COMMISSION FOR ENVIRONMENTAL COOPERATION

Vaquita Porpoise

Factual Record Regarding Submission SEM-21-002

Prepared in accordance with Article 24.28 of the *Agreement between the United States of America, the United Mexican States, and Canada* (USMCA/CUSMA)

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In memoriam

The Secretariat of the Commission for Environmental Cooperation dedicates this work to the memory of Dr. Armando Jaramillo Legorreta, Mexican researcher and pioneer in the application of acoustic detection techniques to monitor the vaquita porpoise in the Upper Gulf of California.

Dr. Jaramillo's tireless work was instrumental in the development of innovative methodologies that made it possible to detect the presence of the species in a highly unsafe environment marked by illegal totoaba fishing and vaquita bycatch. Thanks to his contributions, significant advances were made in implementing the monitoring and surveillance systems used today as critical tools in conservation efforts.

Recognizing that his scientific, technical, and humane legacy continues to be a pillar in the fight for the protection and survival of the vaquita porpoise, we wish to honour the invaluable work of Dr. Armando Jaramillo Legorreta.

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Acronyms, abbreviations, and definitions

BC	Baja California
CEC	Commission for Environmental Cooperation
CIRVA	International Committee for the Recovery of the Vaquita (*Comité Internacional para la Recuperación de la Vaquita*)
CITES	Convention on International Trade in Endangered Species of Wild Fauna and Flora
Conabio	National Biodiversity Commission (*Comisión Nacional para el Conocimiento y Uso de la Biodiversidad*)
Conanp	National Protected Natural Areas Commission (*Comisión Nacional de Áreas Naturales Protegidas*)
Conapesca	National Fisheries and Aquaculture Commission (*Comisión Nacional de Acuacultura y Pesca*)
DOF	Official Gazette of the Federation (*Diario Oficial de la Federación*)
ECA	Environmental Cooperation Agreement
ECG	Trilateral Law Enforcement Contact Group
ECOFT	Expert Committee on Fishing Technologies
FGR	Office of the Attorney General of the Republic (*Fiscalía General de la República*)
GIS	Intragovernmental Group on Sustainability in the Upper Gulf of California (*Grupo Intragubernamental sobre la Sustentabilidad en el Alto Golfo de California*)
IMIPAS	Mexican Institute for Sustainable Fisheries and Aquaculture (*Instituto Mexicano de Investigación en Pesca y Acuacultura Sustentables*) (formerly, National Institute of Fisheries and Aquaculture (*Instituto Nacional de Pesca y Acuacultura*—Inapesca); note that the responsibilities of Inapesca now rest with IMIPAS)
Inapesca	National Institute of Fisheries and Aquaculture (*Instituto Nacional de Pesca y Acuacultura*—Inapesca, now IMIPAS)
IUCN	International Union for the Conservation of Nature
IWC	International Whaling Commission
LGVS	General Wildlife Act (*Ley General de Vida Silvestre*)
Marina	Ministry of the Navy (*Secretaría de Marina*) Note this abbreviation is used when referring to operational activities. (see also "Semar")
NOM	Mexican Official Standard (*Norma Oficial Mexicana*)
PNT	National Transparency Platform (*Plataforma Nacional de Transparencia*)
Profepa	Office of the Federal Attorney for Environmental Protection (*Procuraduría Federal de Protección al Ambiente*)
Sader	Ministry of Agriculture and Rural Development (*Secretaría de Agricultura y Desarrollo Rural*); formerly, the Ministry of Agriculture, Livestock, Rural Development, Fisheries, and Food (*Secretaría de Agricultura, Ganadería, Desarrollo Rural, Pesca y Alimentación*—Sagarpa). Note that Sader is now charged with Sagarpa's responsibilities for fisheries matters.
Sagarpa	Ministry of Agriculture, Livestock, Rural Development, Fisheries, and Food (*Secretaría de Agricultura, Ganadería, Desarrollo Rural, Pesca y Alimentación*); now the Ministry of Agriculture and Rural Development (*Secretaría de Agricultura y Desarrollo Rural*)
Semar	Ministry of the Navy (*Secretaría de Marina*) Note this abbreviation is used when referring to administrative functions. (see also "Marina")
Semarnat	Ministry of the Environment and Natural Resources (*Secretaría de Medio Ambiente y Recursos Naturales*)
SHCP-UIF	Financial Intelligence Unit (*Unidad de Inteligencia Financiera*) of the Ministry of the Treasury and Public Credit (*Secretaría de Hacienda y Crédito Público*)
SSCS	Sea Shepherd Conservation Society (also referred to as "Sea Shepherd")
UABC	Universidad Autónoma de Baja California
UGC	Upper Gulf of California
USMCA/CUSMA	United States-Mexico-Canada Agreement or Canada-United States-Mexico Agreement
VRA	Vaquita Refuge Area
ZO	Zero Tolerance Area

Definitions

1975 Totoaba Fishing Ban	Order establishing a fishing ban on the totoaba (*Cynoscion macdonaldi*) in the waters of the Gulf of California, from the mouth of the Colorado River to Río Fuerte, Sinaloa on the east coast and from the Colorado River to Bahía Concepción, Baja California [Sur] on the west coast (*Acuerdo que establece veda para la especie totoaba* (Cynoscion macdonaldi) *en aguas del golfo de California, desde la desembocadura del río Colorado hasta el río Fuerte, Sinaloa, en la costa oriental, y del río Colorado a Bahía Concepción, Baja California [Sur], en la costa occidental*)
2015 Gillnets Order	Order temporarily suspending commercial fishing by means of gillnets and longlines operated on small craft in the Northern Gulf of California (*Acuerdo por el que se suspende temporalmente la pesca comercial mediante el uso de redes de enmalle, cimbras y palangres operadas con embarcaciones menores, en el norte del golfo de California*)
2017 Gillnets Order	Order prohibiting specific fishing gear, systems, methods, and techniques, and restricting permissible hours, for fishing by small craft in marine waters under Mexican federal government jurisdiction in the Northern Gulf of California, establishing landing sites, and mandating the use of monitoring systems by such craft (*Acuerdo por el que se prohíben artes, sistemas, métodos, técnicas y horarios para la realización de actividades de pesca con embarcaciones menores en aguas marinas de jurisdicción federal de los Estados Unidos Mexicanos en el norte del golfo de California, y se establecen sitios de desembarque, así como el uso de sistemas de monitoreo para dichas embarcaciones*)
2020 Gillnets Order	Order regulating fishing gear, systems, methods, and techniques, and restricting permissible hours, for small and large craft in Mexican marine areas in the Northern Gulf of California, establishing landing sites, and mandating the use of monitoring systems by such craft (*Acuerdo por el que se regulan artes, sistemas, métodos, técnicas y horarios para la realización de actividades de pesca con embarcaciones menores y mayores en zonas marinas mexicanas en el norte del golfo de California y se establecen sitios de desembarque, así como el uso de sistemas de monitoreo para tales embarcaciones*)
CITES Action Plan	Compliance Action Plan of the Government of Mexico to prevent illegal fishing and trade of totoaba, its parts and derivatives, in protection of the vaquita porpoise (*Plan de acción de cumplimiento del gobierno de México para prevenir la pesca y el comercio ilegal de totoaba, sus partes y derivados, en protección a la vaquita marina*), submitted to the Convention on International Trade in Endangered Species of Wild Fauna and Flora
Constitution	Political Constitution of the United Mexican States (*Constitución Política de los Estados Unidos Mexicanos*)
Council	Council of the Commission for Environmental Cooperation

