seriously increases this population's risk of extinction." Recent deaths widely exceed this death rate.

In light of these issues, it is evident that **Mexico is not in compliance with environmental law in relation to the protection and conservation of the loggerhead turtle (*Caretta caretta*), a species listed as threatened with extinction.** In effect, Semarnat, Profepa, Conanp and Conabio **have failed to demand efficient and effective compliance with national and international environmental law.** More specifically, they are putting at risk the loggerhead turtle's biological viability by permitting the destruction or drastic modification of its habitat and its non-sustainable exploitation (through bycatch and fishing for human consumption), among other impacts, which thereby result in irreparable harm.

Semarnat, in coordination with Conanp, is the authority responsible for carrying out the administrative measures necessary to ensure sea turtles conservation, through the implementation of environmental law, along with the National Sea Turtles Conservation Program (*Programa Nacional de Conservación de Tortugas Marinas*) and other instruments for the conservation and protection of this species.

In addition, Conanp, in collaboration with Conabio, manages Action Programs for Species Conservation, which define particular activities that may contribute to the conservation and recovery of selected priority species. To this end, these programs also compile and integrate the relevant information. An Action Program for Loggerhead Turtle Conservation was instituted in 2011 and subsequently updated in 2018.¹⁰

Profepa is a decentralized Semarnat agency charged with the monitoring, inspection and verification of compliance with environmental law. Its principal task is to increase the observance of environmental regulations and thereby contribute to sustainable development and enforcement of compliance with environmental laws.¹¹ Moreover, one of its functions is to initiate actions when apprised of violations of environmental law and, if need be, levy the appropriate fines or penalties. Unfortunately, Profepa has not complied with its monitoring role. Nor has it exercised the powers vested in it to enforce compliance with environmental law.

Specifically, the Mexican authorities have failed to fulfill their responsibilities in the protection and conservation of the loggerhead turtle, and have not required effective compliance with the following provisions: **Article 4 of the Constitution; LGEEPA Articles 5 paragraph XIX, 161, 171, 182 and 202; LGVS Articles 5 paragraphs I, II, III and IX, 9 paragraphs I, VII, X, XV, XXI, 60 and 104; LFRA Articles 2 paragraph III and 10; Articles II and IV of the Inter-American Convention for the Protection and Conservation of Sea Turtles; Articles 7, 8 and 14 of the Convention on Biological Diversity; Article 11 of the Additional Protocol to the American Convention on Human Rights in the Area of Economic, Social and Cultural Rights (Protocol of San Salvador).**

The Submitters are filing this submission pursuant to Article [24.27] of Chapter 24 the United States-Mexico-Canada Agreement and hereby respectfully request that the CEC prepare a factual record in order to examine Mexico's systematic non-compliance with environmental law and related international treaties.

8. Reséndiz, "Analysis of post mortem changes..."

9. Eduardo Reséndiz and María Lara-Uc, "Analysis of post-mortem changes in sea turtles from the Pacific Coast of Baja California Sur using forensic techniques," *Revista Bio Ciencias* 4 (2017), 22 pages, ID 04.04.06. <<http://editorial.uan.edu.mx/BIOCIENCIAS/articulo/view/267/293>>.

10. To review the Action Program, see: <<https://www.gob.mx/conanp/documentos/programa-de-accion-para-la-conservacion-de-la-especie-tortuga-caguama-caretta-caretta>>.

11. For Profepa's mission statement, see: <<https://www.gob.mx/profepa/que-hacemos>>.

We, the Submitters have an interest in effective compliance with environmental law in relation to the protection and conservation of the loggerhead turtle (*Caretta caretta*) by virtue of the social purpose, which we share, of promoting the preservation and conservation of ecosystems and biodiversity, and the preservation and restoration of ecological balance. In effect, ours is a collective, qualified, current, real and legally relevant interest in that we seek compliance with the law and the protection of the loggerhead turtle, cognizant that failure to do so will negatively impact biodiversity and ecological balance, thereby jeopardizing the right to a healthy environment, which is essential to the fulfillment of other human rights.

II. THE FACTS

As mentioned above, Mexican territorial waters are one of the locations where practically all known sea turtles gather. This is the case for the waters off the west coast of Baja California Sur, especially in the Gulf of Ulloa, where marine species are abundant and abundantly exploited. This has affected the loggerhead turtle population, as attests the hundreds of dead turtles found every year. Moreover, this situation obtains despite the various instruments listed below which attach importance to the conservation and protection of this species:

1. *The Protocol of San Salvador*, signed on 17 November 1988 and ratified on 16 April 1996. Article 11 of this protocol establishes that everyone shall have the right to live in a healthy environment. To that end, the States Party shall promote the protection, preservation and improvement of the environment.
2. *The Closed Season Order*,¹² which establishes a total and indefinite closed season for the species of sea turtles present in waters under federal jurisdiction. Under this order, it is strictly prohibited to “extract, capture, chase and disturb or harm in any form any species or subspecies of sea turtle.” Furthermore, this instrument requires that an assessment be done of the magnitude and effects of sea turtle bycatch and decrees the reduction of said phenomenon. In short, the objective of the Closed Season Order is the protection, conservation, propagation and recovery of sea turtles populations.
3. *Order creating a standing Inter-ministerial Commission for the Protection and Conservation of Sea Turtles (Acuerdo por el que se crea con carácter permanente la Comisión Intersecretaral para la Protección y Conservación de las Tortugas Marinas)*¹³ in order to coordinate the actions of the different agencies in the Federal Public Administration, in relation to sea turtle research, **protection, conservation and rescue** activities.
4. On 28 June 1999, a new paragraph was added to Article 4 of the Constitution, which recognized the right to a healthy environment. On 8 February 2012, this paragraph took its current form: “Every person has the right to a healthy environment for his or her development and wellbeing. The State shall ensure the observance of this right. Environmental damage and deterioration shall generate liability on the part of whomever causes it in the terms of the provisions of the law.”
5. Ratification of the *Inter-American Convention for the Protection and Conservation of Sea Turtles*.¹⁴ In accordance with the importance of protecting these species in the habitats where the different periods of their lives unfold, this instrument enshrines a binding **prohibition on the [incidental] capture, retention or killing of sea turtles, and a restriction of human activities that could affect sea turtles during the periods of reproduction, nesting and migration**.
Furthermore, this Convention establishes the obligation to protect, conserve and restore the habitat and sites established and designated as protected areas and minimize as far as possible **the incidental capture, retention, harm or mortality of sea turtles in the course of fishing activities**.
6. *The General Wildlife Act (LGVS)*,¹⁵ which has as its objective the conservation of wildlife and wildlife habitat, through protection measures and the requiring of optimal levels of sustainable exploitation, while maintaining and promoting the restoration of the diversity and integrity thereof. To these ends, the authorities shall, pursuant to Article 5, make provisions for: the conservation of genetic diversity, as well as the protection, restoration and comprehensive

12. Published in *Diario Oficial de la Federación* on 31 May 1990. To review the Closed Season Order, see: >https://www.dof.gob.mx/nota_to_imagen_fs.php?codnota=4658226&fecha=31/05/1990&cod_diario=200570>.

13. Published in *Diario Oficial de la Federación* on 12 December 1993. To review the Order, see: <http://dof.gob.mx/nota_detalle.php?codigo=4808955&fecha=02/12/1993>.

14. Published in *Diario Oficial de la Federación* on 10 July 2001. To review the Convention, see: <https://aplicaciones.sre.gob.mx/tratados/ARCHIVOS/TORTUGAS_MARINAS.pdf>.

15. Published in *Diario Oficial de la Federación* on 3 July 2000. To review the LGVS, see: <<http://www.diputados.gob.mx/LeyesBiblio/ref/lgvs.htm>>.

management of natural habitats, as principal factors for the conservation and recovery of wildlife species; measures conducive to the evolution, viability and continuity of ecosystems, habitats and populations in their natural surroundings; and the application of scientific, technical and traditional knowledge to develop activities in relation to conservation and sustainable wildlife exploitation.

In effect, to achieve the objective of comprehensive conservation management, it is essential to have at one's disposal the studies and scientific and technical information required to make appropriate decisions on wildlife ecosystems, habitats and populations to ensure their protection, restoration, management, conservation and recovery.

- a. *Decree ordering the addition of Article 60 to the General Wildlife Act*,¹⁶ which establishes that Semarnat shall **promote and encourage the conservation and protection of threatened species and populations through the development of conservation and recovery projects, the establishment of special management and conservation measures for critical habitats and refuges to protect aquatic species, the coordination of sampling and permanent monitoring programs, and the certification of sustainable use activities, with the participation, where appropriate, of the persons who manage said species or populations and other stakeholders.**
- b. Pursuant to LGVS Article 61 Semarnat shall make and publish a list of priority conservation species to promote the development of projects for the conservation and recovery thereof, along with that of their ecosystems, habitats and associated species. This is not a list of threatened species (as per NOM-059-Semarnat-2010). Rather, it is a list of species conducive to further broadening conservation efforts.

The loggerhead turtle (*Caretta caretta*) is listed in the Priority Species Order.¹⁷

- c. Under LGVS Article 56, Semarnat is charged with making lists to identify threatened species or populations, pursuant to the provisions of the corresponding Official Mexican Standard. Said lists shall be reviewed and, if need be, updated every three years, if not before, should sufficient new information require the inclusion, exclusion or change of category of any species or population.
- d. Likewise, under LGVS Title VI – Wildlife Conservation, Chapter I – Threatened Species and Populations Designated as Conservation Priorities, shall be included among threatened species and populations those identified as: a) in danger of extinction, b) threatened, c) subject to special protection, and d) probably extinct in the wild.

In addition, pursuant to the same provision, *Mexican Official Standard NOM-059-Semarnat-2010, Environmental protection – Native wildlife species of Mexico - Risk categories and specifications for their inclusion, exclusion or change of risk category - List of threatened species*,¹⁸ identifies threatened wildlife species or populations in Mexico, makes lists accordingly and establishes the criteria for the inclusion, exclusion or change of risk category of species and populations through a methodology for the evaluation of risk of extinction.

The loggerhead turtle (*Caretta caretta*) is listed as a species threatened with extinction, which implies that the size of its population in Mexico has fallen drastically, i.e., to such an extent that its biological viability has been put at risk throughout its natural habitat, due to factors such as the destruction or drastic modification of habitat, non-sustainable exploitation, diseases or natural predators, etc. This determination was made in accordance with LGVS Article 58(a).

- e. Similarly, the Threatened Species Conservation Program (*Programa de Conservación de Especies en Riesgo—Procer*) was instituted, pursuant to the LGVS, as an instrument focusing solely on species threatened with extinction in Mexico, in the interests of their recovery, as well as that of populations of associated species in the same habitat. “Umbrella species” are selected with the aim of ensuring that proposed actions enable the recovery of said species along with others which perform important functions in the ecosystem. Specifically, Action Programs for Species Conservation (PACE) identify specific activities that contribute to the conservation and recovery of particular

16. Published in Diario Oficial de la Federación on 10 January 2002. To review the decree, see: <<http://www.diputados.gob.mx/LeyesBiblio/ref/lgvs.htm>>.

17. Published in Diario Oficial de la Federación on 5 March 2014. To review the Priority Species Order, see: <http://dof.gob.mx/nota_detalle.php?codigo=5334865&fecha=05/03/2014>.

18. Published in Diario Oficial de la Federación on 30 December 2010. To review the Official Standard, see <<https://www.dof.gob.mx/normasOficiales/4254/semarnat/semarnat.htm>>.

species. Thus, the Action Program for the Conservation of the Loggerhead Turtle Species (*Programa de Acción para la Conservación de la Especie Tortuga*), updated in 2018,¹⁹ is an example within the Procer/PACE framework in the specific form of project no. 00092169: “Strengthening the System of Protected Areas to enhance the conservation of threatened species and their habitats.”

7. *The Fish Refuge Order*,²⁰ which was published in *Diario Oficial de la Federación* (**Annex I**) and extended for five more years through another order published on 25 June 2018.²¹ It covers a refuge zone in located in the Gulf of Ulloa (**Annex II**):
8. Under LGVS Articles 65 and 67, Semarnat may establish refuges to protect native wildlife species in aquatic environments located in waters under federal jurisdiction, the Federal Maritime Terrestrial Zone and floodplains. The purpose of such refuges is to conserve native wildlife species and contribute to their development through management and conservation measures, as well as to conserve and protect their habitats. To achieve these ends, Semarnat shall elaborate the appropriate protection programs.

Thus, “the Order establishing a loggerhead turtle refuge in the Gulf of Ulloa, in Baja California Sur” (*Acuerdo por el que se establece el área de refugio para la tortuga amarilla, Caretta caretta, en el Golfo de Ulloa, en Baja California Sur—“the Loggerhead Turtle Refuge Order”*)²² was published to institute a refuge specifically for this species in said location.

9. A number of factors led to the decision to launch a process to elaborate the Marine Ecological and North Pacific Regional Management Program (*Programa de Ordenamiento Ecológico Marino y Regional Pacífico Norte—POEM*), including: the high environmental, economic and social value of the north Pacific region and its coastal strip; the numerous large bays on the coast of the Baja California Peninsula; the islands in the north Pacific; the presence of breeding areas of sea birds, sea turtles and the grey whale, among others; the region’s considerable relevance in terms natural heritage conservation; and the risks and negative consequences associated with growth and the negative impact of overexploitation of natural resources and climate change.²³ POEM led to the establishment of various Environmental Management Units (*Unidades de Gestión Ambiental—UGA*), each operating in accordance with its own respective ecological criteria and general or specific guidelines for the regulation of different types of land use. Thus, with respect to biodiversity in the Gulf of Ulloa region, the relevant ecological criteria for the protection and conservation of the loggerhead turtle were: CB25, CB25BIS, CB26, CB27 and CB28.
10. Nevertheless, despite the various instruments for its protection and conservation, provided for under the LGVS and LGEEPA, and which reflect its ecosystemic importance and its status as a **species threatened with extinction**, dramatically high numbers of loggerhead turtles are still dying.

In response to information request no. 1613100008820 (**Annex III**), Profepa indicated in its communication PFPA/1.7/12C.6/0273/2020, dated 18 February 2020, that from **2017 to 2019, 889 specimens of the loggerhead turtle were captured**.

That is to say, even according to official information, the recorded number of individuals captured as bycatch exceeded the limits specified in POEM criteria CB25 and C25bis. Thus, the number of recorded turtle deaths were as follows: 99 in 2017, 459 in 2018, and 331 in 2019.

19. To review the program, see: <<https://www.gob.mx/conanp/documentos/programa-de-accion-para-la-conservacion-de-la-especie-tortuga-caguama-caretta-caretta>>.

20. Published in *Diario Oficial de la Federación* on 23 June 2016. To review the Fish Refuge Order, see: <https://www.dof.gob.mx/nota_detalle.php?codigo=5442227&fecha=23/06/2016>.

21. To review this order, see: <https://dof.gob.mx/nota_detalle.php?codigo=5528971&fecha=25/06/2018>.

22. Published in *Diario Oficial de la Federación* on 5 June 2018. The Loggerhead Turtle Refuge Order, see: <https://www.dof.gob.mx/nota_detalle.php?codigo=5525056&fecha=05/06/2018>.

23. Published in *Diario Oficial de la Federación* on 9 August 2018. To review this decree, see: <http://dof.gob.mx/nota_detalle.php?codigo=5534289&fecha=09/08/2018>.

11. Subsequently, Profepa indicated in communication PFPA/1.7/12C.6/0719/2020, dated 10 August 2020 and issued in response to information request no. 1613100058420 ([Annex IV](#)), that its Department of Federal Crimes against the Environment (*Dirección General de Delitos Federales contra el Ambiente y Litigio*) had no records whatsoever of complaints filed with the Federal Prosecutor's Office (*Ministerio Público Federal*), which involved the probable commission of crimes against the environment in relation to the loggerhead turtle. And yet this agency is vested with authority to pursue such cases under LGEEPA Article 182 and RI-Semarnat Article 45 paragraph XII.²⁴
12. Similarly, in communication PFPA/1.7/12C.6/0722/2020, dated 14 August 2020 and issued in response to information request no. 1613100058320 ([Annex V](#)), Profepa stated that, during the period between 2010 and July 2020, neither its Assistant Attorney for Natural Resources nor its regional office in Baja California Sur had made any recommendations or requests or issued any requirements to any authority regarding the revoking or suspension of authorizations, permits, licenses or concessions or the implementation of any measure in relation to the protection and conservation of the loggerhead turtle (*Caretta caretta*). And yet these agencies are empowered to conduct such actions under LGEEPA Article 202 and RI-Semarnat Article 45 paragraph XII, subparagraph c).
13. Communication PFPA/1.7/12C.6/0723/2020, dated 14 August 2020 and issued in response to information request no. 1613100058820 ([Annex VI](#)), indicated that Profepa's Assistant Attorney for Natural Resources conducted no monitoring and inspection visits concerning the loggerhead turtle (*Caretta caretta*) in the period between 2010 and July 2020. As for the Profepa's Baja California Sur regional office, it only conducted 14 visits during the same period, i.e., **fewer than two visits per year**, notwithstanding its obligations pursuant to LGEEPA Article 161.
14. Further to the preceding points, it is worth mentioning that according to communication PFPA/1.7/12C.6/0724/2020, dated 14 August 2020 and issued in response to information request no. 1613100058920 by the head of Profepa's Transparency Unit ([Annex VII](#)), neither the Assistant Attorney for Natural Resources nor Profepa's office in Baja California Sur have levied any fines or penalties related to the loggerhead turtle (*Caretta caretta*) during the period between 2010 and July 2020.
15. This is so despite the fact that according to communication PFPA/1.7/12C.6/0739/2020, dated 18 August 2020 and given in response to information request no. 1613100058220 ([Annex VIII](#)), during the period from 2010 to July 2020:
 - a. The Department of Environmental Complaints and Civic Participation of Profepa's Legal Ombudsman (*Dirección General de Denuncias Ambientales, Quejas y Participación social de la Subprocuraduría Jurídica de la Profepa*) received three loggerhead turtle related complaints. In two cases, the files were concluded without any fines or penalties. In the remaining case, the investigation process is ongoing. These cases were in addition to the 41 complaints filed nationwide, 38 of which have been resolved.
 - b. In relation to this issue, the Profepa office in Baja California Sur took receipt of 33 citizen complaints and instituted 14 administrative procedures, 12 of which have been resolved without any penalties or fines while two are currently pending.

It should be pointed out that citizen complaints may not be treated as pending appeals for the purposes of this submission inasmuch as they solely constitute exercises in civic participation intended to inform the environmental authority of facts, acts or omissions which cause or may cause ecological imbalances or damages to the environment or natural resources, or which may contravene provisions of environmental law. Therefore, as such citizen complaints do not have the character of an appeal per se, should a violation of the law be substantiated, the citizen or party who made said complaint shall not participate in any manner whatsoever in the resulting administrative proceeding.

Furthermore, it should be noted that from 2010 to the present date, not a single fine or penalty has been levied in relation to issues of loggerhead turtle conservation or protection.

24 Published in *Diario Oficial de la Federación* on 26 November 2012. To consult this document, see: <<http://www.diputados.gob.mx/LeyesBiblio/regla/n25.pdf>>.

In light of the foregoing points, it is evident that Semarnat, Profepa, Conanp and Conabio have failed to carry out the actions required to comply with or enforce the nation's laws for the protection and conservation of the loggerhead turtle (*Caretta caretta*). In effect, as already mentioned, between 2017 and 2019, **889 specimens of this species were captured**.

III. APPLICABLE LAWS

On 29 June 2020, the following two instruments were published in *Diario Oficial de la Federación*: *The Decree Promulgating the Protocol replacing the North American Trade Agreement with the Agreement between the United States of America, the United Mexican States and Canada*, concluded in Buenos Aires, on 30 November 2018; and *The Protocol of Amendment to the Agreement between the United States of America, the United Mexican States and Canada*, concluded in Mexico City on 10 December 2019.²⁵

Pursuant to Chapter 24 of the United States-Mexico-Canada Agreement (USMCA), in order for compliance with a law or regulation to be binding on the Mexican State, said instrument must be an Act of Congress and/or regulation promulgated pursuant to an Act of Congress that is enforceable by the federal level of government; and/or any instrument that implements the Party's obligations under a multilateral environmental agreement. Moreover, it must have as its primary purpose the protection of the environment, or the prevention of a danger to human life or health, through the protection or conservation of wild flora or fauna or biological diversity, including endangered species, their habitat, and specially protected natural areas.

In the present case, it is clear that the **Inter-American Convention for the Protection and Conservation of Sea Turtles** and the **Convention on Biological Diversity** have the status of binding laws requiring the Mexican state's compliance, as, in addition to the fact that the former was signed on 29 December 1988 and ratified by the Mexican Congress on 29 April 1999 and the latter signed on 29 December 1988 and ratified by the Mexican Congress on 29 April 1999, said international instruments are applicable at the federal level and include amongst their respective objectives: promoting the protection, conservation and recovery of sea turtle populations and the habitats on which they depend; pursuing the conservation of biological diversity, the sustainable utilization of the components thereof, and fair and equitable participation in the benefits deriving from the utilization of genetic resources; and promoting the protection, preservation and improvement of the environment.

In effect, it is the obligation of the Mexican authorities to carry out the necessary administrative actions to safeguard the environment and biodiversity in compliance with, and observance of, the national laws and international norms which defend and consolidate the human right to a healthy environment. Thus, if the right to a healthy environment is to be effective, as provided for in Article 4 of the Constitution, there is clearly an obligation to carry out actions tending to protect the environment, and protect and conserve ecosystems and biodiversity, as attested by various case decisions of the Mexican Supreme Court ([Annex IX](#)).

Moreover, the **Political Constitution of the United Mexican States**, the **General Ecological Balance and Environmental Protection Act** (LGEEPA), the **General Wildlife Act** (LGVS) and the **Federal Environmental Liability Act** (LFRA) all qualify as environmental law, as they were enacted by the Congress of the United Mexican States on 5 February 1917, 22 December 1987, 27 April 2000, and 25 April 2013, respectively, and published in *Diario Oficial de la Federación* on 5 February 1917, 28 January 1988, 3 July 2000, and 7 June 2013, respectively; moreover, said instruments are binding laws at the federal level and regulate the provisions of the Constitution in respect of the preservation, conservation and restoration of ecological balance and environmental protection, nationwide and in all areas where the nation exercises its sovereignty and jurisdiction.²⁶

Similarly, under LGVS Articles 9 paragraph VII, and 71, the following responsibilities fall to the federal government: "*the regulation and enforcement of measures in relation to critical habitat and refuges for the protection of aquatic species*"; "*establishing limitations to the exploitation of wildlife populations, including closed season orders and the modification or lifting thereof, in accordance with the provisions of LGEEPA Article 81, when it is not possible to achieve the conservation or recovery*

25. El Decreto que puede consultarse en: <http://dof.gob.mx/2020/SRE/T_MEC_290620.pdf>.

26. As is clear from LGEEPA Article 1 and LGVS Article 1.

of populations through other measures.” As a consequence, both the **Sea Turtle Closed Season Order** and the **Loggerhead Turtle Refuge Order**, which were published in *Diario Oficial de la Federación*, on 31 May 1990 and 5 June 2018 respectively, should be considered environmental law in the terms of the USMCA, as they consist of regulatory provisions promulgated pursuant to the LGVS, which was enacted by the Congress of the United Mexican States and is applicable at the federal level, and as such are instruments for the protection and conservation of the loggerhead or yellow turtle (*Caretta caretta*).

In the same order of ideas, under LGVS Article 62, it is the federal government’s responsibility to “*implement programs for the conservation, recovery, reproduction and reintroduction into their habitat of priority conservation species and populations, with the participation, where appropriate, of the persons who manage said species or populations and other stakeholders.*” Consequently, the following programs must also be considered environmental laws in the terms of the USMCA: the **National Sea Turtles Conservation Program**, implemented annually by Semarnat; the **Action Program for the Conservation of the Loggerhead Turtle Species**, which in turn is part of the Procer program, in the framework of project 00092169 *Strengthening the management of the System of Protected Areas to enhance the conservation of threatened species and their habitats*; and, finally, the POEM program. In effect, as with aforementioned decrees and orders, these programs consist of regulatory provisions promulgated pursuant to the LGVS, which itself was enacted by the Congress of the United Mexican States and is the law of the land nationwide, with the purpose of enforcing the LGVS and thereby ensure the protection and conservation of the loggerhead or yellow turtle (*Caretta caretta*).

Finally, LGEEPA Articles 5 paragraph V and 36 paragraph I, along with LGVS Article 9 paragraph V, clearly establish that the federal government is responsible for “*the issuing of Official Mexican Standards and the monitoring of compliance with the latter in respect of the matters provided for under the Law*” with the object of “*establishing the requirements, specifications, conditions, procedures, targets, parameters and permissible limits which shall be observed in regions, zones, basins or ecosystems, as well as in the exploitation of natural resources, during economic activities, in production, in the use and end use of goods, in inputs and processes.*” Moreover, under the provisions of LGVS Articles 56 and 61, Semarnat “*shall make lists to identify threatened species or populations, in accordance with the specifications of the relevant Official Mexican Standard.*”

Therefore, **Official Mexican Standard NOM-059-Semarnat–2010** and the **Priority Species Order**, which were published in *Diario Oficial de la Federación*, on 30 December 2010 and 5 March 2014, respectively, should both be considered environmental law in the terms of the USMCA, as both were issued by Semarnat pursuant to LGEEPA and the LGVS (both of which were enacted by the Congress of the United Mexican States) and are applicable nationwide.

IV. FAILURE TO EFFECTIVELY ENFORCE ENVIRONMENTAL LAW

Under Article 1 of the **Protocol of San Salvador**, the States Parties undertake to **adopt the necessary measures, both domestically and through international cooperation, for the purpose of achieving progressively the full observance of the rights recognized in this Protocol**, including, the right of everyone to live in a healthy environment. Consequently, in Article 11 of the Protocol, the States Parties undertake to **promote the protection, preservation and improvement of the environment**.

As mentioned above, Semarnat indicated via a Profepa communication that in the 2017 to 2019 period, **889 specimens of loggerhead turtles were captured**. Recorded turtle deaths were as follows: 99 in 2017, 459 in 2018 and 331 in 2019. This situation clearly reveals the Mexican authorities’ failure to comply with environmental law. In effect, notwithstanding the establishment of legal provisions on environmental protection and on the protection or conservation of wildlife, biological diversity and species threatened with extinction, along with their habitats and protected natural areas, the enforcement of said provisions has not resulted in the protection of the loggerhead turtle.

Furthermore, pursuant to the *Inter-American Convention for the Protection and Conservation of Sea Turtles*, the Mexican state must promote the protection, conservation and recovery of sea turtle populations and their habitats, on the basis of the necessary scientific data and in accordance with the appropriate measures to achieve these ends.

In the same vein, the *Convention on Biological Diversity* establishes that each Contracting Party shall identify the components of biological diversity, through sampling and other techniques, and that said information shall be utilized to establish protected areas to conserve diverse species, through the protection of ecosystems and natural habitats and the maintenance of populations in natural surroundings. In addition, each Contracting Party shall promulgate the necessary legislation and other provisions for the protection of threatened species and populations.

At the national level, LGVS Article 60 Bis 1 stipulates that “**No specimen of sea turtle, including the parts and derivatives thereof, of any species, may be subject to extractive exploitation, be it for subsistence or commercial purposes.**” Consequently, no extraction whatsoever is permissible, not even as a result of bycatch.

As for the *Closed Season Order*, which includes the loggerhead turtle as a listed species, its objective is **the protection, conservation, propagation and recovery of sea turtle populations** and thereby establishes **a total and indefinite closed season for the species of sea turtles that exist in waters under federal jurisdiction**. Consequently, it is strictly prohibited to extract, capture, chase and **disturb or harm in any manner all species and subspecies of sea turtles**. Furthermore, the Order establishes that the authority must **evaluate the magnitude and effects of sea turtles bycatch, as well as reduce said phenomenon**.

The National Sea Turtles Conservation Program is a direct result of the Closed Season Order. It is implemented every year by Semarnat, in coordination with Profepa and Conanp, in the framework of the Threatened Species Recovery Program (Procer) and the Action Programs for Species Conservation (PACE). This instrument complements the Loggerhead Turtle Refuge Order, a measure decreed in response to the strong anthropogenic pressures affecting the species, within the framework of Article IV paragraph 2, subparagraph b) of the Inter-American Convention for the Protection and Conservation of Sea Turtles.

Official Mexican Standard NOM-059-Semarnat-2010 identifies threatened wildlife species or populations. In addition, it establishes the criteria for the inclusion, exclusion or change in risk category of wildlife species. The loggerhead turtle (*Caretta caretta*) is included in this list as a species **threatened with extinction**, which implies that the size of its populations in Mexico have fallen drastically, i.e. to such an extent that its biological viability is at risk throughout its entire natural habitat, due to factors such as the destruction or drastic modification of habitat, unsustainable exploitation, illnesses or natural predators, etc.

Likewise, in March 2014, the *Priority Species Order* was published in *Diario Oficial de la Federación*. This document lists the loggerhead turtle (*Caretta caretta*) as a priority species, a status which led to the development of an Action Program for Loggerhead Turtle Conservation, in force since 2011 with the following main objectives: facilitating the implementation of comprehensive conservation strategies; encouraging the utilization of the best loggerhead turtle protection measures; ensuring monitoring of its population and reproductive parameters; and protection of its breeding habitat.