Council Resolution 24-02	Instructions to the Secretariat of the Commission for Environmental Cooperation (CEC) regarding Submission SEM 21-002 (*Vaquita Porpoise*) which asserts that the Mexican environmental authorities are failing to effectively enforce (1) Article 55 of the General Wildlife Act (*Ley General de Vida Silvestre*) (LGVS); (2) Article 56 of the LGVS Regulations (LGVS Regulation); (3) Order which temporarily suspends commercial fishing by means of gillnets and longlines operated on small vessels, in the Northern Gulf of California (*Acuerdo por el que se suspende temporalmente la pesca comercial mediante el uso de redes de enmalle, cimbras y/o palangres operadas con embarcaciones menores, en el norte del Golfo de California*) ("2015 Gillnets Order"); (4) Order which prohibits specific fishing gear, systems, methods and techniques, as well as restricts permissible hours, for small vessel fishing activities in marine waters under the Mexican federal government's jurisdiction in the Northern Gulf of California, and which establishes landing sites and mandates the use of monitoring systems by such vessels (*Acuerdo por el que se prohiben artes, sistemas, métodos, técnicas y horarios para la realización de actividades de pesca con embarcaciones menores en aguas marinas de jurisdicción federal de los Estados Unidos Mexicanos en el norte del Golfo de California, y se establecen sitios de desembarque, así como el uso de sistemas de monitoreo para dichas embarcaciones*) ("2017 Gillnets Order"); (5) Order which establishes a fishing ban on the Totoaba (*Cynoscion macdonaldi*), in the waters of the Gulf of California, from the mouth of the Colorado River to Río Fuerte, Sinaloa, on the east coast, and from the Colorado River to Bahía Concepción, Baja California [Sur], on the west coast (*Acuerdo que establece veda para la especie Totoaba, Cynoscion MacDonaldi, en aguas del Golfo de California, desde la desembocadura del Río Colorado hasta el Río Fuerte, Sinaloa en la costa oriental, y del Río Colorado a Bahía Concepción, Baja California [Sur], en la costa occidental*) ("1975 Totoaba Fishing Ban"); and (6) Order which regulates fishing gear, systems, methods and techniques, as well as restricts permissible hours, for small and large vessels in Mexican marine areas in the Northern Gulf of California, and which establishes landing sites and mandates the use of monitoring systems for such vessels (*Acuerdo por el que se regulan artes, sistemas, métodos, técnicas y horarios para la realización de actividades de pesca con embarcaciones menores y mayores en Zonas Marinas Mexicanas en el norte del Golfo de California y se establecen sitios de desembarque, así como el uso de sistemas de monitoreo para tales embarcaciones*) ("2020 Gillnets Order") to protect the Vaquita Porpoise (*Phocoena sinus*).
Guidelines	*Guidelines for Submissions on Enforcement Matters under Articles 14 and 15 of the North American Agreement on Environmental Cooperation*
IUCN Red List	IUCN Red List of Threatened Species
Mexico	United Mexican States
NOM-059	Mexican Official Standard 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*
Notification	SEM-21-002 (*Vaquita Porpoise*), USMCA/CUSMA Article 24.28 Notification (1 April 2022)
Parties	The governments of Canada, the United States, and Mexico
Party	The Government of Mexico
Pesca ABC	Pesca Alternativa de Baja California, A. C. (non-governmental organization)
Profepa-BC	Profepa office in Baja California
Response	SEM-21-002 (*Vaquita Porpoise*), USMCA/CUSMA Article 24.27(4) Response of Mexico (31 January 2022)
RI-Semarnat	Internal Regulation of Semarnat
Sea Shepherd	Sea Shepherd Conservation Society, SSCS (non-governmental organization)
Secretariat	CEC Secretariat
Submission	SEM-21-002 (*Vaquita Porpoise*), USMCA/CUSMA Article 24.27(1) Submission (11 August 2021)

Submitters	Authors of submission SEM-21-002 (*Vaquita Porpoise*)
totoaba	*Totoaba macdonaldi*
UGC Biosphere Reserve	Upper Gulf of California and Colorado River Delta Biosphere Reserve (*Reserva de la Biosfera Alto Golfo de California y Delta del Río Colorado*)
vaquita or vaquita porpoise	*Phocoena sinus*
Vaquita Protection Program	Vaquita Protection Program within the Refuge Area Located in the Western Portion of the Upper Gulf of California (*Programa de protección de la vaquita dentro del área de refugio ubicada en la porción occidental del Alto Golfo de California*)
ZO/VRA Enforcement Plan	Enforcement Plan for the Zero Tolerance Area and the Vaquita Refuge Area

Units of measure and other abbreviations

°C	degrees celsius
ha	hectare
kHz	kilohertz
km	kilometer
km²	square kilometer
m	meter
mm	millimeter
µs	microsecond (millionth part of a second)
s	second
T	ton (metric, 1,000 kg)

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 documents cited herein are found in the digital 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 Spanish versions.

Terminology

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

Term	Definition
abundance	Number of individuals of a species; determines the size of the population.[i]
biological monitoring	Systematic, ongoing measurement of variables of interest in organisms of a species in order to detect changes. This method helps understand ecosystem dynamics and the effects of anthropogenic intervention.[ii]
cetacean	Order of mammals that includes whales, dolphins, and porpoises. Although most types of cetacean species have specific or common ranges, members of the cetacean group can be found in all the world's oceans. Fossil evidence indicates that cetaceans descend from a group of land mammals that were characterized by being even toed, having an oblong cranium, and slim limbs, with significant similarities to that of early whales.[iii]
chinchorro	Common term to refer to gillnets. It is a small mesh net used to catch shrimp. In the Gulf of California region it is known as "chinchorro de línea".[iv]
Critically endangered	A category established by the International Union for the Conservation of Nature that indicates that a wildlife taxon is on the brink of extinction.[v]
demersal species	Pelagic species living in deep water or near the ocean floor, or temporarily coming in contact with the ocean floor, in areas located on the continent al shelf are called demersal or benthic. This group includes fish such as rays, flounders, groupers, and catfish as well as a great many crustaceans.[vi]
Derelict fishing gear or ghost gear	A derelict object is something "abandoned." Derelict or "ghost" fishing gear are nets that are lost, misplaced, abandoned or discarded at sea.[vii]
echolocation	A system of orientation enabling an animal to locate an object by listening to reflected sound waves that are emitted by the animal itself. The system is used by animals such as bats and toothed cetaceans (odontocetes). This behavior allows an individual to locate and catch food, and also to explore its environment.[viii]
endemic species	Species whose distribution is limited to a single geographical area.[ix]

i. T. M. Smith and R. L. Smith (2007), *Ecología,* 6th ed., Madrid, Pearson, at 199–200 and G–1, at: <https://bit.ly/3WP3SIg>; F. W. Preston (1948), "The Commonness, and Rarity, of Species," *Ecology* 29(3): 254–83, at: <https://bit.ly/4dWmbS3>.

ii. Mexican Official Standard NOM-047-SSA1-2011, *Salud ambiental-Índices biológicos de exposición para el personal ocupacionalmente expuesto a sustancias químicas*, published in the DOF on 6 June 2012, at: <https://bit.ly/3wVLmDr>; S. E. Chediack (comp.) (2009), *Monitoreo de biodiversidad y recursos naturales: ¿para qué?*, Conabio, Corredor Biológico Mesoamericano México, Serie Diálogos, no. 3, at 3, at: <https://bit.ly/3VjJr4Y>.

iii. C. Dold (2015), "Cetacea (Whales, Dolphins, Porpoises)," in R. E. Miller and M. E. Fowler (eds.), *Fowler's Zoo and Wild Animal Medicine*, vol. 8, at: <https://bit.ly/3EdtF5G>.

iv. Semarnat, "Compendio de estadísticas ambientales 2018", Secretaría de Medio Ambiente y Recursos Naturales, at: <http://bit.ly/3ZQk6Se>.

v. UICN (2016), *Directrices para la aplicación de las categorías y criterios de la Lista Roja de Ecosistemas de UICN*, L. M. Bland, D. A. Keith, R. M. Miller, N. J. Murray, and J. P. Rodríguez (eds.), Unión Internacional para la Conservación de la Naturaleza, Gland, Switzerland, at 6, 93–6, at: <https://bit.ly/4dTKtMn>.

vi. C. M. Lalli and T. R. Parsons (1997), *Biological Oceanography: an Introduction*, 2nd ed., Elsevier Butterworth Heinemann, at 94, at: <https://bit.ly/3Eqa4z6>.

vii. A. X. Fellmeth and M. Horwitz (2011), "Res derelicta", Guide to Latin in International Law, Oxford Reference, at: <https://bit.ly/4m8JbRJ>.

viii. T. A. Jefferson, M. A. Webber, and R. L. Pitman (2015), *Marine Mammals of the World: A Comprehensive Guide to Their Identification*, 2nd ed., Academic Press, London, at 12.

ix. T. M. Smith and R. L. Smith (2007), *supra* at 199–200 and G-1, at: <https://bit.ly/3WP3SIg>; F. W. Preston (1948), *supra* at 635, at: <https://bit.ly/4dWmbS3>; Conabio (2022), "Especies endémicas," at: <https://bit.ly/3UViovn>.