Meanwhile, the technical supporting study for the proposal to declare a loggerhead turtle refuge in the Gulf of Ulloa, Baja California Sur determined that “*a constant fall in the number of turtles nesting in Japanese coastal areas has been documented even as bycatch has remained constant in the Gulf of Ulloa, a priority loggerhead turtle feeding area.*”

This study also indicated that the population in the North Pacific “*has been experiencing a significant reduction in population numbers in recent years [...] due to this reduction, the result of several threats, the population is classified as “endangered” on the International Union for the Conservation of Nature (IUCN) Red List [...] According to Demographic modeling, the death of over 92 subadults per year throughout the Pacific Ocean severely increases this population’s risk of extinction.*”

However, as mentioned in the background information above (points 17 to 22), in the period from 2017 to 2019, **889 loggerhead turtle specimens were captured**, i.e., an **average of 296 turtles per year** or **triple the permissible limit of 92 specimens**. This situation severely increases this population’s risk of extinction even as it underlines the Mexican environmental authorities’ lack of action to ensure effective loggerhead turtle protection and conservation despite having at their disposal the appropriate instruments to do so.

Furthermore, as attest communications PFPA/1.7/12C.6/0719/2020, PFPA/1.7/12C.6/0722/2020, PFPA/1.7/12C.6/0723/2020, PFPA/1.7/12C.6/0724/2020 and PFPA/1.7/12C.6/0739/2020, during the period from 2010 to July 2020, the Mexican authorities **lodged no complaints** with the Federal Public Prosecutor’s Office (**the deprivation of life of a specimen turtle is considered**

a crime, punishable by a sentence of 9 years); **did not once request the revoking or suspension of authorizations, permits, licenses or concessions** in response to high loggerhead turtle mortality; carried out **less than 2 monitoring and inspection visits per year, which is clearly insufficient**; and **did not levy a single fine or penalty** in relation to the loggerhead turtle, despite having received 41 complaints nationwide, including the 33 filed with the Profepa office in Baja California Sur.

As the foregoing makes clear, the Mexican authorities are **failing to comply with environmental laws in relation to the protection and conservation of the loggerhead turtle (*Caretta caretta*), a species listed as threatened with extinction**, and failing to fulfill their conservation and protection responsibilities in relation to this species. In effect, in addition to lacking the scientific and technical information required to design protection and conservation strategies and instruments, they are not fulfilling their monitoring and inspection obligations and they are not levying fines or penalties to ensure that not a single loggerhead turtle is impacted by bycatch.

This record of failure is manifest. In effect, according to the supporting technical study conducted prior to the establishment of the turtle refuge, mortality among loggerhead turtles may not exceed 92 individuals per year in the ENTIRE PACIFIC OCEAN if their viability as a species is to be ensured, in keeping with the provisions of the Inter-American Convention for the Protection and Conservation of Sea Turtles.

The high number of individuals captured as bycatch from 2017 to 2019 reflects the grave lack of effective measures for sea turtle protection and conservation due to the absence of a program to ensure the monitoring of, *and* effective compliance with, such protection and conservation measures.

The reason for this situation is two-fold: 1) there exist no recent studies on the size of the population (i.e., catch quotas are determined without any scientific basis whatsoever, which is risky and irresponsible); and 2) there exists no assessment by the Mexican authorities of the effectiveness of its current instruments in reducing mortality due to bycatch.

As all of the foregoing makes clear, the Mexican authorities have not been ensuring the loggerhead turtle's survival. In effect, the Mexican authorities are undermining biological diversity as they are lacking in technical and scientific information, in mechanisms for reviewing the effectiveness of existing measures, as well as an efficient inspection and monitoring system, which would ensure the levying of fines or penalties. For these reasons, it is essential to require the Mexican authorities' compliance with their obligations, without delay, in order to ensure the loggerhead turtle's survival.

V. COMPLIANCE WITH THE REQUIREMENTS OF USMCA ARTICLE 24 AND THE CASE FOR THE PREPARATION OF A FACTUAL RECORD.

Chapter 24 of the USMCA, which concerns the environment, obliges Parties to ensure the conservation of marine species, which includes the long term conservation of sea turtles, through the implementation of, and effective compliance with, conservation and management measures such as studies and evaluations of the impact of fishing activities on non-target species and their marine habitats. In effect, such studies entail the gathering of specific data on non-target species and estimates of their bycatch in order to avoid, mitigate or reduce this phenomenon in fisheries.

Based on the foregoing, it is evident that the death rates of the loggerhead turtle (*Caretta caretta*) described in this submission contravene USMCA Article 24.19. Consequently, it is appropriate to turn to this international body to request that a **factual record be prepared to address the failure on the part of the Mexican authorities to effectively enforce environmental law**, pursuant to the following instruments thereof: the Additional Protocol to the American Convention on Human Rights in the Area of Economic, Social and Cultural Rights (Protocol of San Salvador); the Inter-American Convention for the Protection and Conservation of Sea Turtles, the Political Constitution of the United Mexican States; the General Ecological Balance and Environmental Protection Act (LGEEPA); the General Wildlife Act (LGVS); the Order establishing a closed season on sea turtle species and subspecies in waters under federal jurisdiction in the Gulf of Mexico and the Caribbean, as well as in the Pacific Ocean, including the Gulf of California; the Order establishing a sea turtle (*Caretta caretta*) refuge in the Gulf of Ulloa, Baja California Sur; the National Sea Turtles Conservation Program; the Action Program for the Conservation of the Loggerhead Turtle; Official Mexican Standard NOM-059-Semarnat-2010, Environmental Protection - Native wildlife species of Mexico - Risk categories and specifications for the inclusion, exclusion or change in category of species - List of threatened species; and the Order declaring the list of priority species and populations for conservation. Let it be further noted that the relevant ends of environmental law are as follow:

1. To promote the protection, conservation and recovery of sea turtle populations and of the habitats on which they depend, based on the most reliable scientific and technical data and the best available science.
2. To prohibit the extraction, capture, chasing and retention of all species and subspecies of sea turtles, as well as any other act which may disturb, prejudice or cause the death of same. Shall also be prohibited the domestic trade in same, including in their eggs, parts or products to thereby ensure compliance with the total and definitive closed season order on the species.
3. To minimize as far as possible the incidental capture, retention, harm or death of sea turtles in the course offishing activities and/or any other human activity, through appropriate regulation of such activities, as well as through the development, improvement and use of appropriate fishing gear, equipment or techniques, including turtle excluder devices (TEDs).
4. To restrict the human activities which may seriously affect sea turtles, particularly during the periods of reproduction, nesting and migration.
5. To reinforce monitoring and inspection operations which may lead to actions for the protection of the species' populations and habitats.
6. To restore sea turtle habitats and spawning grounds, as well as establish whatever restrictions may be necessary regarding the utilization of these areas through, inter alia, the designation of protected areas and/or any other protection classification recognized by Mexican law.
7. To ensure monitoring of sea turtle populations and their reproductive parameters.
8. To conduct scientific research on sea turtles, their habitats and other relevant aspects, which may generate reliable and useful information for the adoption of measures that may ensure the protection, conservation and recovery of sea turtle populations and that of the habitats on which they depend, in strict compliance with the guidelines stipulated in the Convention on Biological Diversity.
9. To ensure strict compliance with the instruments of national and international legislation regulating the protection, conservation and recovery of sea turtle populations and that of the habitats on which they depend.
10. To ensure inter-institutional, logistical and financial coordination to facilitate the implementation of comprehensive strategies for the species' conservation.

Best regards,

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Appendix 3

Factual Record for Submission SEM-20-001 (*Loggerhead Turtle*)
Environmental Laws in Question

The Political Constitution of the United Mexican States

Article 4. [...]

[...]

[...]

[...]

Every person has the right to a healthy environment for his or her development and wellbeing. The State shall ensure the observance of this right. Environmental damage and deterioration shall generate liability for whomever causes it in the terms provided by the law.

The General Ecological Balance and Environmental Protection Act

Article 5. The federal government has the following powers:

[...]

XIX. To monitor and promote, within the purview of its jurisdiction, compliance with this Act and the other provisions deriving therefrom;

[...]

Article 161. The Ministry shall conduct inspection and monitoring actions regarding compliance with the provisions contained in this Act, as well as regarding compliance with the other provisions deriving therefrom.

In Mexican territorial waters, the Ministry shall conduct monitoring and inspection actions directly, or it shall so act through the Ministry of the Navy and, where required, levy fines and penalties for violations of provisions of this Act.

Article 171. Violations of the provisions of this Act, its regulations or other provisions deriving therefrom shall be administratively punished by the Ministry with the offender incurring one or more of the following fines or penalties:

- I. A fine equivalent to thirty thousand to fifty thousand days of wages, as per the general minimum wage in effect in the Federal District on the date the fine was levied;
- II. A shutdown, which may be temporary or definitive, total or partial, when:
 - a) The offender has failed to comply with the deadlines and conditions of the corrective or emergency measures ordered by the authority;
 - b) In cases of repeat offenses where the infractions generate negative environmental effects; or
 - c) The issue is the repeated flouting of orders, on three or more occasions, to comply with one or more corrective or emergency measures ordered by the authority;
- III. Administrative detention for up to 36 hours;
- IV. Forfeiture of the instruments, specimens, products or derivatives directly connected with infractions related to forest resources, species of wildlife flora and fauna or genetic resources, in accordance with the provisions of this Act; and
- V. The suspension or revoking of the concessions, licenses, permits or authorizations in question.

Should the infraction(s) in question persist beyond the deadline accorded by the authority to rectify said infraction(s), fines may be imposed for each successive day of noncompliance, provided the total amount levied does not exceed the maximum permissible amount, in accordance with paragraph I of this Article.

In the case of a repeat offense, a fine of up to three times the amount of the original fine may be levied. A definitive shutdown may also be ordered.

A party will be considered a repeat offender if it engages more than once in conduct involving violations of the same provision within a two-year period from the date of the initial notice of infraction, provided that the latter still remains in effect.

Article 182. In cases where, due to the exercise of its functions, the Ministry becomes aware of acts and omissions which may constitute offenses in the terms of the applicable legislation, it shall file the appropriate complaint with the Federal Prosecutor's Office.

[...]

Article 202. The Federal Attorney for Environmental Protection has the power, within the purview of its jurisdiction, to undertake the appropriate actions with the competent authorities, when it becomes aware of acts, facts or omissions which may constitute violations of administrative or criminal law.

[...]

General Wildlife Act

Article 9. The federal government is responsible for:

[...]

XXI. The monitoring and inspection of compliance with this Act and the standards deriving therefrom, as well as for ordering the safety measures and administrative penalties established in this Act, with the appropriate collaboration of the state governments.

[...]

Article 60. The Ministry shall promote and encourage the conservation and protection of endangered species and populations by developing conservation and recovery projects, by establishing special measures for the management and conservation of critical habitats and refuges to protect aquatic species, by coordinating sampling and ongoing monitoring programs, as well as by certifying sustainable exploitation, with the participation, where appropriate, of the persons who manage said species or populations, as well as that of other stakeholders.

[...]

Article 60. The Ministry shall promote and encourage the conservation and protection of endangered species and populations by developing conservation and recovery projects, by establishing special measures for the management and conservation of critical habitats and refuges to protect aquatic species, by coordinating sampling and ongoing monitoring programs, as well as by certifying sustainable exploitation, with the participation, where appropriate, of the persons who manage said species or populations, as well as that of other stakeholders.

[...]

Article 62. The Ministry shall implement programs for the conservation, recovery, reproduction and reintroduction into their habitat, of species and populations with conservation priority, with the participation, where appropriate, of the persons who manage said species or populations, as well as that of other stakeholders.

Information on the conservation and recovery projects for species and populations with conservation priority will be made available to the public.

Article 104. The Ministry shall carry out the monitoring and inspection actions necessary for the conservation and sustainable exploitation of wildlife, in accordance with the provisions of this Act, as well as those of the General Ecological Balance and Environmental Protection Act and of the provisions deriving therefrom; moreover, it shall maintain a register of offenders against these same provisions. Persons included in said register, in relation to the infractions specified in Article 127 section II of this Act, in the terms established by the regulation, shall not be granted use authorizations or approvals for the transfer of rights of use.

Internal Regulation of the Ministry of the Environment and Natural Resources

Article 45. The Office of the Federal Attorney for Environmental Protection shall be headed by a federal attorney vested with the following powers:

- I. To program, order and conduct inspection visits or operations to monitor and assess compliance with the applicable legal provisions on: the restoration of natural resources; the preservation and protection of forest resources, wildlife, turtles, marine mammals and endangered aquatic species, as well as their ecosystems and genetic resources; the biosecurity of genetically modified organisms; exotic species which threaten ecosystems, habitats or species; the use and exploitation of the federal maritime terrestrial zone; seaside beaches and land reclaimed from the sea or any other basin of maritime waters; protected natural areas; air pollution prevention and control; soils contaminated by hazardous materials and waste; high risk activities; hazardous waste; environmental impact; pollutant release and transfer; discharges of wastewater into national water bodies; environmental zoning and environmental auditing, in accordance with the applicable provisions; as well as to establish policies and administrative guidelines to ensure the furtherance of said ends;
- II. To receive, process and investigate complaints on matters falling within the purview of the Federal Attorney and, where appropriate, undertake, in the terms of the applicable laws and regulations, the necessary steps to determine the existence of the acts, facts or omissions which underlie the complaint or, alternatively, direct said complaints toward the competent authorities;

[...]

- V. To issue rulings based on the administrative proceedings under its purview, as well as:
 - a) Request that the competent authorities at the Ministry revoke or suspend authorizations, permits, licenses or concessions, when such have been imposed as a penalty, while also requesting, when appropriate, cancelation of the offender's registration with the competent authority;

[...]

- c) Encourage the competent federal, state or municipal authorities to execute one or more of the safety measures provided for in other laws or regulations when there exists an imminent risk of ecological imbalance or damage to, or serious deterioration of, natural resources or high impact cases of pollution;

VI. To develop and issue recommendations to the federal, state, municipal or Federal District authorities in order to promote compliance with environmental law, as well as follow-up on said recommendations;

[...]

X. To determine and order technical corrective measures, emergency measures, restoration measures and actions to rectify irregularities, as well as safety measures and penalties and fines within its purview, while providing what is necessary for the execution of said measures, in the terms of the applicable legal provisions;

XI. To investigate and determine the existence of violations of environmental laws or regulations or, in extra-jurisdictional cases, inform the appropriate authorities of the acts, facts or omissions, and request, in either case, that said authorities execute one or more of the safety measures established in the regulations which they are charged with enforcing;

XII. To file complaints with the Federal Prosecutor's Office regarding acts, facts or omissions, which concern the probable commission of crimes against the environment, and request its collaboration, as well as that of the criminal proceeding's competent judicial body;

XIII. To issue recommendations to federal, state and municipal authorities with the aim of promoting ecosystems conservation and conservation of ecosystems biodiversity;

[...]

Article 70. The National Commission for Protected Natural Areas shall have the following powers:

I. To promote and develop activities aimed at the conservation of ecosystems and their biodiversity in protected natural areas, their catchment areas and in refuges for the protection of aquatic species and other species which, due to their characteristics, the Commission designates as conservation priorities;

[...]