Term	Definition
Finfish fishing	The diversity of marine finfish species is so great that fishing of these species—called *finfish fishing* in both its inshore and deep-sea variants—includes fisheries associated with lagoon and estuarine environments and the coastline ("lagoon and coastal finfish fishing") as well as deep-sea pelagic species found far off shore, beyond the continental shelf ("pelagic finfish fishing"), and also includes fish communities living in shallow or deep water bottom habitats, rocky or reef habitats, or smooth, sandy, clayey, or muddy habitats ("bottom fishing").[x] Depending on the fishing system and the techniques and tactics employed, organisms from all three groups may be caught in the same operation, along with other associated species taken as bycatch.[xi] Examples of finfish include snook (*Centropomidae*), corvinas and croakers (*Sciaenidae*), snappers (*Lutjanidae*), rockfish and rosefish (*Sebastes*), mackerels and allies (*Scombridae*), flounders (*Paralichthyidae* and *Pleuronectidae*), mullets (*Muglidae*), jacks and allies (*Carangidae*), and many more.[xii]
Genetic variability	Genotypic differences present in individuals of a single population.[xiii]
Gillnets	General term used to refer to fishing nets that catch fish by their gills, hence the name. Passive fishing gear, composed of multiple rectangular sections of monofilament or multifilament panels that are held vertically—with respect to the water's surface—by horizontal lines, one on the top called a "cork line" or "head rope," with evenly spaced floats, and a weighted one on the bottom called a "lead line" or "foot rope." This system allows drift nets to be fixed or move with tides and winds. The term also covers small-mesh shrimp nets known as *chinchorros de línea*.[xiv] Fish get caught in the mesh of the net when they try to swim through it. The mesh size varies (from about 5 to 30 cm or more) depending on the target species. Line chinchorros and the *redes agalleras* nets are gillnets.
Ghost gear	"Ghost" fishing gear are nets that are lost, abandoned or discarded at sea that cause significant harm—including injury and death—to marine life. The use of the term "*derelict* fishing gear," meaning abandoned, is also common.[xv]
Longlines	Passive fishing gear (fish has to swim to the gear to be caught) made of lines and hooks. It consists of a main line from which secondary hooked lines hang. The main line hangs from two or more lines connecting it to buoys on the surface. It can be anchored to the bottom (set) or allowed to drift.[xvi]

x. Sader (2018), "La pesquería de escama en Baja California Sur,", Secretaría de Agricultura y Desarrollo Rural, 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> and <https://bit.ly/3Znj009>.

xi. Sagarpa (2012), *supra* at 18 (third section), at: <https://bit.ly/47b93UT>.

xii. Semarnat (2003), *Informe de la situación del medio ambiente en México 2002, Compendio de estadísticas ambientales*, chapter 7, "Aprovechamiento de la vida silvestre: recursos pesqueros," at 251, at: <https://bit.ly/4lq3N6L>.

xiii. Conabio (2020), "Variabilidad genética," Biodiversidad mexicana, at: <https://bit.ly/4bDYf4c>; C. D. Sastré Velásquez et al. (2022), "¿Es la reproducción sexual necesaria para mantener la variabilidad genética?," *Nuestra Tierra* 18(38): 16–18, at: <https://bit.ly/3x1A3cP>.

xiv. Semarnat-Conanp (2014), *Lineamientos para el otorgamiento de apoyos del Programa de Acción para la Conservación de la Especie: vaquita (*Phocoena sinus*), ejercicio fiscal 2014*, at: <https://bit.ly/4dHv8xy>; Mexican Official Standard NOM-046-SAG/PESC-2017, *Pesca responsable en el embalse de la Presa La Amistad en el estado de Coahuila: especificaciones para el aprovechamiento de los recursos pesqueros*, published in the DOF on 27 July 2017, at: <https://bit.ly/4fEcsjY>; Mexican Official Standard NOM-060-SAG/PESC-2014, *Pesca responsable en cuerpos de aguas continentales dulceacuícolas de jurisdicción federal de los Estados Unidos Mexicanos: especificaciones para el aprovechamiento de los recursos pesqueros*, published in the DOF on 27 May 2014, at: <https://bit.ly/3X2zd9Y>; draft amendment to Mexican Official Standard NOM-002-PESC-1993, *Para ordenar el aprovechamiento de las especies de camarón en aguas de jurisdicción federal de los Estados Unidos Mexicanos*, publicada el 31 de diciembre de 1993 y sus modificaciones publicadas los días 30 de julio de 1997 y 28 de noviembre de 2006, published in the DOF on 22 February 2013, at: <https://bit.ly/4cnreZG>.

xv. SRE (2020), "México anuncia su adhesión formal a la Iniciativa Global contra Redes de Pesca Fantasma", comunicado núm. 348, Secretaría de Relaciones Exteriores, 11 November 2020, at: <https://bit.ly/4fEVO4f>. *See also* A. X. Fellmeth and M. Horwitz (2011), "Res derelicta", Guide to Latin in International Law, Oxford Reference, at: <https://bit.ly/4m8JbRJ>.

xvi. Mexican Official Standard NOM-029-PESC-2006, *Pesca responsable de tiburones y rayas. Especificaciones para su aprovechamiento*, published in the DOF on 14 February 2007, at: <https://bit.ly/40uzUdJ>.

Term	Definition
mesh size	The distance between the inner edges of two adjacent knots in the direction in which the fishing net is woven; it is based on the target species and is one of the most regulated parameters in the regulations.[xvii]
notice of landings	Document reporting to the relevant authority the volumes caught, by species, during one fishing day or trip.[xviii]
Pacific decadal oscillation (PDO)	Climate pattern associated with processes of oceanic-atmospheric interaction that recurs at decade-long intervals. It has two phases, warm and cool. In Mexico, the PDO influences precipitation and minimum and maximum temperatures; it has a statistically important impact on the climate of northern and northwestern Mexico.[xix]
Panga	A small fiberglass skiff with dimensions varying from 6.4 to 7.9 m long, 2.0 to 2.5 m wide, and 0.7 to 1.3 m high. It has a cover that can be used as a floatation device and 3–5 dividers or benches to make the boat sturdy. It is propelled by an outboard motor.[xx]
porpoise	Porpoises or phocoenids (*Phocoenidae*) are the smallest species of toothed cetaceans. Similar to dolphins, they are most closely related to narwhals and belugas. Generally, porpoises are distinguished from the dolphins by their flattened, spade-shaped teeth; the vaquita has 17 to 21 teeth on the upper jaw and 17 to 20 on the lower jaw. Porpoises are smaller overall, with short, rounded beaks and a triangular dorsal fin.[xxi]
rare species	A biologically viable species circumscribed to specific habitats, with a low population density and a limited range.[xxii]
relict species	A species that remains as a representative of a nearly extinct group or formation.[xxiii]
sciaenids	Fish belonging to the family Sciaenidae, typically known as corvinas, curvinas, croakers or drums.They have elongated, somewhat compressed bodies; a lateral line generally parallel to the dorsal profile and extending to the hind margin of the caudal fin, and a notched dorsal fin.[xxiv]

xvii. Inapesca (2000), *Catalog of capture systems for major commercial fisheries,* Chapter II: "Gillnets," General Directorate of Fisheries Research and Technological Development, National Fisheries Institute–Ministry of the Environment, Natural Resources, and Fisheries, Mexico, p. 66, at: <http://cec.org/files/sem/20240306/aal014.pdf>.

xviii. General Sustainable Fisheries and Aquaculture Act (*Ley General de Pesca y Acuacultura Sustentables*—LGPAS) published in the Official Gazette of the Federation (*Diario Oficial de la Federación*—DOF) on 24 July 2007, last reform DOF 01-04-2024, at: <https://bit.ly/45aZ1oL>.