III. To execute and promote in protected natural areas, in their catchment areas and in refuges for the protection of aquatic species and other species, which, due to their characteristics, the Commission designates as priorities for conservation, the special programs, economic programs or programs of any other nature provided for in the Federation's Expenditure Budget, or in other legal provisions;

IV. To formulate, promote, execute and evaluate projects for the conservation and recovery of species and populations considered priorities, with the participation, where appropriate, of the persons who manage said species or populations and that of other stakeholders, as well as other Ministry administrative units, and the agencies and entities of the Federal Public Administration, states and municipalities;

[...]

XIII. To elaborate protection programs and administrate aquatic species protection refuges;

[...]

Order establishing a closed season on sea turtle species and subspecies in waters under federal jurisdiction in the Gulf of Mexico and the Caribbean, as well as in the Pacific Ocean, including the Gulf of California [Closed Season Agreement]

Order establishing a closed season on sea turtle species and subspecies in waters under federal jurisdiction in the Gulf of Mexico and the Caribbean, as well as in the Pacific Ocean, including the Gulf of California, in accordance with the provisions of Articles 37 section XXVII and 43 sections I, II and V of the Organic Law of the Federal Public Administration; Articles 1, 2, 15 sections II and III, 16 section II, 17 sections II and V, 68 sections I, II, IV, VII, XI and XII, 69 section V and other applicable provisions of the Federal Fisheries Act; Articles 73, 104 and 105 of the Regulation to the Federal Fisheries Act; and

Whereas

The sea turtles species existing in the waters under federal jurisdiction of the Gulf of Mexico and the Caribbean, as well as in the waters of the Pacific Ocean, including the Gulf of California, known as “the olive ridley sea turtle” (*Lepidochelys olivacea*), “the Kemp’s ridley turtle” (*Lepidochelys kempii*), “the green sea turtle” (*Chelonia mydas*), “the Pacific green sea turtle” (*Chelonia agassizii*), “the loggerhead turtle” (*Caretta caretta*), “the hawksbill sea turtle” (*Eretmochelys imbricata*), “the leatherback sea turtle” (*Dermochelys coriacea*), as well as the subspecies known as “the Atlantic loggerhead turtle” (*Caretta caretta caretta*), “the Pacific and Indian loggerhead turtle” (*Caretta caretta gigas*), “the Atlantic hawksbill sea turtle” (*Eretmochelys imbricata imbricata*), “the Pacific hawksbill sea turtle” (*Eretmochelys imbricata bissa*), “the Atlantic leatherback sea turtle” (*Dermochelys coriacea coriacea*) and “the Pacific leatherback sea turtle” (*Dermochelys coriacea schlegelii*), constitute a natural resource forming part of the nation’s public wealth, which the State has the duty to conserve so that its use may bring the greatest benefits to the country’s economy;

In accordance with the traditional purposes of natural resources conservation and preservation, an area in which Mexican fisheries policy has distinguished itself at the international level, for over twenty-five years, use of all species of sea turtles has been subject to a system of protection via various instruments and actions, including the following notable examples:

- a) The establishment of turtle protection camps at the main landing beaches during the breeding seasons of the nine species and subspecies that spawn in Mexico, a mechanism which has functioned as a focal point for the realization of national programs in areas such as scientific research and protection of landing beaches and nests, natural and artificial incubation of eggs, control of natural predators, and protection and release of hatchlings in their natural environment.
- b) Reduction in the user base of these resources, which have been legally reserved to fishing cooperative enterprises since 1972, the year the Federal Fisheries Development Act was passed. Said restriction, which is now established under Article 55 of the current Federal Fisheries Act, facilitates the incorporation of an organized labor force that is not solely focused on fishing, but rather is also committed to conservation of this resource.
- c) The establishment of a system of partial and total closures per species, which has excluded any type of use for practically all sea turtle species since 1973, except for the “olive ridley” or “loggerhead” turtle and the “black,” “green” or “Pacific green” turtle species, for which commercial use was suspended in 1983.

- d) As a result of the Presidential Decree of 28 October 1986, published the following day in the *Diario Oficial de la Federación*, the establishment of sixteen reserve areas and refuge sites located off the coasts of the Gulf of Mexico and the Pacific Ocean was declared; in addition, legal regulations were established to avoid deterioration of ecological conditions in the environment and pollution, and thereby protect breeding and nesting by sea turtles in said areas and in a maritime strip of five nautical miles.
- e) Adoption of a use scheme based on catch quotas set in strict adherence with the scientific recommendations coming out of National Fisheries Institute research programs, where said quotas, in addition to focusing on the exclusive use of the “olive Ridley turtle,” have progressively decreased since the 1983–1984 season and been assigned to groups of Indigenous fishers and communities, organized in cooperatives, with few opportunities for alternative employment or other economic activities.

The efforts made by the Government of Mexico and stakeholder sectors have been in general positive and readily apparent; as proof, one only need mention the fact that while in other regions of the world sea turtle breeding, nesting and hatching areas have practically disappeared, sea turtles are still coming to Mexico’s beaches;

On balance, the strategy adopted by the federal government regarding the use of turtle resources, which takes into account the status of their populations and includes specific protection and conservation programs, is considered favorable; however, other factors, such as the slow biological development which characterizes sea turtle species, in addition to the inevitable effects of the industrialization process and growth in human settlements and tourist sites, as reflected in higher pollution levels and changes in the ecology and habitats where the breeding and nesting processes of these species take place, have made the full recovery of these resources difficult, as attests the continuing worldwide deterioration in their populations;

Taking into account the foregoing considerations, as well as the fact that sea turtle species, as natural resources, belong to the Nation, and based on the scientific studies and research done by the Ministry of Fisheries and the Ministry of Urban Development and Ecology, a determination was made to decree a total and indefinite closure order for all species and subspecies of sea turtles in waters under federal jurisdiction;

Consequently, with the provisions herein founded on technical reasons and the public interest, I hereby issue the following:

Order

Article one. A total and indefinite closed season is established for the species of sea turtles existing in the waters under federal jurisdiction of the Gulf of Mexico and the Caribbean Sea, as well as in the waters of the Pacific Ocean, including the Gulf of California, which have the following common names and scientific denominations: “the olive ridley sea turtle” (*Lepidochelys olivacea*), “the Kemp’s ridley turtle” (*Lepidochelys kempii*), “the green sea turtle” (*Chelonia mydas*), “the Pacific green sea turtle” (*Chelonia agassizii*), “the loggerhead turtle” (*Caretta caretta*), “the hawksbill sea turtle” (*Eretmochelys imbricata*), “the leatherback sea turtle” (*Dermodochelys coriacea*). Also affected are the following subspecies: “the Atlantic loggerhead turtle” (*Caretta caretta caretta*), “the Pacific and Indian loggerhead turtle” (*Caretta caretta gigas*), “the Atlantic hawksbill sea turtle” (*Eretmochelys imbricata imbricata*) and “the Pacific hawksbill sea turtle” (*Eretmochelys imbricata bissa*), “the Atlantic leatherback sea turtle” (*Dermodochelys coriacea coriacea*) and “the Pacific leatherback sea turtle” (*Dermodochelys coriacea schlegelii*).

Article two. It is strictly prohibited to extract, capture, chase and disturb or harm in any manner any of the species and subspecies of sea turtles in waters under federal jurisdiction in the Gulf of Mexico, the Caribbean, the Pacific Ocean and the Gulf of California, as well as in beaches nationwide where they spawn. It is also strictly prohibited to destroy their nests and to collect, keep or sell their eggs.

Article three. Specimens of any species of sea turtle caught as bycatch during the operations of other commercial fisheries must be returned to the sea, regardless of their physical state, dead or alive, as it is prohibited to keep and transport any such specimens on fishing vessels.

Article four. The Ministry of Fisheries shall undertake to establish a program to assess the magnitude and effects of sea turtle bycatch in other fisheries, as well as specific research and technological development projects to encourage the adoption of more selective fishing gear and equipment to reduce this type of bycatch.

Article five. Fishing within the 4 nautical mile strip facing the refuge zones during the breeding and spawning periods of the different species of sea turtles shall be subject to the regulatory standards issued in this regard by the Ministry of Fisheries. Moreover, the latter will request of the Ministry of Communications and Transport that it issue regulations on navigation in the abovementioned strip which contribute to the protection of the resources that are the object of this Order.

Article six. The Ministry of Fisheries shall, based on the opinion of the National Fisheries Institute and in coordination with the Ministry of Urban Development and Ecology, establish new refuges for nesting by sea turtle species and subspecies, when such is required to protect their breeding and nesting seasons. The Ministry of Urban Development and Ecology shall not grant permits, concessions or authorizations for the use or exploitation of the federal maritime terrestrial zone.

Article seven. The Ministry of Urban Development and Ecology shall, in coordination with the state and municipal governments, regulate land uses and purposes in nesting refuges with a view to ensuring the preservation of the ecological conditions in the natural environment which enable breeding and nesting by sea turtle species and subspecies. This will be done by encouraging local authorities to issue land-use declarations in areas adjacent to such refuges, which are consistent with the latter's objectives, in order to avoid the ecological deterioration thereof.

Article eight. Acting through the National Fisheries Institute, the Ministry of Fisheries shall coordinate the scientific and technological research work on sea turtle species and subspecies. To that end, it will convene the different agencies, groups, associations and public and private institutions, which make up the national and international scientific community interested in participating in the elaboration of a National Sea Turtle Plan aimed at the preservation and recovery of sea turtle populations.

Article nine. The Ministry of Urban Development and Ecology shall be responsible for the establishment and control of turtle protection camps installed in refuges and beaches in Mexico for sea turtle protection and conservation. Specifically, it will carry out activities to conserve and preserve the natural environment's ecological balance, protect the sea turtle species and subspecies that come to breed and nest, as well as protect their eggs and hatchlings until their release into the ocean.

The Ministry of Urban Development and Ecology will undertake monitoring and control activities in both turtle refuges and turtle protection camps. To that end, it will coordinate with the Ministry of Fisheries and Ministry of the Navy to expand and strengthen, in accordance with their respective roles and responsibilities, monitoring and inspection programs which guarantee the observance of, and compliance with, the provisions set forth in this Order.

Article ten. The objective of the Closed Season Order established herein is the protection, conservation, propagation and recovery of sea turtle populations; consequently, this order may only be amended or lifted when the results of the studies and technical and scientific research conducted by the Ministry of Fisheries and the Ministry of Urban Development and Ecology show that natural populations have increased and may therefore newly support the extraction of portions of said populations, without prejudice to their conservation and long-term survival.

Article eleven. The Ministry of Fisheries and the Ministry of Urban Development and Ecology shall encourage the competent authorities to take the appropriate measures to prohibit the trade in, or processing of, sea turtles, sea turtle eggs, products and derivatives in Mexico, as well as the importing and exporting thereof.

Article twelve. Whoever carries out the prohibited acts referred to in this Order shall be subject to the appropriate penalties and fines, as prescribed in the Federal Fisheries Act.

Article thirteen. The Ministry of Fisheries and the Ministry of Urban Development and Ecology shall, in accordance with their respective roles and responsibilities, monitor strict compliance with this Order and, where necessary, shall request support from other competent Federal Executive agencies.

Transitory articles

Article one. This Order will enter into force the day after its publication in *Diario Oficial de la Federación*.

Article two. Within fifteen days of this Order entering into force, members of fishing cooperatives, traders and industrialists who are in possession of sea turtle meat, hides, meat flours, oils and any other sea turtle derived products or by-products shall make an inventory of these materials, using the official forms of the Ministry of Fisheries, to which they shall attach the documentation proving their legal origin. They shall then submit these forms and documentation to the Federal Fisheries Office nearest to their residence in order to request physical verification of said materials, a necessary requirement before such may be sold or purchased. Trade in these materials may take place under the following conditions:

- I. The holders of said products or by-products must file a bi-weekly report of their sales, which shall include the numbers and dates of the outgoing invoices, to the appropriate Federal Fisheries Office.
- II. To transfer from one location to another any product derived from sea turtles that is listed in the corresponding inventories, the interested parties must obtain the authorization of the Federal Fisheries Office in their jurisdiction by producing the original of the relevant sales invoice and delivering a copy of same to both the Federal Fisheries Office at the place of origin and the Federal Fisheries Office at the destination point, within 24 hours of the product's arrival.
- III. With the sale of these materials, the Federal Fisheries Office shall deduct the quantities sold from the inventories of banned fisheries products until stocks are exhausted.
- IV. Noncompliance with these provisions shall be punished in accordance with the applicable legal provisions.

Mexico City, Federal District, 28 May 1990. The Minister of Urban Development and Ecology, Patricio Chirinos Calero.- Initials.- Fisheries Minister, María de los Ángeles Moreno U.- Initials.

Order establishing a refuge for the loggerhead turtle (*Caretta caretta*) in the Gulf of Ulloa, Baja California Sur [Refuge Order]

Rafael Pacchiano Alamán, Minister of the Environment and Natural Resources, pursuant to the provisions of Articles 32 *bis* section XLII of the Organic Law of the Federal Public Administration; Articles 1, 5 sections I and II, 9 section XVII, 58 paragraph a), 60, 65, 66, 67 section IV, 68 and 69 of the General Wildlife Act; Articles 79 sections I and III, 80 section VII and 83 of the General Ecological Balance and Environmental Protection Act; and Article 5 section XXV of the Internal Regulation of the Ministry of the Environment and Natural Resources, and

Whereas

Mexico is recognized as a megadiverse country because of its great biological wealth, which is due, in large part, to its having coastlines on both the Atlantic and the Pacific, as well as a variety of climates, topographies and geological histories, such that it is estimated that ten per cent of global species diversity is concentrated in the country;

Sea turtles are among the aquatic species which develop in said coastal areas. Mexico is a habitat to at least four species of these animals, including the *Caretta caretta*, whose populations are subject to strong anthropogenic pressures, a situation which has spurred the design and implementation of conservation policies with the fundamental objective of ensuring the recovery of their populations;

The species *Caretta caretta*, commonly known as the loggerhead turtle, nests exclusively in the Japanese archipelago. While its juveniles are distributed throughout the north Pacific, they concentrate in a limited coastal area just thirty-two kilometers off the coast of Baja California Sur, in the Gulf of Ulloa. This location is a nursery area and feeding ground where they remain around twenty-five to thirty years, before returning to breed and nest in the coastal areas of Japan;

The Inter-American Convention for the Protection and Conservation of Sea Turtles, an instrument to which Mexico is a Party, determines under Article IV paragraph 2 subparagraph b) that the measures which member countries adopt under said international instrument shall include, *inter alia*, the protection, conservation and, where appropriate, restoration of sea turtles habitat and spawning sites; as well as the establishment of the limits which may be necessary regarding utilization of these areas via, among other measures, the designation of protected areas, as provided for under Annex II of the Convention;

In turn, under Annex II of the aforementioned Convention, Parties have the power to establish protected areas and institute other measures to regulate use of nesting areas or other areas where sea turtles are frequently distributed, including measures such as permanent or temporary closures, modifications to fishing gear and, to the extent possible, vessel transit restrictions.