xix. B. L. Bello Jiménez (2018), *Evaluación de la influencia de la oscilación decadal del Pacífico en la lluvia de verano y la incidencia de sistemas tropicales en Baja California Sur, bajo el efecto del cambio climático*, master's thesis in marine and coastal sciences with a sustainable management orientation, Universidad Autónoma de Baja California Sur, at 7, 15, 62, and 63, at: <https://bit.ly/3WETJxa>; E. Guevara Polo (n.d.), "La oscilación decadal del Pacífico," UNESCO Chair on Hydrometeorological Riesgos, Universidad de las Américas Puebla, at: <https://bit.ly/3D1ve6c>; NOAA, National Centers for Environmental Information (n.d.), "Pacific decadal oscillation (PDO)," at: <https://bit.ly/3WpTXak>; J. Méndez González et al. (2010), "Teleconexiones de la oscilación decadal del Pacífico (PDO) a la precipitación y temperatura en México," *Investigaciones Geográficas*, *Boletín del Instituto de Geografía, UNAM,* no. 73, at 57–70, at: <https://bit.ly/4dj0Yk6>.

xx. Semarnat and Cedo Intercultural (2017), *Manifestación de impacto ambiental (modalidad regional) para la pesca ribereña responsable in la Reserva de la Biosfera del Alto Golfo de California y Delta del Río Colorado: costa este-II*, at 11, at: <http://cec.org/files/sem/20241101/aaw038.pdf>.

xxi. Semarnat (2008), *Programa de acción para la conservación de la especie: vaquita (*Phocoena sinus*)*, at 27, at: <https://bit.ly/3zO9Sr5> [PACE-Vaquita].

xxii. Mexican Official Standard 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>; M. Tavera Carreño et al. (2019), "Rasgos funcionales de especies arbóreas raras y abundantes en bosques de montaña del sur de México," *Polibotánica*, no. 48, at 29–41, at: <https://bit.ly/3wJDAN5>.

xxiii. M. Seco, O. Andrés, and G. Ramos (2025), "Diccionario del español actual," in Fundación BBVA, *Diccionario del español actual*, at: <https://bit.ly/40TaMOt>.

xxiv. M. T. González Rubalcava (1993), "Contribución al conocimiento de la familia Sciaenidae en los litorales mexicanos," bachelor's thesis in biology, Universidad Nacional Autónoma de México, at 8, at: <https://bit.ly/464fI3Z>; iNaturalistMX (n.d.), "Corvinas, pescadillas y parientes (familia Sciaenidae)," at: <https://bit.ly/3XW4SLh>; Sagarpa-Conapesca (2014), *Diagnóstico de la pesquería de curvina golfina*, at 5, at: <https://bit.ly/3xKw0Cl>.

Term	Definition
Swim bladder	Known to the region's fishermen by the term *buche*,[xxv] a swim bladder (*maw* in Chinese) is an organ present in the majority of bony fish that modulates their buoyancy. In the case of *Totoaba macdonaldi*, it is characterized by its slight pearly sheen when fresh; it is oblong and pointed at one end, the "gas tubes" are longer than the bladder, emerging from the anterior central part of the organ.[xxvi]
Totoaba (*Totoaba macdonaldi*)	An endemic fish species of the Gulf of California, in the order *Perciformes*, with a compressed and elongate body, a large, pointed mouth, and a prominent lower jaw. Adults can measure up to 2 meters long and weigh more than 100 kg.[xxvii] It was classified as *Cynoscion macdonaldi* until 1980, when its name was changed to *Totoaba macdonaldi* to reflect its new status as a monotypic group. Note that some of the public documents cited in submission SEM 21-002 (*Vaquita Porpoise*) use the older designation of *Cynoscion macdonaldi*.[xxviii]
Upper Gulf of California	Marine zone delimited by the vertex formed by the states of Baja California and Sonora on the north and by a continuous line on the southeast extending from Punta San Francisquito, Baja California to Bahía de Kino, Sonora, passing through the southern end of Isla San Lorenzo and from there through the southern ends of Isla San Esteban and Isla Tiburón.[xxix]
Vaquita (*Phocoena sinus*)	A toothed cetacean belonging to the porpoise family, characterized by a small body, an unusually tall triangular dorsal fin, and a rounded head without a prominent rostrum. It has a distinctive color pattern with black or dark gray patches around its mouth and eyes that contrast with the pale gray of the rest of its body, which fades to a creamy white on the ventral region. It is the world's smallest cetacean with a maximum length of approximately a meter and a half and is endemic to the Upper Gulf of California.[xxx]

xxv. L. Choon Wei (2019), "The Fish Totoaba," in Asian Bestiary, Southern Collective, at: <https://bit.ly/3AmrryN>.

xxvi. CITES (2021), "Identification Guide: Totoaba (*Totoaba macdonaldi*)," at: <https://bit.ly/3LtADUk>; Porpoise Conservation Society (n.d.), "What is the totoaba and how is it connected to the vaquita?," Porpoise Knowledge Base, at: <https://bit.ly/4bNu9KI>.

xxvii. Ibunam (2024), "Totoaba," data sheet with illustrations by Keisdo Shimabukuro for "Gyotaku: El camino del arte a través de la ciencia," Instituto de Biología, Universidad Nacional Autónoma de México, at: <https://bit.ly/3yuMwpS>; NOAA Fisheries (2024), "Totoaba," Species Directory, National Marine Fisheries Service-National Oceanic and Atmospheric Administration, at: <https://bit.ly/3wHThnX>; L. M. Enríquez Paredes et al. (2023), *Informe final del proyecto RE006: Evaluación del impacto y pertinencia de las liberaciones experimentales de totoaba* (Totoaba mcdonaldi) *producida en cautiverio como estrategia de conservación de la población silvestre*, Universidad Autónoma de Baja California, at: <https://bit.ly/4cBxZbe>.

xxviii. D. Guevara Aguirre and M. A. Cisneros Mata (2020), "La totoaba: revisión histórica," in M. A. Cisneros Mata (ed.), *Evaluación de la población de Totoaba macdonaldi* (Mexico: Inapesca), at 14, at: <https://bit.ly/3SK94u4>.

xix. A. Sepúlveda Medina (1999), *Dinámica poblacional de los peneidos comerciales en el alto, centro Golfo de California, Topolobampo y costa occidental de la Baja California, en el litoral del Pacífico mexicano*, PhD diss. in marine sciences, Instituto de Ciencias del Mar y Limnología, Universidad Nacional Autónoma de México, at 11, at: <https://bit.ly/43L97vT>; C. A. Sans Aguilar (2018), *El Golfo de California en su totalidad como aguas interiores o territoriales mexicanas*, Semar: Centro de Estudios Superiores Navales, at 10–13, at: <https://bit.ly/3Y55zlD>; Profepa (2019), "La importancia del Alto Golfo," Procuraduría Federal de Protección al Ambiente, 21 October 2019, at: <https://bit.ly/3WkaduJ>.

xxx. T. A. Jefferson, M. A. Webber, and R. L. Pitman (2015), supra at 1 and 336; Conanp-Procer (2015), "Vaquita marina, marsopa del golfo de California, cochito," at 1, at: <https://bit.ly/44ZoUWE>.

Photo: Tomas A. Jefferson / Viva Vaquita

Executive summary

Among the objectives of Chapter 24 of the United States-Mexico-Canada Agreement or Canada-United States-Mexico Agreement (USMCA/CUSMA)[*] is that of "promot[ing] high levels of environmental protection and effective enforcement of environmental laws."[†] The USMCA/CUSMA Parties "recognize that enhanced cooperation to protect and conserve the environment…brings benefits that can…support implementation of international environmental agreements to which they are a party, and complement the objectives of this Agreement."[‡] The purpose of a CEC factual record is to provide an objective presentation of the facts relevant to assertions submitted under the submissions on enforcement matters (SEM) process, and to allow readers to draw their own conclusions regarding a Party's environmental law enforcement. While a factual record does not contain recommendations, it is expected to generally outline the history of the environmental enforcement issue raised in the submission, the relevant environmental laws of the party in question, and the actions taken by the Party to effectively enforce those environmental laws. Factual records thus serve as valuable tools for information sharing and for fulfillment of the Parties' obligations regarding promotion of public knowledge of their environmental laws and policies, including enforcement and compliance procedures, thereby "ensuring that relevant information is available to the public."[§]

This factual record addresses the assertions contained in submission SEM-21-001 (*Vaquita Porpoise*)[¶] concerning alleged failures to effectively enforce the General Wildlife Act (*Ley General de Vida Silvestre*—LGVS) and its regulation (the "LGVS Regulation"), and various administrative orders aimed at protecting the vaquita (*Phocoena sinus*), a species that is critically endangered due to the direct impacts of illegally fishing totoaba (*Totoaba macdonaldi*) in Mexico's Upper Gulf of California (UGC). In addition to a summary of the response from the Government of Mexico ("the Party"),[**] the factual record presents the information obtained by the Secretariat in the course of its preparation, including information about measures taken by the Party to address the issues raised in the submission.

LGVS Article 55 provides that any import, export, or re-export of specimens, parts, and derivatives of wild species included in the *Convention on International Trade in Endangered Species of Wild Fauna and Flora* (CITES) must adhere to CITES, the LGVS, and any provisions flowing from them. Article 56 of the LGVS Regulation provides that any import, export, or re-export of biological material from species included in CITES must also adhere to the Convention. Both the vaquita and the totoaba are listed in CITES Appendix I, meaning that international trade in specimens of both species should be subject to particularly strict regulation. The "1975 Totoaba Fishing Ban"[††] was promulgated in view of the declining population of totoaba and the special vulnerability of the species to commercial and sport fishing, given its limited area of distribution. The "2020 Gillnets Order"[‡‡] permanently bans all gillnets within a circumscribed area comprising the Zero Tolerance Area (Z0) and the Vaquita Refuge Area (VRA).

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* Agreement between the United States of America, the United Mexican States, and Canada, Chapter 24, at: <https://bit.ly/420Lb6x> and <https://bit.ly/4itON6R> [USMCA/CUSMA]. The sections of the USMCA/CUSMA that are relevant to the submissions on enforcement matters (SEM) process are available on the CEC website at: <https://www.cec.org/publications/sem-booklet/>.

† USMCA/CUSMA Article 24.2(2), at: <https://bit.ly/420Lb6x> and <https://bit.ly/4itON6R>.

‡ Id. at Article 24.2(3).

§ Id. at Article 24.5(1).

¶ SEM-21-002 (*Vaquita Porpoise*), USMCA/CUSMA Article 24.27(1) Submission (11 August 2021), at: <https://bit.ly/4bPwWER> [Submission].

** SEM-21-002 (*Vaquita Porpoise*), USMCA/CUSMA Article 24.27 (4) Response of Mexico (31 January 2022), at: <https://bit.ly/3R5Y09o>.

†† *Acuerdo que establece veda para la especie totoaba (*Cynoscion macdonaldi*) en aguas del golfo de California, desde la desembocadura del río Colorado hasta el río Fuerte, Sinaloa, en la costa oriental, y del río Colorado a Bahía Concepción, Baja California [Sur], en la costa occidental*, declared in 1975.

‡‡ *Acuerdo por el que se regulan artes, sistemas, métodos, técnicas y horarios para la realización de actividades de pesca con embarcaciones menores y mayores en zonas marinas mexicanas en el norte del golfo de California y se establecen sitios de desembarque, así como el uso de sistemas de monitoreo para tales embarcaciones*, declared in 2020.

The various legal instruments for the protection of the totoaba and the vaquita comprise coercive mechanisms such as closed seasons or zones, temporary fishing suspensions, fishing gear bans, and restricted shipping zones, in addition to listing the species as "protected"; these are augmented by administrative and penal measures for purposes of enforcement. In addition, various provisions of the USMCA/CUSMA relate to protection of the vaquita, the promotion and use of alternative fishing gear, the implementation of provisions deriving from CITES, fishing of marine wildlife species, and unreported and unregulated fishing.[§§] In addition to the protection afforded by the inclusion of the vaquita on protected species lists—the Red List of the International Union for the Conservation of Nature (IUCN) in 1978; CITES Appendix I in 1979; the list of species at risk in Mexican official standard NOM-059 in 1994—the habitat of this species is covered by zones of protection, including the Z0, the VRA, the Upper Gulf of California and Colorado River Delta Biosphere Reserve, and zones in which the use of gillnets is suspended.

The socio-environmental factors related to totoaba fishing and vaquita bycatch in the UGC are complex. On one hand there is organized criminal trafficking of totoaba swim bladders, while on the other, there are local fishing organizations requesting to revise the 2020 Gillnets Order in order to reduce the VRA and the gillnet exclusion zone, as well as to support initiatives to allow for sport fishing of the species in question.

The vaquita (or vaquita porpoise) is the world's smallest cetacean and is endemic to the UGC. Like other toothed cetaceans, the vaquita uses echolocation to recognize its environment, navigate, search for food, and identify predators. Accurate knowledge of its echolocation mechanism has made it possible to use acoustic detection methods, along with visual methods, to monitor the presence of vaquitas with considerable precision. In 1997, the vaquita population was estimated at 567 individuals. Subsequent studies documented a steep decline in the population, including losses of nearly 50 percent per year between 2015 and 2018. In recent years, monitoring and research has focused on the Z0 and an adjacent area referred to as the "extension area." The last research cruise in 2024 utilized visual observation methods supported with photographic identification and expert elicitation (judgment), and established (with 75 percent probability) that the number of vaquitas sighted was between 6 and 8 , down from the 10 to 13 vaquitas observed in 2023.[¶¶] It should be noted that these recent figures do not represent a population estimate, but rather a minimum number of specimens sighted in the observation area. Data for 2024 indicate that vaquita visual confirmation is now at its smallest since monitoring of the species began, although the pace of its decline has slowed. Furthermore, 2024 was the first year in which an observation cruise yielded no probable observations of calves, although a yearling, probably identical to the calf observed in 2023, was seen.