Breeding and nursery activities are recorded within the area covered by this order; as a consequence of which, there has been a reduction in fishing induced mortality in these important areas and differentiated fish management has been introduced. These developments are reflected in the growth in biomass of many marine species and contribute to the conservation of sea turtles, through specific regulations. Thus, by means of the Order published in *Diario Oficial de la Federación* on 23 June 2016, the Ministry of Agriculture, Livestock Farming, Rural Development, Fisheries and Food, established a fish refuge and new measures to reduce potential interaction between fishing operations and sea turtles off the west coast of Baja California Sur, in the area known as the “Gulf of Ulloa”;

Article 5 of the General Wildlife Act establishes that the objective of national policy on wildlife and wildlife habitat is conservation through protection and the requiring of optimal levels of sustainable use, such that said policy may simultaneously achieve the goal of preserving and promoting restoration of wildlife diversity and wildlife habitat integrity, as well as the goal of increasing the wellbeing of the country’s inhabitants;

To that end, section II of said Article stipulates that a lack of scientific certainty may not be argued as a justification for postponing adoption of effective measures for the conservation and comprehensive management of wildlife and wildlife habitat;

Article 65 of said General Law vests the Ministry of the Environment and Natural Resources with the power to establish, by means of a Ministerial Order, refuges to protect native wildlife species, which inhabit aquatic environments in waters under federal jurisdiction, the federal maritime terrestrial zone and flood plains, and thereby conserve said species and contribute, through management and conservation measures, to their development, as well as conserve and protect their habitats by elaborating the appropriate protection programs;

In turn, Article 67 section IV of the same legal instrument stipulates that refuges to protect aquatic species may be established for the protection of specimens with specific characteristics, as well as for populations, species or groups of native wildlife species that develop in aquatic environments, which may be negatively affected by the use of certain means of resource exploitation or by physical, chemical or acoustic pollution or by collisions with vessels;

Interaction of the loggerhead turtle with fishing activities has been documented, as have deaths of specimens of said species linked to the use of specific types of fishing gear in the Gulf of Ulloa, an area which presents oceanographic conditions inducing high productivity and biodiversity and where there exist areas with high concentrations of red pelagic crabs, the principal food of loggerhead turtles;

This same productivity leads coastal fishers to engage in fishing activities in the feeding grounds of turtles every summer, fishing activities which coincide with beachings of turtles and other species, a phenomenon which has increased in recent years, in an area 43 kilometers from Playa San Lázaro;

The fishing gear used in the Gulf of Ulloa area essentially consists of varieties of gillnets and surface and bottom-set longlines, i.e., types of fishing equipment which negatively impact loggerhead specimens. The great majority of turtle deaths owing to the use of specific types of fishing gear involve juveniles, as they are more vulnerable. Should this impact on juveniles of the loggerhead species (*Caretta caretta*) continue, this would generate a high risk of extinction of their populations in the Pacific Ocean, a situation which makes it imperative to protect this species to ensure its recovery;

The information detailed in the preceding paragraph describes an actual instance of the hypothetical case provided for in section IV of Article 67 of the General Wildlife Act, which indicates that a refuge may be declared to protect aquatic species when the issue in question is wildlife populations negatively affected by the use of specific means of resource exploitation;

In addition to the foregoing, sea turtles are classified as endangered species, by virtue of which pursuant to Articles 79 sections I and III and 83 of the General Ecological Balance and Environmental Protection Act, the sustainable use of resources in the Gulf of Ulloa must be conducted in such a fashion that priority is given to the continuity of development processes, as well as to efforts to ensure the preservation of species classified as endangered;

Loggerhead turtle (*Caretta caretta*) populations have come under pressure due to anthropogenic activities, such that this species has been included in different classification systems of species at risk such as Appendix I of the list established by the Convention on International Trade in Endangered Species of Wild Flora and Fauna (CITES), the Red List of the International Union for Conservation of Nature (UICN), under the category endangered, as well as Official Mexican Standard NOM-059-SEMARNAT-2010, *Environmental Protection -Native Species of Mexico of wild flora and fauna -Risk Categories and specifications for their inclusion, exclusion or change in status-List of endangered species*;

In light of the foregoing, the General Wildlife Directorate of the Ministry of the Environment and Natural Resources conducted the supporting study stipulated in Article 67 of the General Wildlife Act, in which it concluded that it is essential to establish a refuge for the loggerhead turtle (*Caretta caretta*) in the Gulf of Ulloa, Baja California Sur where this species feeds;

The Internal Regulation of the Ministry of the Environment and Natural Resources establishes under Article 70 sections I and III that the National Commission for Protected Natural Areas shall be the agency of the Ministry charged with the execution and promotion of special programs, as well the development of activities conducive to the conservation of said loggerhead turtle (*Caretta caretta*) protection refuge in the Gulf of Ulloa;

In light of the study mentioned two paragraphs above, the natural conditions enabling the survival of the loggerhead turtle (*Caretta caretta*) and the fishing activities in the area, and given that the purpose at hand is to conserve this species and contribute to its development, as well as to conserve and protect its habitat, I hereby issue the following:

Order establishing a refuge for the loggerhead turtle (*Caretta caretta*) in the Gulf of Ulloa, Baja California Sur

Article one. This Order hereby establishes as a Protection Refuge for the loggerhead turtle (*Caretta caretta*) the marine area known as the Gulf of Ulloa, which is located off the coasts of the municipalities of Comondú and Mulegé, in Baja California Sur, and covers an area of 1,989,390 (one million, nine hundred eighty-nine thousand, three hundred and ninety) hectares.

The analytical and topographic description and boundaries of the area, which is described below and which forms the refuge mentioned in the preceding paragraph, is found in Universal Transverse Mercator (UTM) format, Zone 12, with a WGS84 spheroid and a WGS84 datum, based on the Municipal 4.1 Geostatic Framework (Inegi, 2009).

[Table with coordinates and location map]

Article two. The Ministry of the Environment and Natural Resources, in coordination with the competent agencies of the Federal Public Administration, and with the participation of stakeholders in the social and private sectors, shall formulate the protection program for the refuge established in this Order.

This protection program shall establish the conservation and management requirements which shall be mandatory for works and activities carried out in the refuge established in this Order, in the terms of Article 69 of the General Wildlife Act.

Article three. The National Commission for Protected Natural Areas will be responsible for the administration of the Loggerhead Turtle (*Caretta caretta*) Protection Refuge in the Gulf of Ulloa.

Transitory Articles

Article one. This Order will enter into effect the day after its publication in *Diario Oficial de la Federación*.

Article two. Acting through the National Commission for Protected Natural Areas, the Ministry of the Environment and Natural Resources shall elaborate the appropriate protection program, within one hundred and eighty calendar days of the coming into force of this Order.

Mexico City, 23 May 2018. Minister of the Environment and Natural Resources, Rafael Pacchiano Alamán- Initials

Order establishing a fish refuge and new measures to reduce the likelihood of interaction between fishing activities and sea turtles on the West Coast of Baja California Sur [Fish Refuge Order]

José Eduardo Calzada Roviroso, Minister of Agriculture, Livestock Farming, Rural Development, Fisheries and Food, pursuant to Articles 26 and 35 sections XXI and XXII of the Organic Law of the Federal Public Administration; Article 4 of the Federal Administrative Procedures Act; Articles 1, 2 and 10 of the Planning Act; Articles 1, 2 sections I and III, 4 section LI, 8 sections I, II, III, XII, XIV, XVI, XXXVIII and XLI, 10, 17 sections I, III and VIII, 29 sections I, II and XII and 124 of the General Sustainable Fisheries and Aquaculture Act; Articles 1, 2 paragraph “D”: section III, 3, 4, 5 sections I and XXII, 44, 45 and transitory Article eight of the Internal Regulation of the Ministry of Agriculture, Livestock Farming, Rural Development, Fisheries and Food, published in *Diario Oficial de la Federación* on 25 April 2012; Articles One, Two and Three of the “Decree by which is established the organization and functioning of the decentralized organization known as the National Fisheries Institute,” published in *Diario Oficial de la Federación* on 1 July 2013; in accordance with Official Mexican Standard NOM-049-SAG/PESC-2014, which determines the procedure for establishing refuge zones for fish resources in waters under the federal jurisdiction of the United Mexican States, published in *Diario Oficial de la Federación* on 14 April 2014, and

Whereas

Acting through the National Aquaculture and Fisheries Commission, the Ministry of Agriculture, Livestock Farming, Rural Development, Fisheries and Food (Sagarpa) is responsible for administrating and regulating the use of aquatic flora and fauna resources, as well as for promoting the sustainable use thereof, by regulating the activities of the persons intervening in this sector and by establishing the conditions under which fishing operations shall be carried out; Sagarpa is likewise responsible for proposing, formulating, coordinating and executing the national sustainable fisheries policy; for establishing the administrative and control measures governing fishing activities; and for determining the methods and measures for the conservation of fish resources, as well as for regulating fish refuges for the protection of aquatic species which may require such protection;

In the central region of the west coast of Baja California Sur there exist estuary environments, marshes, shallow bays, mangroves and wetlands where small scale and artisanal coastline fisheries operate and where various species of shellfish (abalones, clams, snails, octopi), crustaceans (lobsters, shrimps, crabs), sharks, rays and finfish are exploited, such that the coastline fishery is multi-specific and seasons vary widely for different fish catch operations;

Some fishing operations coincide with the seasonal distribution of various species of sea turtles whose populations have been protected by the Government of Mexico for several decades, through a set of programs and measures to promote their conservation, recovery and propagation;

On 31 May 1990, the Federal Government, acting through the then Ministry of Fisheries, published in *Diario Oficial de la Federación* the Order establishing a closed season on sea turtle species and subspecies in waters under federal jurisdiction in the Gulf of Mexico and the Caribbean, as well as in the Pacific Ocean, including the Gulf of California, with the objective of establishing measures for their conservation and preservation.

The loggerhead turtle (*Caretta caretta*) is a species of highly migratory sea turtle with a complex life cycle, which occupies diverse habitats, from exclusively oceanic habitats to neritic habitats. Thus, adult loggerheads migrate between nesting beaches and feeding grounds. As for the juveniles, they tend to stay for long periods in the deep waters of the northern Pacific or in the neritic areas of the Baja California Peninsula in Mexico;

In accordance with national legislation, the sea turtles present in waters under federal jurisdiction are classified as a “threatened” species, under Mexican Official Standard NOM-059-SEMARNAT-2010, *Environmental protection –Native species of Mexico of wild flora and fauna-Risk categories and specifications for their inclusion, exclusion or change in status-List of species at risk*;

In the fisheries operated in the marine waters opposite the west coast of the Baja California Peninsula, regulations have been progressively introduced and applied in relation to species subject to use as a resource, fishing gear and methods, as well as specific provisions for sea turtles protection, which are all periodically updated through their publication in *Diario Oficial de la Federación* (DOF);

According to satellite tracking results and aerial surveys available in scientific publications, the turtles that inhabit the Gulf of Ulloa remain there temporarily in coastal waters approximately 32 km from the coast of B.C.S. This region is considered a high productivity and bio-diverse area that generates high concentrations of food for turtles and a wide variety of fish resources (sharks, rays, fish, clams, abalones, squids, lobsters, shrimps, crabs, snails and crayfish), which sustain coastal fisheries where various types of gillnets and surface and bottom-set longlines are in use;

Regarding the background history of loggerhead turtle research and conservation efforts, what stands out is that studies to assess the presence and abundance of this species in the area have been undertaken since 1990 (Ramírez-Cruz *et al.*, 1991; Olguín, 1990; Villanueva, 1991). In particular, based on genetic and telemetric studies, all specimens of the loggerhead turtle observed in Mexican Pacific Ocean waters were regarded as originally from breeding populations that nest in the Japanese archipelago, having traversed a migratory route of over 12,000 km (Bowen *et al.*, 1995; Nichols *et al.*, 2000). These animals inhabit waters close to the coasts of the Baja California Peninsula, where they feed until a natural mechanism activates and leads them to return to the coasts of the Japanese archipelago to rejoin the breeding population (Nichols, 2003, Maldonado *et al.*, 2009); due to this long migration, which exposes them to highly varied environments and conditions, it is probable that non-anthropogenic factors can affect the health and condition of individual specimens;

In 2009, the state and federal authorities agreed to develop a Fisheries Management Program and a Finfish Management Plan for the region. Both were subsequently carried out and led to the collection of precise information on all fishing gear in the region, as well as the development of specific types of fishing gear (e.g., traps for use with saltwater species) in the years 2013 and 2014, respectively;

In the year 2014, the On Board Technical Assistants (scientific observers) Program was implemented with the artisanal fishing fleet operating in the Gulf of Ulloa, B.C.S. The program's primary focus was supervision of fishing activities and their relationship with the legal framework, with the objective of recording and carrying out daily on board monitoring of the fishing operations of small vessels and especially to determine the potential for interactions with sea turtles. Coverage of these fishing operations encompassed between 40 to 80 percent of the fishing trips effected in the period from September to December 2014, in the central and southern areas [of the Gulf of Ulloa];

On 10 April 2015, the *Order establishing a Fishing Refuge Zone and Measures to Reduce the Interaction of Fishing with Sea Turtles on the West Coast of Baja California Sur* was published in the *Diario Oficial de la Federación*, establishing measures to reduce interactions between fisheries and sea turtles over an area of 8,848.2 km² (884,824.9 ha), with this fishing restrictions zone being in force for a period of two years;

For the purpose of assessing the effectiveness of the measures adopted, including verification of the fishing-induced loggerhead turtle mortality limit and the interactions between fishing activities and sea turtles, two programs were implemented: the On Board Technical Assistants (scientific observers) Program, with the objective of obtaining accurate information and data on fishing operations, catch, interactions, and sea turtle presence, and a video recording system for fisheries operations on the central west coast of Baja California Sur;

The objective of the programs is to generate information in order to determine the degree of interaction of inshore fishing with sea turtles, as well as to verify compliance with the loggerhead turtle mortality [limit], by means of technicians independent of the inshore fisheries, especially during the season when the largest incidence of beaching of marine macrofauna corpses is recorded. These programs have served to document more than 18,000 inshore fishing operations since the establishment of the refuge zone in 2015, providing specific information on the operations by gear type, duration, intensity in each zone, and season;

The National Fisheries Institute has recommended, in a technical opinion issued as file no. RJL/INAPESCA/DGAIPP/0790/2016, ratification of a fishing-related mortality limit for the loggerhead turtle (*Caretta caretta*) of 90 specimens per year throughout the fish refuge zone, determined on the basis of a precautionary approach. The technical opinion recommends not prohibiting fishing activities involving catch methods that do not interact with sea turtles, such as sports/recreational fishing and bottom fishing of abalone, clam, sea cucumber, snail, lobster, octopus, and other species.