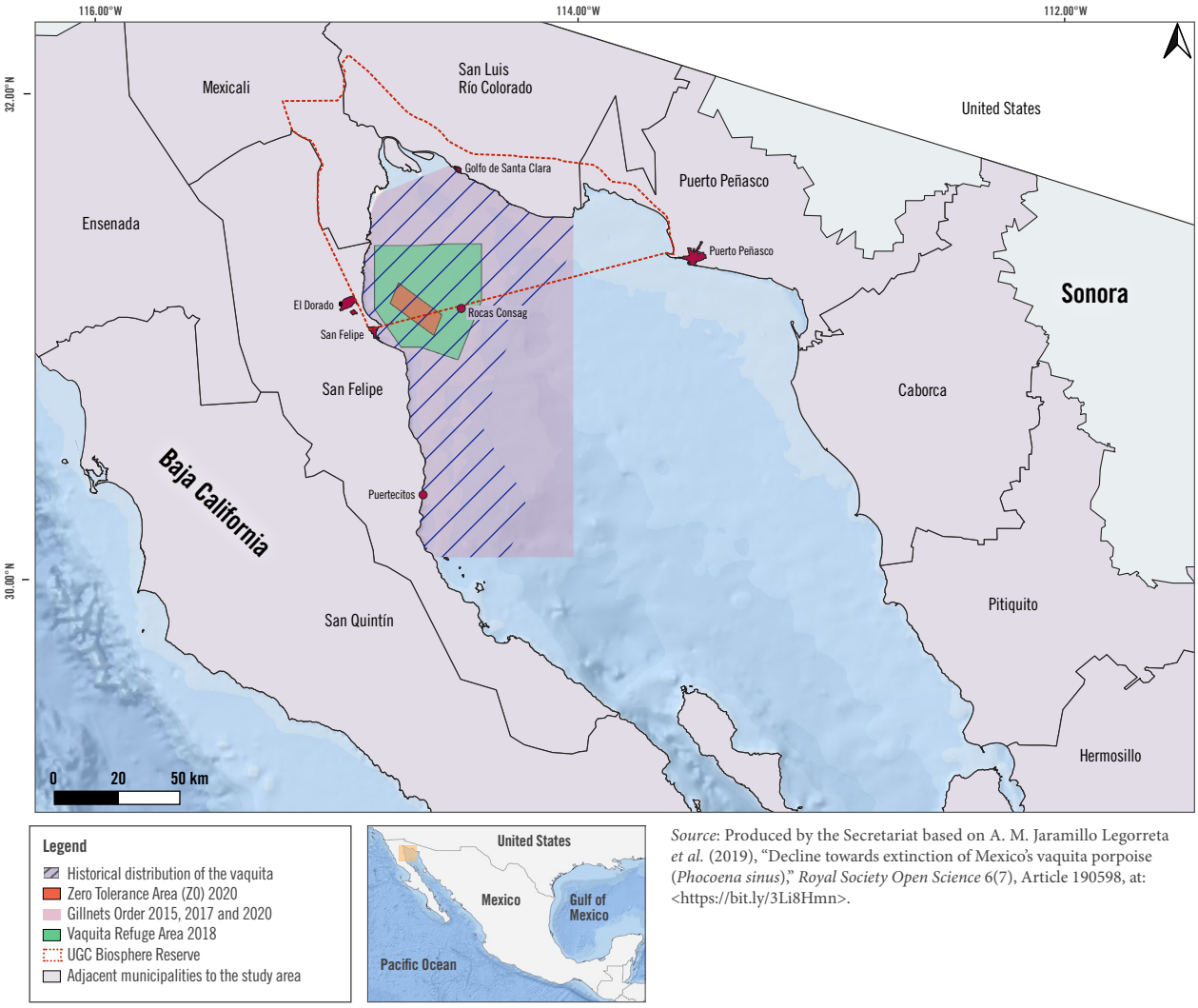
The size of the vaquita (averaging 140–150 cm) is very similar to that of the totoaba (which is also endemic to the Gulf of California); moreover, the two species share habitats and range (the Colorado River delta and the UGC). These two factors make the vaquita porpoise particularly susceptible to being caught in the gillnets used to catch totoaba. The rapid collapse of the vaquita population demonstrates the impact of illegal fishing, which intensified in early 2010 and which is documented in studies on the impact of illegal fishing on the population status of this species. Coveted for its swim bladder, the totoaba has been targeted for illicit capture and trade, resulting in poaching. In Asia, the swim bladder can reach prices of USD 20,000 to 80,000 per kilogram.

§§ USMCA/CUSMA Articles 24.19, 24.8(4), 24.17, and 24.21(1), at: <https://bit.ly/420Lb6x> and <https://bit.ly/4itON6R>.

¶¶ The elicited distribution (obtained by means of expert elicitation) indicated a 75% probability that the total number of distinct individuals observed was between 6 and 8, and a 25% probability that this number was 9 to 11. For the first time, no calves were sighted. Table 1 of the factual record presents more detailed information on this subject.

The vaquita is also vulnerable to entanglement in gillnets of all mesh sizes, particularly those used in bigeye croaker, sierra and shrimp fishing. Interviews conducted by the Secretariat during its field trip, coupled with various public statements and reports, support the conclusion that gillnets have never ceased to be used in the Z0 and the VRA. As to the use of alternative fishing gear contemplated and recommended in the 2020 Gillnets Order, representatives of local fishermen stated in meetings with the Secretariat that "the alternative nets don't work," allegedly yielding smaller catches, which expose the fishermen who use them to unfair competition and even, in some cases, to threats from fishermen who do not use them. This occurs even though various entities, such as the organization Pesca ABC, have tested alternative nets and documented their efficiency. According to the information obtained by the Secretariat, despite the restrictions on the use of gillnets in the UGC, fishing activities are allegedly continuing at similar levels and using the same methods as before the restrictions were established.

Historical distribution of the vaquita



Source: Produced by the Secretariat based on A. M. Jaramillo Legorreta *et al.* (2019), "Decline towards extinction of Mexico's vaquita porpoise (*Phocoena sinus*)," *Royal Society Open Science* 6(7), Article 190598, at: <https://bit.ly/3Li8Hmn>.

Photo: Tomas A. Jefferson / Viva Vaquita

In 1996, at the 48th meeting of the International Whaling Commission, Mexico presented a recovery strategy for the vaquita. One of its main components was a proposal to form a committee, the International Committee for the Recovery of the Vaquita (CIRVA), made up of domestic and international scientists responsible for monitoring the vaquita population and recommending measures to the Party.

In January 2021, Mexico formed the Intragovernmental Group on Sustainability in the Upper Gulf of California (GIS), headed by representatives of the Ministry of the Environment and Natural Resources (*Secretaría de Medio Ambiente y Recursos Naturales* (Semarnat), the Ministry of Agriculture and Rural Development, and the Ministry of the Navy (*Secretaría de Marina*—Semar or Marina), through its various agencies,*** in collaboration with other federal public entities,††† as required under the 2020 Gillnets Order. Semarnat is the GIS member in charge of strengthening exchanges of public information on measures to enforce the 2020 Gillnets Order and prevent violations thereof; on illegal trade in swim bladders and other totoaba parts, and on law enforcement (governance, security, inspection, surveillance), among other aspects.

*** These are: Office of the Federal Attorney for Environmental Protection (*Procuraduría Federal de Protección al Ambiente*), National Protected Natural Areas Commission (*Comisión Nacional de Áreas Naturales Protegidas*), National Fisheries and Aquaculture Commission (*Comisión Nacional de Acuacultura y Pesca*) and Mexican Institute for Sustainable Fisheries and Aquaculture (*Instituto Mexicano de Investigación en Pesca y Acuacultura Sustentables*).

††† These are: Ministry of Trade (*Secretaría de Economía*), Ministry of the Treasury and Public Credit (*Secretaría de Hacienda y Crédito Público*), Ministry of Labor and Social Welfare (*Secretaría del Trabajo y Previsión Social*), Secretariat of Security and Citizen Protection (*Secretaría de Seguridad y Protección Ciudadana*), Ministry of Welfare (*Secretaría del Bienestar*), Ministry of Foreign Affairs (*Secretaría de Relaciones Exteriores*), Tax Administration Service (*Servicio de Administración Tributaria*) and the Attorney General of the Republic (*Fiscalía General de la República*).

In early 2023, Mexico submitted to the CITES Secretariat its action plan to urgently progress CITES implementation, in particular addressing the measures and activities that will be put in place to effectively prevent illegal fishers and unauthorized vessels from entering the Z0 and the VRA to halt illegal trade in totoaba and protect the vaquita. The *Compliance Action Plan of the Government of Mexico to prevent illegal fishing and trade of totoaba, its parts and derivatives, in protection of the vaquita porpoise* ("CITES Action Plan") has seven lines of action comprising 34 goals and 101 scheduled milestones; the plan includes baselines and outcome indicators allowing for regular tracking, assessment, and recording of progress for each of the goals and milestones. The Party provided the Secretariat with its 2024 progress report on implementation of the CITES Action Plan. The report states that from 2022 to September 2024, marine inspection patrols increased from 166 to 278, while land-based patrols increased from 190 to 409, with a 50% increase in personnel dedicated to these patrols. In the period running from implementation of the action plan in July 2023 to 30 September 2024, there were 5,191 inspections of boats at sites authorized for fishing activities under the 2020 Gillnets Order, giving rise to 29 administrative decisions finding that fisheries-related offenses had been committed. Three additional inspection points were set up in 2023, according to the report. In the absence of information submitted by the Party, the Secretariat was unable to substantiate certain statements regarding the objectives contained in the CITES Action Plan. Eyewitness accounts do not always confirm results submitted by Mexico.

Marina has been conducting round-the-clock surface radar monitoring since 2023, using ocean patrol vessels and the Sea Shepherd Conservation Society (SSCS) ship, the *Sea Horse,* working out of the San Felipe, BC naval sector. In August 2024, with the goal of deterring the placement of gillnets in the Z0 and in the "extended area" adjacent to the Z0, Marina proceeded to place 216 concrete blocks to capture and prevent the entry of gillnets into the Z0, adding to the 193 blocks initially installed in October 2022, for a total of 409 concrete blocks in the UGC.

In 2024, the National Aquaculture and Fisheries Commission (*Comisión Nacional de Acuacultura y Pesca—Conapesca*) drafted terms of reference for a program to register and accredit fishermen active in the UGC as well as a special program for marking and fishing gear on small craft. Mexico states that between April 2023 and September 2024, Conapesca received 233 fishing permit applications, 121 of which gave rise to permits for the use of alternative fishing gear and systems. The Secretariat was unable to identify detailed information about the type of fishing gear authorized by these permits, or whether fishermen are indeed using the authorized gear.

The SEM mechanism is part of an ongoing commitment enshrined in the USMCA/CUSMA to promote high levels of environmental protection and the effective enforcement of environmental law. Factual records represent an opportunity for the Parties to promote transparency and to educate their citizens about environmental law and policy in North America, as well as environmental and compliance procedures, ensuring that relevant information is available to the public. Under certain circumstances, the SEM process may also constitute an early warning tool that contributes to addressing environmental law enforcement concerns and may support cooperative activities among the Parties pursuant to the Environmental Cooperation Agreement.‡‡‡

‡‡‡ USMCA/CUSMA Articles 24.2(2) and (3), 24.5(1), 24.25, and 24.27, at: <https://bit.ly/420Lb6x> and <https://bit.ly/4itON6R>.

***Photo*: Image taken from video by Fabián Rodríguez / *Comisión Nacional de Áreas Naturales Protegidas* and National Marine Mammal Foundation, 2024**

1. Background

1. Among the objectives of Chapter 24 of the Agreement between the United States of America, the United Mexican States, and Canada (USMCA/CUSMA) is that of "promot[ing] high levels of environmental protection and effective enforcement of environmental laws."[1] Parties to the USMCA/CUSMA "recognize that enhanced cooperation to protect and conserve the environment…brings benefits that can…support implementation of international environmental agreements to which they are a party, and complement the objectives of this Agreement."[2] Each Party "shall strive to ensure that its environmental laws and policies provide for, and encourage, high levels of environmental protection, and shall strive to continue to improve its respective levels of environmental protection."[3]

2. USMCA/CUSMA Article 24.27[4] provides for a process allowing any person of, or entity established in Canada, the United States, or Mexico 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). Where 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.[5] Where at least two CEC Council members instruct it to do so, the Secretariat prepares a factual record. The CEC Council is mindful of the value of timely dialogue between the public and the Parties on matters related to effective enforcement of environmental laws; the Secretariat can offer its good offices to facilitate this dialogue.[6]

3. On 11 August 2021, the Center for Biological Diversity, the Animal Welfare Institute, the Natural Resources Defense Council, and the Environmental Investigation Agency (together, "the Submitters") filed a submission with the Secretariat under USMCA/CUSMA Article 24.27(1).[7] The Submitters, all US-based organizations, assert that Mexico is failing to effectively enforce the General Wildlife Act (*Ley General de Vida Silvestre*—LGVS) and its regulation (the "LGVS Regulation") as well as various orders aimed at protecting the vaquita (or vaquita porpoise—*Phocoena sinus*), leading to the near-extinction of the species. The Submitters state that illegal fishing of totoaba (*Totoaba macdonaldi*) is having a direct impact on the conservation status of the vaquita.

1. Agreement between United States of America, the United Mexican States, and Canada, Article 24.2(2), at: <https://bit.ly/43MDjGX> and <https://bit.ly/3XPYl3H>. The sections of the USMCA/CUSMA that are relevant to the submissions on enforcement matters (SEM) process are available on the CEC website at: <https://www.cec.org/publications/sem-booklet/>.
2. Id. at Article 24.2(3), at: <https://bit.ly/420Lb6x> and <https://bit.ly/4itON6R>.
3. Id. at Article 24.3(2).
4. Id. at Article 24.27(1).
5. 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, visit the CEC website at: <www.cec.org/submissions>.
6. *Cf.* CEC (2012), *Guidelines for Submissions on Enforcement Matters under Articles 14 and 15 of the North American Agreement on Environmental Cooperation*, at: <https://bit.ly/3FwraMx>.
7. SEM-21-002 (*Vaquita Porpoise*), USMCA/CUSMA Article 24.27(1) Submission (11 August 2021), at: <https://bit.ly/3VV5qQj> [Submission]. While the submission was originally filed in English, the citations or references to the submission in this factual record correspond to the Spanish translation.

4. According to the Submitters, Mexico is failing to effectively enforce **LGVS Article 55**[8] and **Article 56 of the LGVS Regulation**.[9] In addition, the submission asserts that the Party is failing to effectively enforce the following legal instruments: the Order which establishes a fishing ban on the Totoaba (*Cynoscion macdonaldi*), in the waters of the Gulf of California, from the mouth of the Colorado River to Río Fuerte, Sinaloa, on the east coast, and from the Colorado River to Bahía Concepción, Baja California [Sur], on the west coast ("**1975 Totoaba Fishing Ban**");[10] the Order which temporarily suspends commercial fishing by means of gillnets and longlines operated on small vessels, in the Northern Gulf of California ("**2015 Gillnets Order**");[11] the Order which prohibits specific fishing gear, systems, methods and techniques, as well as restricts permissible hours, for small vessel fishing activities in marine waters under the Mexican federal government's jurisdiction in the Northern Gulf of California, and which establishes landing sites and mandates the use of monitoring systems by such vessels ("**2017 Gillnets Order**"),[12] and the Order which regulates fishing gear, systems, methods and techniques, as well as restricts permissible hours, for small and large vessels in Mexican marine areas in the Northern Gulf of California, and which establishes landing sites and mandates the use of monitoring systems for such vessels ("**2020 Gillnets Order**").[13]

5. On 8 September 2021, the Secretariat found that submission SEM 21-002 (*Vaquita Porpoise*) met the requirements of USMCA/CUSMA Articles 24.27(1) and (2) and merited a response from the Government of Mexico, pursuant to USMCA/CUSMA Article 24.27(3), in relation to the effective enforcement of the environmental laws listed in the preceding paragraph.[14]

6. After notifying the Secretariat of a deadline extension for filing the Party response[15] and explaining the reasons for this extension,[16] Mexico submitted its response on 31 January 2022.[17] In the response, Mexico contends that the Secretariat should not have requested a response pursuant to USMCA/CUSMA Article 24.27(3) because, in Mexico's opinion, the submission does not demonstrate harm to the Submitters,[18] does not include information on private remedies available under Mexican law,[19] and is based exclusively on media reports.[20] The Party further contends that the commitments undertaken within the framework of the USMCA/CUSMA become binding "as from its entry into force, i.e., on 1 July 2020."[21]

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8. General Wildlife Act (*Ley General de Vida Silvestre*—LGVS), published in the DOF on 3 July 2000, last reform DOF 20-05-2021, at: <https://bit.ly/4247xCC> [LGVS].
9. *Reglamento de la Ley General de Vida Silvestre*, published in the DOF on 30 November 2006, last reform DOF 09-05-2014, at: <https://bit.ly/3O6598L> [LGVS Regulation].
10. Ministry of Industry and Commerce (*Secretaría de Industria y Comercio*) (1975), *Acuerdo que establece veda para la especie totoaba (*Cynoscion macdonaldi*) en aguas del golfo de California, desde la desembocadura del río Colorado hasta el río Fuerte, Sinaloa, en la costa oriental, y del río Colorado a Bahía Concepción, Baja California [Sur], en la costa occidental,* published in the DOF on 1 August 1975, at: <https://bit.ly/4aZ1AL8> [1975 Totoaba Fishing Ban].
11. Sagarpa (2015), *Acuerdo por el que se suspende temporalmente la pesca comercial mediante el uso de redes de enmalle, cimbras y palangres operadas con embarcaciones menores, en el norte del golfo de California,* published in the DOF on 10 April 2015, at: <https://bit.ly/48Zh28b> [2015 Gillnets Order].
12. Sagarpa (2017), *Acuerdo por el que se prohíben artes, sistemas, métodos, técnicas y horarios para la realización de actividades de pesca con embarcaciones menores en aguas marinas de jurisdicción federal de los Estados Unidos Mexicanos en el norte del golfo de California, y se establecen sitios de desembarque, así como el uso de sistemas de monitoreo para dichas embarcaciones*, published in the DOF on 30 June 2017, at: <https://bit.ly/48yGlOX> [2017 Gillnets Order].
13. Sader, Semarnat, and Semar (2020), *Acuerdo por el que se regulan artes, sistemas, métodos, técnicas y horarios para la realización de actividades de pesca con embarcaciones menores y mayores en zonas marinas mexicanas en el norte del golfo de California y se establecen sitios de desembarque, así como el uso de sistemas de monitoreo para tales embarcaciones*, published in the DOF on 24 September 2020, at: <https://bit.ly/48VdSma> [2020 Gillnets Order].
14. SEM-21-002 (*Vaquita Porpoise*), Article 24.27 (2) and (3) Determination (8 September 2021), § 49, at: <https://bit.ly/DET_21-02en>.
15. UCAJ, file no. 112/2014 (4 November 2021), at: <https://bit.ly/49clNfW>.
16. UCAJ, file no. 112/02103 (16 November 2021), at: <https://bit.ly/416nObx>.
17. SEM-21-002 (*Vaquita Porpoise*), USMCA/CUSMA Article 24.27 (4) Response (31 January 2022), at: <https://bit.ly/3Y4Mq2S> [Response].
18. Id. at §§ 4–5.
19. Id. at §§ 17–25.
20. Id. at §§ 26–30.
21. Id. at §§ 33–5.