The General Sustainable Fisheries and Aquaculture Act defines Refuge Zones as specific areas in waters under federal jurisdiction, the main purpose of which is to conserve fish resources and contribute, via natural or artificial methods, to their development in terms of their reproduction, growth or recruitment, as well as to preserve and protect the surrounding natural environment.

The establishment of a refuge zone entails a set of complementary management measures for the conservation and sustainable use of species of fishing interest, as well as for species under a special protection regime, in that it constitutes the establishing of specific marine areas where breeding and nursery processes are recorded, as a consequence of which, the reduction in fish mortality in these important areas, along with the differentiated fisheries management practiced there, are reflected in the growth in the biomass of many marine species and contribute to sea turtles conservation, by means of specific regulations;

There exists documentary evidence of the positive effects that the establishment of marine refuges or reserves has generated in other countries, as models for the administration and protection of species exploited in fishing activity, which demonstrate favorable outcomes in terms of increases in biomass, organism size and biodiversity in general;

Consequently, with the provisions herein founded on technical reasons and the public interest, I hereby issue the following:

Order establishing a fish refuge and new measures to reduce the likelihood of interaction between fishing activities and sea turtles on the West Coast of Baja California Sur

Article one. The provisions of this Order are applicable to commercial and sports and recreational fishers, permit holders and concessionaires who use small or large vessels in exploiting fisheries resources in those marine waters of the United Mexican States that are under federal jurisdiction, adjacent to the western coastline of the state of Baja California Sur in the area known as the “Gulf of Ulloa”.

Article two. By this Order, is hereby established a Partial Temporary Fish Refuge (see Annex I) within which measures are applied to reduce potential interactions between fishing operations and sea turtles, for a two-year period, in an area of 19,934 km² (1,993,229 hectares), as delineated by the following coordinates (Table I):

[Table with coordinates]

This provision shall be in force for a period of two years.

Within the aforementioned Fish Refuge is established a “Specific Fishing Restrictions Zone” (see Annex II-a) in an area covering 7,244 km² (724,372 hectares) whose exact geographic location with UTM coordinates is as follows (Table II-a):

[Table with coordinates]

Additionally, the vertices and the distances from the coastline to the boundary of the “Specific Fishing Restrictions Zone,” and from this latter to the ocean boundary of the Partial Temporary Fish Refuge, are given in Annex II-b, Tables II-b and II-c. The distances are with respect to eight relevant fishing communities.

Article three. Commercial fishing activities in the “Specific Fishing Restrictions Zone” mentioned in Article two of this Order may only be carried out with the fishing gear specifically authorized in commercial fishing permits or concessions, with the exception of the following:

1. Gillnets with a mesh size greater than 15.2 centimeters (6 inches) shall not be used at any time during the entire year.
2. Gillnets with a mesh size between 10.8 centimeters (4 1/4 inches) and 15.2 centimeters (6 inches) may not be used during the period when the presence of sea turtles is at its peak, which occurs every year between May and August.
3. In the marine waters of the “Specific Fishing Restrictions Zone,” gillnets may not be in operation for more than six continuous hours.
4. Longlines with “J” hooks may not be used under any circumstances. Only longlines with circular hooks may be used, provided that these do not exceed a maximum angle of 10 degrees in relation to the vertical axis.
5. Large temporary fixed traps, known as “almadrabas,” may not be used under any circumstances.

Trawl nets may not be used within the geographical limits of the Fish Refuge established in Article two of this Order (see Annex I) as long as this Order remains in effect.

Article four. Both large and small vessel fishing activities shall be suspended from the date of publication of this Order until 30 September 2016, with the exception of the abalone, lobster, clam, snail, octopus and sea cucumber fisheries, in the Fish Refuge established in Article two of this Order. Also excluded from this provision are the fishing grounds known as “Bajo Thetis,” located at the geographic coordinates of 24°52’58.19” latitude north and 112°36’10.33” longitude west, and “Bajo Las 38,” located at the geographic coordinates of 25°6’36.67” latitude north and 112° 45’ 1.79” longitude west, where fishing may be carried out using traps and individual hand lines.

Article five. Sport and recreational fishing in the Fish Refuge mentioned in Article two of this Order may not be conducted with either diving equipment or harpoons, under any of the conditions or circumstances in which said fishing gear and methods are used.

The total allowable catches applicable to sport and recreational activities are defined in subparagraph 4.9.1 of the Amendment to Official Mexican Standard NOM-017-PESC-1994, published on 25 November 2013, with the exception of those species, which, for the duration of this Order, are subject to temporary or permanent closed season orders.

Article six. Fishing for household consumption by residents on the shore and coast does not require a concession or a permit, and may only be done from the bank with handlines that can be manipulated by an individual fisher.

Article seven. The following additional measures for preventing interaction with sea turtles are established:

- I. Should a bycatch incident occur, measures must be applied to release the specimen under adequate survival conditions. It is only permissible to temporarily keep an accidentally caught sea turtle specimen when one of the following cases occurs:
 - a) For the purposes of recording morphometric data or taking biological or serological samples or realizing any other authorized study or research need. This implies that the specimen shall be released into the water under adequate conditions.

- b) It is necessary to resuscitate a specimen to release it into the water *in situ*. In such cases, the specimen shall only be kept on board for the time required to resuscitate it.
 - c) It is necessary to transfer a sea turtle specimen to a rehabilitation facility, established or authorized for this purpose by the Ministry of the Environment and Natural Resources.
- II. If required, the Sea Turtle Resuscitation Procedure shall be applied, in accordance with Annex IV of this Order.
 - III. All vessels that use longlines must carry on board tools to free sea turtles, in case a specimen is entangled or caught by a fishhook.
 - IV. It is prohibited to keep and transport, dead or alive, in whole or in part, a specimen of any species of sea turtle, regardless of the circumstances of its capture. The exceptions to this provision are given in the next paragraph.
 - V. The transport and unloading of sea turtle specimens may be permitted for research purposes or to promote the recovery, rehabilitation or conservation of the species, provided that this measure is specified in the appropriate permit and one is in possession of the proper protocol under a program authorized by the Ministry of the Environment and Natural Resources.
 - VI. The mortality limit of the loggerhead turtle (*Caretta caretta*) is established at 90 specimens per year, for commercial fishing operations in the refuge referred to in Article two of this Order.
 - VII. In the event the loggerhead mortality limit is reached, commercial fishing with gillnets and longlines shall be suspended for the remainder of the year in the refuge established by this Order.

Article eight. All fishing activities shall be subject to the applicable compliance verification measures at any time by the competent authorities. This includes use of information from the On Board Technical Assistants (scientific observers) Program (ATB) mentioned in Annex III of this Order.

Article nine. Compliance verification in relation to the loggerhead turtle mortality limit is subject to the following provisions:

- I. The number of loggerhead turtle deaths caused by fishing operations will be determined by the On Board Technical Assistants (scientific observers) Program (ATB).
- II. On vessels where no observer is present, videotaping linked to a satellite vessel monitoring system shall be used as an alternative technology.

Any vessel unable to carry an On Board Technical Assistant (ATB) shall be equipped with satellite monitoring equipment, which is functioning at all times during fishing operations, as well as the equipment to videotape said operations.
- III. Turtle deaths from natural causes or from non-fishing related anthropogenic causes will be not linked to, or counted as, fishing related mortality.
- IV. On board technical assistants shall record data and information on the circumstances of fishing operations using the forms included in Annex V of this Order, and shall transmit messages via satellite in each case of turtle mortality due to fishing, or where any interaction occurs, using the equipment provided by the corresponding program.

Article ten. The precise geographical coverage of the Partial Temporary Fish Refuge established by this Order, as well as the coverage of the On Board Technical Assistants (scientific observers) Program throughout the fish refuge (see Annex III, Table III), shall be subject in 2017 to the results arising from the implementation of the measures in this Order and the results of the National Fisheries Institute's Fishery Management Plan.

Article eleven. The persons who contravene this Order shall be liable to the fines and penalties established under Article 133 of the General Sustainable Fisheries and Aquaculture Act and other applicable legal provisions.

Article twelve. Monitoring of compliance with this Order is the responsibility of the Ministry of Agriculture, Livestock Farming, Rural Development, Fisheries and Food, acting through the National Aquaculture and Fisheries Commission, without prejudice to [other] inspection and compliance verification activities ... within the scope of the respective jurisdictions.

Transitory articles

One. This Order shall enter into effect on the day following its publication in *Diario Oficial de la Federación*.

Two. Research, evaluation and monitoring activities not provided for in this Order shall be considered by the Fishery Management Plan administered by the National Fisheries Institute.

Three. The provisions of this Order shall be applied without prejudice to what is set forth in other applicable legal provisions.

Four. The *Order establishing a Fishing Refuge Zone and Measures to Reduce the Interaction of Fishing with Sea Turtles on the West Coast of Baja California Sur*, published 10 April 2015 in the *Diario Oficial de la Federación*, is hereby repealed.

Mexico City, 16 June 2016. Minister of Agriculture, Livestock Farming, Rural Development, Fisheries and Food, José Eduardo Calzada Roviroso – Initials

Annex I. Map of the Geographic Location of the Fish Refuge

Annex II. Maps with geographic delimitation of the Specific Fishing Restrictions Zone and with vertices and distances to the ocean boundary of the fish refuge

Annex III. Map of the coverage area of the On Board Technical Assistants Program (ATB)

Annex IV. Sea Turtle Resuscitation Procedure

Annex V. On Board Technical Assistants Program (ATB) or the Coastal Fleet Scientific Observers Program

Appendix 4

Request for Information to the Government of Mexico



11 de agosto de 2023

Por correo electrónico

Mtro. Miguel Ángel Zerón Cid

Representante Alterno

Titular de la Unidad Coordinadora de Asuntos Internacionales
Secretaría de Medio Ambiente y Recursos Naturales
Avenida Ejército Nacional No. 223
Colonia Anáhuac, Alcaldía Miguel Hidalgo
Ciudad de México, C.P. 11320
México

Asunto: Solicitud de información relevante para la elaboración de un expediente de hechos sobre la petición SEM-20-001 (*Tortuga caguama*)

Estimado Mtro. Zerón:

Por medio de la presente, el Secretariado solicita a México información pertinente para integrar un expediente de hechos sobre la petición SEM-20-001 (*Tortuga caguama*) conforme al artículo 24.28 del T-MEC. Como es de su conocimiento, el día 4 de abril de 2023 dos miembros del Consejo de la Comisión para la Cooperación Ambiental decidieron girar instrucciones al Secretariado para que elabore un expediente de hechos sobre la petición SEM-20-001, mediante la resolución de Consejo 23-01.

El Secretariado tomará en cuenta toda la información presentada por una Parte. Asimismo, el Secretariado considerará información que esté disponible al público, que le proporcione el Consejo Consultivo Público Conjunto, los peticionarios, y otras personas u organizaciones interesadas sin vinculación gubernamental, e información que elaboren el Secretariado y expertos independientes.

En la solicitud de información anexa encontrará la identificación de la información pertinente para la elaboración de este expediente de hechos. Agradeceremos que la información se haga llegar al Secretariado dentro de los 20 días hábiles posteriores a la recepción de la presente solicitud.

Sin más por el momento, aprovecho la ocasión para enviarle un cordial saludo.

Atentamente,

Secretariado de la Comisión para la Cooperación Ambiental

por: Paolo Solano
Director de asuntos jurídicos y titular de la unidad SEM

ccp. Jorge Daniel Taillant, director ejecutivo del Secretariado de la CCA

Anexo



Secretariado de la Comisión para la Cooperación Ambiental
SOLICITUD DE INFORMACIÓN
para la elaboración del expediente de hechos relativo a la petición
SEM-20-001 (*Tortuga caguama*)

I. Proceso de elaboración de un expediente de hechos

La Comisión para la Cooperación Ambiental (CCA o “la Comisión”), se creó en 1994 al amparo del Acuerdo de Cooperación Ambiental de América del Norte (ACAAN), firmado por Canadá, Estados Unidos y México (las “Partes”). El 1 de julio de 2020 entraron en vigor el Tratado entre los Estados Unidos Mexicanos, los Estados Unidos de América y Canadá (T-MEC o “el Tratado”) y el Acuerdo de Cooperación Ambiental (ACA). A partir de esa fecha, el mecanismo de peticiones sobre aplicación de la legislación ambiental (“mecanismo SEM”, por sus siglas en inglés), originalmente establecido en los artículos 14 y 15 del Acuerdo de Cooperación Ambiental de América del Norte (ACAAN), se rige ahora con apego a los artículos 24.27 y 24.28 del T-MEC. Asimismo, la instrumentación del mecanismo SEM continúa siendo tarea de la Comisión para la Cooperación Ambiental (CCA o “la Comisión”), cuyos términos de operación están ahora estipulados en el ACA.¹

Los artículos 24.27 y 24.28 del T-MEC establecen un proceso que permite a cualquier persona de una Parte o una entidad establecida conforme a las leyes de una Parte presentar una petición en la que se asevere que una Parte está incurriendo en omisiones en la aplicación efectiva de sus leyes ambientales. El Secretariado de la CCA (“el Secretariado”) examina inicialmente las peticiones con base en los criterios y requisitos establecidos en el artículo 24.27(1) y (2) del T-MEC. Cuando el Secretariado considera que una petición cumple con tales requisitos, procede a determinar si, conforme a lo señalado en el artículo 24.27(3) del Tratado, la petición amerita una respuesta de la Parte en cuestión. A la luz de la respuesta proporcionada por la Parte, el Secretariado determina entonces si el asunto amerita la elaboración de un expediente de hechos y, de ser así, lo informa al Consejo de la CCA y al Comité de Medio Ambiente,² proporcionando sus razones en apego al artículo 24.28(1); en caso contrario, el trámite de la petición se da por concluido.³

¹ La Comisión para la Cooperación Ambiental se creó en 1994 al amparo del Acuerdo de Cooperación Ambiental de América del Norte (ACAAN), suscrito por Canadá, Estados Unidos y México (las “Partes”). En virtud del artículo 2(3) del Acuerdo en Materia de Cooperación Ambiental entre los gobiernos de los Estados Unidos Mexicanos, los Estados Unidos de América y Canadá (ACA), la Comisión para la Cooperación Ambiental (CCA) “continuará operando bajo las modalidades vigentes a la fecha de entrada en vigor [del ACA]”. Los órganos que constituyen la CCA son el Consejo, el Secretariado y el Comité Consultivo Público Conjunto (CCPC).

² El Comité de Medio Ambiente se establece por el artículo 24.26(2) del Tratado entre los Estados Unidos Mexicanos, los Estados Unidos de América y Canadá (T-MEC o “el Tratado”) y su función es la de supervisar la implementación del capítulo 24 del Tratado.

³ Para conocer más detalles relativos a las diversas fases del proceso de peticiones sobre aplicación de la ley ambiental, el registro público de peticiones, y las determinaciones y expedientes de hechos del Secretariado, consúltese el sitio web de la CCA, en: <www.cec.org/peticiones>.

El 4 de abril de 2023 el Secretariado recibió instrucciones de los miembros del Consejo de la CCA para preparar un expediente de hechos conforme al artículo 24.28(2) del T-MEC. Tal decisión se adoptó mediante la resolución de Consejo 23-01 que señala en su parte preambular:

Instrucciones al Secretariado de la Comisión para la Cooperación Ambiental (CCA) respecto de la petición SEM-20-001 (*Tortuga caguama*), en la que se asevera que las autoridades ambientales de México están incurriendo en omisiones en la aplicación efectiva de diversas disposiciones de la Constitución Política de los Estados Unidos Mexicanos (CPEUM); la Ley General del Equilibrio Ecológico y la Protección al Ambiente (LGEEPA); la Ley General de Vida Silvestre (LGVS); el Reglamento Interior de la Secretaría de Medio Ambiente y Recursos Naturales (RI-Semarnat); el *Acuerdo por el que se establece veda para las especies y subespecies de tortuga marina en aguas de jurisdicción federal del golfo de México y mar Caribe, así como en las del océano Pacífico, incluyendo el golfo de California* (“**Acuerdo de Veda**”); el *Acuerdo por el que se establece el área de refugio para la tortuga amarilla (Caretta caretta) en el golfo de Ulloa, Baja California Sur* (“**Acuerdo de Área de Refugio**”) y el *Acuerdo por el que se establece la zona de refugio pesquero y nuevas medidas para reducir la posible interacción de la pesca con tortugas marinas en la costa occidental de Baja California Sur* (“**Acuerdo de Refugio Pesquero**”), en relación con la protección y conservación de la tortuga caguama (*Caretta caretta*), especie cuya conservación es prioritaria al encontrarse en peligro de extinción.

Un expediente de hechos tiene como finalidad presentar de manera objetiva los hechos relacionados con la aseveración planteada en una petición y permitir así a los lectores del mismo sacar sus propias conclusiones respecto a la aplicación de la legislación ambiental de la Parte aludida. Un expediente de hechos debe ofrecer una exposición general y sucinta sobre los antecedentes del asunto planteado en la petición, de las obligaciones legales aplicables a la Parte de que se trate, y de las medidas que ésta ha tomado para cumplir con dichas obligaciones. Por lo tanto, el expediente de hechos representa otro resultado valioso de este proceso de naturaleza informativa sobre la aplicación efectiva de la legislación ambiental en el territorio de las Partes.

En conformidad con el artículo 24.28(4), para la elaboración de un expediente de hechos, el Secretariado podrá cualquier información proporcionada por una Parte y podrá considerar cualquier información pertinente de naturaleza técnica, científica u otra, que esté disponible al público; sea presentada por el CCPC, por comités consultivos nacionales, o por personas u organizaciones sin vinculación gubernamental interesadas, o bien elaborada conforme al ACA o por expertos independientes.

II. Solicitud de información

El artículo 14 del ACA establece que “Cada Parte cooperará con el Secretariado para proporcionar información relevante para la preparación de un expediente de hechos”. Con esa finalidad, el Secretariado ha gestionado con las siguientes autoridades la información fáctica relevante con vistas a la elaboración del expediente de hechos, entre ellas:

- a. La Fiscalía General de la República;
- b. Delegación Federal de la Secretaría de Medio Ambiente y Recursos Naturales en Baja California Sur (“Semarnat-BCS”);
- c. Delegación Federal de la Procuraduría Federal de Protección al Ambiente en Baja California Sur (“Profepa-BCS”);

- d. Subdelegación de Pesca de la Comisión Nacional de Acuacultura y Pesca en Baja California Sur (“Conapesca”); y
- e. Comisión Nacional de Áreas Naturales Protegidas (“Conanp”).

En su conjunto las “autoridades relevantes”

A continuación, se describe información de naturaleza técnica, científica u otra requerida para la elaboración del expediente de hechos. A fin de facilitar su manejo e integración, se solicita atentamente que la información sea transmitida al Secretariado de la CCA en formato electrónico, en el entendido de que su transmisión se hace sin reserva alguna respecto de su reserva o confidencialidad.

1. Respetto de la presunta omisión de presentar denuncias ante la Fiscalía General de la República (FGR) por la muerte de especímenes de tortuga caguama (*Caretta caretta*) en el golfo de Ulloa en el periodo comprendido entre 2010 y julio de 2020;

- a) Información (inclusive de índole estadístico) sobre las denuncias interpuestas ante la FGR, y/o la Profepa-BCS por la muerte de ejemplares de tortuga caguama (*Caretta caretta*) o bien, hechos relacionados con esto durante el periodo de 2010 a julio de 2020;
- b) Información sobre las acciones instrumentadas por la FGR y/o la Profepa-BCS luego de la presentación de denuncias, incluyendo:
 - i. Investigación con vistas a obtener datos técnicos-científicos que sirvan de base para determinar la muerte de ejemplares de *Caretta caretta*;
 - ii. Informes sobre el hallazgo de ejemplares muertos de *Caretta caretta* encontrados durante los recorridos de la Profepa-BCS y/o la FGR en el del golfo de Ulloa durante el periodo de 2010 a julio de 2020 y el seguimiento respectivo, e
 - iii. Información y diagnóstico sobre estudios *post mortem* realizados por las autoridades relevantes respecto de especímenes de *Caretta caretta* y descripción de métodos de análisis o manipulación al momento de encontrar los cadáveres de dicha especie.

2. En relación con la realización de un promedio de dos visitas anuales de inspección y monitoreo y la omisión de imponer sanciones administrativas relacionadas con la *Caretta caretta* instrumentadas por la Profepa-BCS en el golfo de Ulloa, Baja California Sur, en el periodo de 2010 a julio de 2020;

- a) Información sobre el número de inspectores de la Profepa-BCS asignados en el golfo de Ulloa, incluyendo Puerto Adolfo López Mateos, San Carlos, isla Magdalena, y San Juanico, para la realización de acciones de inspección y vigilancia durante el periodo de 2010 a julio de 2020.
- b) Número de inspecciones realizadas en las playas de Puerto Adolfo López Mateos, San Carlos, isla Magdalena, y San Juanico y otras en el golfo de Ulloa y resultados de dichas acciones de inspección, incluyendo:
 - i. Número, tipo, fecha y actas levantadas durante los recorridos en el golfo de Ulloa realizados por la Profepa-BCS o por cualquier otra autoridad que tenga conocimiento, en el periodo enero de 2010 a julio de 2020 en los que se hubieren identificado ejemplares de *Caretta caretta* varados en las playas del golfo de Ulloa;
 - ii. Número de ejemplares varados por mes/año de *Caretta caretta* en el periodo de enero de 2010 a julio de 2020. La información puede contener datos como: el comparativo con ejemplares de otras especies de tortuga encontrados en el mismo

periodo, la relación de varamientos con actividades antropogénicas, así como los resultados del análisis forense de los especímenes encontrados para conocer el estado de salud de los individuos e las posibles causas de muerte;

- iii. Información sobre hallazgos de *Caretta caretta* en el golfo de Ulloa, diagnóstico de enfermedades de la especie o bien otros factores que hayan sido identificados como causa probable en la mortandad de la especie en cuestión luego de la realización de actos de inspección y vigilancia;
 - iv. Información sobre las guías o protocolos que el personal autorizado de las autoridades relevantes debe seguir a efecto de determinar la probable violación de disposiciones legales orientadas a la protección de la *Caretta caretta*;
 - v. Sanciones administrativas impuestas por la autoridad en relación con la captura ilegal de *Caretta caretta* en el periodo enero de 2010 a julio de 2020
- c) Número de embarcaciones tanto en operación como en mantenimiento o fuera de operación, incluyendo el modelo y número de identificación propiedad o a disposición de la Profepa-BCS que se dispone para realizar recorridos, dentro del golfo de Ulloa para acciones de inspección, vigilancia o cualquier otra actividad relacionada con la protección de *Caretta caretta*.
 - d) Número de denuncias interpuestas ante la Profepa-BCS sobre el hallazgo de ejemplares muertos de *Caretta caretta*; número de visitas de inspección y vigilancia (por tipo de industria o actividad); procedimientos administrativos instaurados, y sanciones impuestas por las autoridades relevantes en el periodo de enero 2010 a julio 2020. La información debe incluir el estado procesal que guardan y, de existir, el acuerdo de cierre de éstos;
 - e) Recursos asignados entre enero de 2010 a julio de 2020 a la Profepa-BCS para la realización de actividades de protección y conservación de *Caretta caretta* en el golfo de Ulloa, incluyendo personal técnico, recursos materiales, equipo especializado, etc.
 - f) Presupuesto anual asignado a la Profepa-BCS en el periodo comprendido de enero de 2010 a diciembre de 2020.
- 3. En relación con la promoción y ejecución de actividades de conservación, y su actualización y evaluación efectuadas por las Autoridades Relevantes —conjunta o separadamente—, en el golfo de Ulloa, Baja California Sur, en el periodo de 2017 a 2019.**
- a) Información sobre el estado que guarda la elaboración del Plan Trinacional México-Estados Unidos y Japón, así como las actividades realizadas a la fecha para su finalización y puesta en marcha.
 - b) Información sobre la instrumentación del Programa de Conservación para el Desarrollo Sostenible de la región que comprende la Reserva de la Biósfera Islas del Pacífico de la Península de Baja California.
 - c) Información sobre la instrumentación, resultados o seguimiento del Programa Regulatorio para el Golfo de Ulloa.
- a) Informes, reportes o seguimientos sobre el Programa de Acción para la Conservación de la Especie Tortuga Caguama (*Caretta caretta*).
 - b) Información sobre el estado que guarda la actualización del Programa de Ordenamiento Ecológico Marino y Regional del Pacífico Norte (POEMR-PN), así como las actividades realizadas a la fecha para su finalización y puesta en marcha.

- c) Resultados y seguimiento de los compromisos adoptados luego de la Séptima Conferencia de las Partes de la Convención Interamericana para la Protección y Conservación de las Tortugas Marinas (COP7-CIT) celebrada en junio de 2015, en la Ciudad de México.
 - d) Información sobre la estimación de la abundancia poblacional de las diferentes especies de tortugas marinas en el golfo de Ulloa, así como información sobre su distribución espacial, tasas de reproducción, características poblacionales (talla, sexo) entre otras.
 - e) Información de acciones o mecanismos implementados por la coordinación entre autoridades de los tres niveles de gobierno para la promoción y ejecución de actividades de conservación, y su actualización y evaluación, en el golfo de Ulloa, Baja California Sur, en el periodo de 2017 a 2019.
 - f) Información sobre la incidencia de los proyectos instrumentados por la Conanp en el marco del Programa Sectorial de Medio Ambiente y Recursos Naturales 2020-2024 que tuvieren una relación con medidas de protección de *Caretta caretta* en el golfo de Ulloa.
4. Respecto de la instrumentación por las Autoridades Relevantes del *Acuerdo por el que se establece veda para las especies y subespecies de tortuga marina en aguas de jurisdicción federal del golfo de México y mar Caribe, así como en las del océano Pacífico, incluyendo el golfo de California (“Acuerdo de Veda”)*; el *Acuerdo por el que se establece el área de refugio para la tortuga amarilla (Caretta caretta) en el golfo de Ulloa, Baja California Sur (“Acuerdo de Área de Refugio”)* y el *Acuerdo por el que se establece la zona de refugio pesquero y nuevas medidas para reducir la posible interacción de la pesca con tortugas marinas en la costa occidental de Baja California Sur) (“Acuerdo de Refugio Pesquero”)*, se solicita la siguiente información
- a) Información recabada durante la instrumentación del Programa sobre los Observadores a Bordo y del Sistema de Videgrabación de las Operaciones de Pesca, en específico minutas de los recorridos, informes de resultados, reportes parciales o finales, informes de hallazgos de ejemplares de *Caretta caretta* muertos, informes de hallazgo de ejemplares vivos de *Caretta caretta* o cualquier otro documento o comunicación relacionada con este punto, así como evidencia filmica de los recorridos y hallazgos de ejemplares *Caretta caretta* y hallazgos de carcazas de *Caretta caretta* entre la fecha de su instrumentación y julio de 2020;
 - b) Información sobre la instrumentación del Programa Integral de Ordenamiento Pesquero en el golfo de Ulloa, BCS en el periodo comprendido entre 2017 a julio de 2020. La información debe contener acciones instrumentadas, resultados e indicadores de su efectividad. Se aclara que dicho programa se ordena mediante el Acuerdo de Refugio Pesquero;
 - c) Información sobre la instrumentación del Plan de Manejo Pesquero en el golfo de Ulloa La información debe comprender el periodo entre 2017 a julio de 2020; incluir acciones instrumentadas, resultados e indicadores de su efectividad.
 - d) Información sobre la efectividad de los mecanismos utilizados para reducir la captura incidental de *Caretta caretta* en el golfo de Ulloa;
 - e) Información sobre cómo se comparte entre las Autoridades Relevantes los datos recabados sobre los varamientos de la especie en cuestión y la manera en que se determinan acciones coordinadas entre las diversas instituciones.

- f) Información relacionada a mecanismos o acciones para la coordinación entre las Autoridades Relevantes para reducir la captura incidental de *Caretta caretta* en el golfo de Ulloa, así como mecanismos destinados a evaluar las medidas implementadas;
- g) Información sobre los factores y procesos que contribuyen a la mortalidad de *Caretta caretta*, los posibles efectos que pueda tener la pesca incidental en virtud del uso de redes de gran longitud (palangres, redes de arrastre y redes de enmalle); el efecto de otras actividades humanas en el golfo de Ulloa, tales como la iluminación, la contaminación proveniente de embarcaciones, el efecto de los plásticos y desechos similares en el sistema digestivo de la especie;
- h) Información sobre los factores y procesos ambientales que contribuyen a la mortalidad de *Caretta caretta*.

III. Plazo para la entrega de información

Si bien el T-MEC o el ACA no establecen un plazo para la entrega de la información al Secretariado con miras a la preparación de un expediente de hechos, con la finalidad de dar cumplimiento con los plazos establecidos en el artículo 24.28(5) del T-MEC, se solicita que la información se haga llegar al Secretariado dentro de los 20 días hábiles posteriores a la recepción de la presente solicitud.

Appendix 5

Work Plan for the Preparation of the Factual Record
for SEM-20-001 (*Loggerhead Turtle*)

Secretariat of the Commission for Environmental Cooperation
Overall Plan to prepare a Factual Record

Submitters: Centro Mexicano de Derecho Ambiental,
Center for Biological Diversity
Party: United Mexican States
Date: 26 September 2023 (updated on 14 November 2023)
Submission No.: SEM-20-001 (*Loggerhead Turtle*)

On 29 March and 4 April, the Council members from US and Canada, respectively, issued their decision pursuant to Article 24.28(2) of the United States-Mexico-Canada Agreement (USMCA/CUSMA), in which they instructed the CEC Secretariat to prepare a factual record regarding Mexico’s alleged failure to effectively enforce the following provisions:

- A. Article 4 paragraph five of the Political Constitution of the United Mexican States (the “**Constitution**”), Articles 182 paragraph one, and 202 paragraph one of the General Ecological Balance and the Environmental Protection Act (**LGEEPA**), and Article 45 sections II, XI and XII of the Internal Regulation of the Ministry of the Environment and Natural Resources (**RI-Semarnat**), with respect to the alleged failure to file complaints with the Federal Public Prosecutor (*Fiscalía General de la República*) concerning the death of specimens of the loggerhead turtle (*Caretta caretta*) in the Gulf of Ulloa, Baja California Sur, during the period from 2010 to July 2020;
- B. LGEEPA Articles 5 section XIX, 161 and 171; Articles 9 section XXI and 104 of the General Wildlife Act (**LGVS**); and RI-Semarnat Article 45 sections I, V subparagraphs a) and c), VI and X, with regard to the carrying out of an average of 2 inspection and monitoring visits per year and the failure to impose administrative sanctions related to the loggerhead turtle in the Gulf of Ulloa, Baja California Sur, during the period from 2010 to July 2020;
- C. LGVS Articles 60 section I and 62; Article RI-Semarnat 70 sections I, III, IV and XIII, regarding the promotion and execution of conservation activities, as well as updating and evaluating those activities, in the Gulf of Ulloa, Baja California Sur, during the 2017-2019 period;
- D. The Order establishing a closed season on Sea Turtles (the “**Closed Season Order**”); the Order establishing a Loggerhead Turtle Refuge (the “**Turtle Refuge Order**”); and the Order establishing a Fish Refuge (the “**Fish Refuge Order**”); with respect to the effectiveness of instruments to reduce bycatch and the alleged lack of mechanisms for reviewing the measures implemented.

On 1 August 2023, the Secretariat asked the Council to grant an extension of 120 calendar days for the preparation of the factual record, citing the delays in obtaining public government information. On 11 September 2023, the Council asked the Secretariat to provide the Parties with the overall work plan that it will follow to gather information related to the pertinent facts, taking into consideration a 120-day extension for the preparation of the factual record. The Secretariat describes below its overall work plan for the preparation of the draft factual record.

Overall Work Plan

In order to observe the 120-day deadline extension requested by the Secretariat and to ensure that the latter has sufficient time to gather information and incorporate it into the factual record in a timely manner, the Parties are asked to provide relevant information within 30 calendar days of receiving a request, as detailed below:

Obtaining of information and preparation of the factual record

1. The Secretariat will conduct an information search in databases and public records — as required and with the support of independent experts— for relevant technical, scientific, or other information, in accordance with subparagraph e) of USMCA Article 24.28(4).

Timeline: April-July 2023.

2. In accordance with USMCA Article 24.28(4) and Article 14 of the Environmental Cooperation Agreement (ECA), the Secretariat shall take into account any information provided by a Party. In effect, Article 14 of the ECA states that “Each Party shall cooperate with the Secretariat to provide information relevant to the preparation of a factual record.” To this end, the Secretariat has made submitted requests to the following authorities to obtain relevant factual information with the aim of preparing the factual record:
 - i. Office of the Attorney General of the Republic (FGR);
 - ii. Federal Delegate of the Ministry of the Environment and Natural Resources in Baja California Sur (“Semarnat-BCS”);
 - iii. Office of the Representative of the Federal Attorney for Environmental Protection in Baja California Sur (“Profepa-BCS”);
 - iv. Baja California Sur Branch of the National Fisheries Institute (Inapesca-BCS)
 - v. Fisheries Office of the National Aquaculture and Fisheries Commission in Baja California Sur (“Conapesca-BCS”); and
 - vi. Regional Director of the National Commission for Protected Natural Areas for the Baja California Peninsula and Northern Pacific (“Conanp-BCS”).

As of the date of the drafting of this document, the following information requests have been made:

- i. Between 21 June and 28 June 2023, the Secretariat requested information from the following agencies: Semarnat-BCS, Profepa-BCS, Conanp-BCS, Inapesca-BCS and Conapesca-BCS. Status: no response.
- ii. On 11 August 2023, the Secretariat requested information from Mexico's Alternate Representative. Status: The Alternate Representative requested the suspension of work on the factual record until a decision has been taken by the Council; to date, the response to this information request is still pending.
- iii. On 14 August, acting through a consultant, the Secretariat filed various information requests via the National Transparency Platform (*Plataforma Nacional de Transparencia*). Status: partial response to the information requests.

To date, the Secretariat has conducted the following field activities:

- i. Field visit to Puerto Adolfo López Mateos on 5-6 June 2023;
- ii. Field visit to San Lázaro Beach on Magdalena Island, BCS, on 19 July 2023;
- iii. Meetings with representatives of Profepa-BCS, Conapesca-BCS and the National Fisheries Institute in Baja California Sur;
- iv. The Secretariat did not succeed in obtaining meetings with representatives of Semarnat-BCS and Conanp-BCS.

Timeline: June-July 2023.

3. The Secretariat will request—as appropriate—information of a technical or scientific nature or any other information pertinent to the preparation of the factual record from interested persons or non-governmental organizations, JPAC or independent experts, in accordance with subparagraphs b), c) and d) of USMC Article 24.28(4).

Timeline: April-July 2023.

Missing information and pending meetings

4. The following information has yet to be obtained and analyzed, as necessary:
 - i. Information (including statistics) on the complaints filed with the FGR and/or Profepa-BCS concerning the death of loggerhead turtle (*Caretta caretta*) specimens or other related facts during the period from 2010 to July 2020;
 - ii. Information on the actions taken by the FGR and/or Profepa-BCS, following the filing of complaints, including in relation to:
 - a. Investigations aimed at obtaining technical and scientific data which would serve as a basis for determining the cause of death of *Caretta caretta* specimens;
 - b. Reports on the discovery of dead *Caretta caretta* specimens detected during inspection tours by Profepa-BCS and/or the FGR in the Gulf of Ulloa during the period from 2010 to July 2020 and the respective follow-up actions; and

- c. Information on and diagnostic conclusions of the *post mortem* studies done by the competent authorities in relation to *Caretta caretta* specimens and description of the methods of analysis or handling when dead specimens of said species are found.
- iii. Information on the status of the drafting process of the Trilateral Mexico-United States-Japan Plan, as well as on the activities executed to date to finalize and implement it;
- iv. Information on the implementation of the Conservation Program for Sustainable Development for the region that includes the Pacific Islands of the Baja California Peninsula Biosphere Reserve, during the 2017-2019 period;
- v. Information on the implementation and outcomes or follow-up of the Regulatory Program for the Gulf of Ulloa, during the 2017-2019 period;
- vi. Information on the status of the updates to the Regional and Marine Environmental Management Program for the Northern Pacific (POEMR-PN), as well as the activities completed to date to finalize and implement it, during the 2017-2019 period;
- vii. Outcomes and follow-up in relation to the commitments undertaken after the 7th Conference of the Parties of the Inter-American Convention for the Protection and Conservation of Sea Turtles (COP7-CIT), held in Mexico City, in June 2015;
- viii. Information on the actions or mechanisms implemented to ensure coordination between authorities from the three levels of government to promote and execute conservation activities, as well as on updating and evaluating those activities, in the Gulf of Ulloa, Baja California Sur, during the 2017-2019 period;
- ix. In relation to the implementation of the Program for the Recovery and Repopulation of Endangered Species (“Procer”), information on actions related to the protection of the loggerhead turtle in the following projects and initiatives:
 - a. Evaluation of loggerhead turtle mortality due to fishing activities in the Gulf of Ulloa in 2013.
 - b. The 2015 Program to Monitor Sea Turtle Feeding Grounds in Mexico’s Northwestern Pacific region.
 - c. The 2016 project on the distribution and condition of sea turtles in the Gulf of Ulloa and San Lázaro Beach, Baja California Sur.
 - d. The 2016 Program to Monitor Sea Turtle Feeding Grounds in Mexico’s Northwestern Pacific region.
- x. Reports on the implementation of the Action Program for the Conservation of the Loggerhead Turtle Species and the coordinated actions of Profepa with the Sea Turtle Conservation Group of the Californias (*Grupo Tortuguero de las Californias*) in the Gulf of Ulloa.
- xi. Meeting minutes and agreements from the meetings held between 2017 and 2019 with fishers, fishing cooperatives and fishing permit holders in the communities of Puerto Mateos, Puerto San Carlos and Puerto Magdalena in Isla Magdalena, in the context of implementing the Action Program for the Conservation of the Loggerhead Turtle Species (*Caretta caretta*).

- xii. Number of seaworthy Profepa-BCS vessels available to carry out inspection and monitoring actions in the period from 2010 to July 2020.
- xiii. In connection with Profepa-BCS inspections conducted on the beaches of Puerto Adolfo López Mateos and, more generally, in the area known as the Gulf of Ulloa, which led to the identification of dead loggerhead turtle specimens, copies of the following documents:

File	File no.	Date
PFPA/10.3/2C.27.3/0064-12	092-12	12-06-27
PFPA/10.3/2C.27.3/0090-12	120-12	12-11-30
PFPA/10.3/2C.27.3/0029-13	019-13	13-04-05
PFPA/10.3/2C.27.3/0032-13	057-13	13-04-17
PFPA/10.3/2C.27.3/0033-13	068-13	13-04-24
PFPA/10.3/2C.27.3/0034-13	030-13	27/04/13
PFPA/10.3/2C.27.3/0010-14	014-14	14-02-18
PFPA/10.3/2C.27.3/0011-14	013-14	14-02-18
PFPA/10.3/2C.27.3/0024-14	087-14	14-04-03
PFPA/10.3/2C.27.3/0075-14	073-14	14-10-16
PFPA/10.3/2C.27.3/0099-14	031-14	14-12-12
PFPA/10.3/2C.27.3/0061-15	076-15	15-07-31

- xiv. The number of beached specimens of loggerhead turtles per month/year during the period from January 2010 to July 2020, including a comparison with the specimens of other sea turtle species found during the same period. Information provided may contain data such as: the relationship between turtle beachings and anthropogenic activities, as well as the results of the forensic analysis of individual specimens to determine their state of health and the possible causes of death;
- xv. With respect to the implementation of the Closed Season Order, Turtle Refuge Order, and the Fish Refuge Order, the following information is requested:
 - a. Information gathered during the implementation of the On Board Observers and Fishing Operations Videotaping System Program, specifically a copy of the program, the fishing trip log book, catch reports, reports of loggerhead turtle (*Caretta caretta*) carcasses found, reports of live loggerhead turtle (*Caretta caretta*) specimens found in trawl nets or any other related document or communication, as well as video evidence of fishing trips, loggerhead turtle (*Caretta caretta*) specimens found and loggerhead turtle (*Caretta caretta*) carcasses found, from the program's date of implementation to July 2020;

- b. Information on the implementation of the Comprehensive Fisheries Management Program in the Gulf of Ulloa, BCS (mandated in the Fish Refuge Order), from 2017 to 2019; said information must specify the actions implemented, outcomes and effectiveness indicators;
 - c. Information on the implementation of the Fisheries Management Plan in the Gulf of Ulloa, BCS (mandated in the Turtle Refuge Order); said information must cover the period from 2017 to 2019 and specify the actions implemented, outcomes and effectiveness indicators;
 - d. Information on the effectiveness of the mechanisms utilized to reduce loggerhead turtle (*Caretta caretta*) bycatch in the Gulf of Ulloa;
 - e. Information on how the relevant authorities share data collected on turtle beachings, in relation to species of interest, and on how coordinated inter-agency actions are determined.
 - f. Information on the coordination mechanisms or actions between the authorities of the three levels of government to reduce loggerhead turtle (*Caretta caretta*) bycatch in the Gulf of Ulloa, as well as on the mechanisms designed to evaluate the measures implemented;
 - g. Information on the factors and processes that contribute to loggerhead turtle mortality, the possible effects of bycatch due to the use of longline nets, trawl nets and gillnets; the effects of other human activities in the Gulf of Ulloa, such as nighttime illumination, pollution from vessels, the effects of plastics and similar debris on the digestive systems of loggerhead turtles;
 - h. Any information on the measures and actions implemented with artisanal and industrial fishers regarding the use of technologies and fishing gear that would reduce or eliminate sea turtle bycatch.
- xvi. Statistical information, tracking reports, communications or any other documents with information on loggerhead turtle (*Caretta caretta*) specimens injured by the propellers of vessels navigating the Gulf of Ulloa.

Missing information will be incorporated into the factual record, as applicable.

5. Although the Secretariat obtained information through a consultant who used Mexico's government transparency mechanisms, it has not received responses to the following information requests pursuant to ECA Article 14:
- i. Information request to Semarnat-BCS and email from the SEM Unit (21 June 2023).
 - ii. Information request to Profepa-BCS and email from the SEM Unit (21 June 2023).
 - iii. Information request to Conanp-BCS and email from the SEM Unit (21 June 2023).
 - iv. Information request to Conapesca-BCS and email from the SEM Unit (27 June 2023).

- v. Information request to Inapesca-BCS and email from the SEM Unit (21 June 2023).
- vi. Information request to Mexico's Alternate Representative, via communication no. A24.27/SEM/20-001/85/REQ (11 August 2023).

Timeline: September-October 2023.

Editing and translation into the CEC's official languages

6. Pursuant to Article 24.28(2), the draft factual record will be prepared on the basis of the information compiled and generated. The Secretariat will be responsible for final editing of the factual record in one of the CEC's official languages and —where appropriate— its translation into the other two.

Timeline: December 2023.

Submission of the draft factual record to the Council, the Parties' comments, incorporation of said comments and final version of the factual record

7. Pursuant to USMCA Article 24.28(5), the Secretariat shall submit a draft factual record to the Council in at least one of the concerned Party's designated official languages.

Scheduled date: 1 December 2023.

The draft will be submitted in the other two official languages of the Parties by 8 January 2024.

8. Once the draft factual record has been submitted, any Party may provide comments on its accuracy, in accordance with USMCA Article 24.28(5).

Scheduled date: Within 30 days of receipt of the draft factual record.

9. In accordance with the provisions of USMCA Article 24.28(5), the Secretariat shall incorporate the observations received from the Parties, where appropriate, and submit the final version of the factual record to the Council.

Scheduled date: Within 30 days of receipt of the Parties' comments.

10. The Secretariat shall make the final factual record publicly available within 30 days of its submission to the Parties, unless at least two members of the Council instruct it not to do so, in accordance with USMCA Article 24.28 (6).

Scheduled date: Within 30 days of submitting the final factual record.

Additional information

The submission, Mexico's response, the Secretariat's determinations, the Council member's instructions and a summary of all of these documents are available online, in the registry of submissions and public archive, on the CEC website: <www.cec.org/submissions>. Similarly, one may request additional information by contacting the Secretariat by email <sem@cec.org> or in writing, at the following address:

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