7. The response makes reference to enforcement measures relating to LGVS Article 55 and Article 56 of the LGVS Regulation,[22] as well as to measures aimed at implementing the 2020 Gillnets Order, including those taken by the Ministry of Agriculture and Rural Development (*Secretaría de Agricultura y Desarrollo Rural*—Sader), the Ministry of the Navy (*Secretaría de Marina*—Marina), and the Office of the Federal Attorney for Environmental Protection (*Procuraduría Federal de Protección al Ambiente*—Profepa).[23] Furthermore, the response includes information on measures to enforce fishing and commercial bans;[24] to implement the government's plan to adopt implementation triggers,[25] and other measures being implemented by Mexico.[26]

8. In particular, the Party maintains that the General Wildlife Branch (*Dirección General de Vida Silvestre*—DGVS) of the Ministry of the Environment and Natural Resources (*Secretaría de Medio Ambiente y Recursos Naturales*—Semarnat) is the authority responsible for the *Convention on International Trade in Endangered Species of Wild Fauna and Flora* (CITES) in Mexico and that the provisions of the LGVS and the LGVS Regulation cited in the submission are implemented in Mexico by means of a procedure called "authorization, permit, or certificate for import, export, or re-export of wildlife specimens, parts, and derivatives" that is registered with the Federal Regulatory Improvement Commission (*Comisión Federal de Mejora Regulatoria*).[27] The Party asserts that it is thereby complying with the CITES provisions relating to permits and certificates. It also states that the DGVS reported that "there is no record of any complaint filed by any supervisory body, ministerial authority, or the Convention itself for failure to enforce Article 55 of the General Wildlife Act or Article 56 of its regulation."[28]

9. The Party states that "the 2017 Gillnets Order was in force as of the effective date of the USMCA/CUSMA" but was repealed "nearly three months later, on 24 September 2020, with the entry into force of the 2020 Gillnets Order"; therefore any inspection and surveillance measures under the responsibility of Semarnat (Profepa), Sader, and Marina that were taken during that period are included in the section of the response concerning measures to implement the 2020 Gillnets Order.[29] The Party contends that the National Fisheries and Aquaculture Commission (*Comisión Nacional de Acuacultura y Pesca*—Conapesca[30] has produced 36 inspection records[31] and carried out 8 administrative proceedings resulting in the destruction and seizure of gillnets.[32] According to Mexico's response, Marina reported that inspection and surveillance measures are being deployed in the Upper Gulf of California (UGC) region to preserve the vaquita and mitigate illicit traffic in totoaba, "with assistance from and in coordination with the responsible authorities, under the applicable laws and decisions."[33] Marina reports that it participated in the enforcement of the 2020 Gillnets Order and that it has performed spot checks on 321 ships, 3,420 small vessels, 1,393 vehicles, 8,280 individuals, and 15 facilities, as well as seizing 14 vessels, detaining 5 persons, and seizing 151 fishing gear items totaling 38,582 meters of fishing nets.

22. Id. at §§ 37–43.
23. Id. at §§ 46–68.
24. Id. at §§ 69–81.
25. Id. at §§ 85–7.
26. Id. at §§ 88–90.
27. Id. at §§ 37–38.
28. Id. at § 39.
29. Id. at § 45. *See* §§ 52–68.
30. Response, Appendix MX-009: Conapesca, file no. UAJ.-13228/290921 (4 October 2021).
31. Response, § 54 and Appendix MX-012: information reserved by the Party.
32. Response, § 53.
33. Response, Appendix MX-018: Semar, file no. SSPC-848/2021 (7 October 2021).

10. Regarding inspection and surveillance measures taken by Profepa in the UGC, Mexico's response refers to 359 inspection measures carried out in 2020 and 293 from January to October 2021. The reported inspection and surveillance measures consisted of maritime and terrestrial patrols as well as loading and landing site inspections, in collaboration with other federal government agencies.[34] The response also includes an appendix with confidential surveillance reports produced by Profepa.[35]

11. On 1 April 2022, the Secretariat notified the CEC Council that submission SEM-21-002 *(Vaquita Porpoise)* warranted the preparation of a factual record, since Mexico's response left open central questions with respect to the effective enforcement of several provisions.[36] Further to its review in light of the response, the Secretariat found that:

> A factual record could provide information on Mexico's efforts to implement strategies and the effectiveness of its measures to enforce LGVS Article 55 and Article 56 of the LGVS Regulation to effectively control illegal traffic in totoaba within the CITES framework. A factual record could present information on the implementation of the totoaba fishing ban in the Gulf of California, the imposition of sanctions, and measures taken to effectively implement the ban. A factual record could also document the principal links, components, and organized groups involved in the illegal fishing, storage, distribution, transportation, and commercialization of the totoaba.
>
> A factual record could report on the implementation of a mechanism to compensate fishermen in the Upper Gulf of California and other incentives for training the inshore fishing sector; totoaba population data and information on its recovery in the Gulf of California; and information on facilities to raise totoaba in captivity for commercial purposes.
>
> The Secretariat finds that a factual record could present information on Mexico's efforts to implement the 2015, 2017, and 2020 Gillnets Orders, including: the permanent ban on gillnet use; the characteristics of *agalleras*, their use, and their effects on marine fauna and biodiversity; the characteristics and effectiveness of devices or monitoring systems for vessels prescribed by the orders; any sanctions imposed, and the launch and landing sites… A factual record could provide information on the number and type of vessels detained by Mexican authorities; the number of vessels present each day; actions to address recidivism; net recovery; ongoing monitoring and surveillance measures and the effectiveness of such measures; and policies and programs encouraging the sustainable use of natural resources in the Upper Gulf of California for the benefit of all persons.
>
> A factual record could also describe the roles played by various government bodies and the development of governance mechanisms to eradicate illicit traffic in totoaba swim bladders and promote the effective protection of the vaquita. Additionally, it could provide information explaining the interaction between the three orders and other legal and environmental policy instruments for the protection of the totoaba and the vaquita.[37]

34. Response, § 65.
35. Response, Appendix MX-019: Profepa, confidential report on inspection measures.
36. SEM-21-002 (*Vaquita Porpoise*), USMCA/CUSMA Article 24.28(1) Notification (1 April 2022), at: <https://bit.ly/4cW5STW> [Notification].
37. Id. at executive summary.

12. On 26 June 2024, the Council members unanimously adopted Council Resolution 24-02 instructing the Secretariat to prepare a factual record with respect to the following provisions:[38]

    - Article 55 of the LGVS, in relation to measures put into place to effectively enforce this Article in the context of illegal traffic of totoaba; Article 56 of the LGVS Regulation, in relation to measures put in place to effectively enforce this article in the context of illegal traffic of totoaba;
    - the 1975 Totoaba Fishing Ban, in relation to the measures taken to effectively enforce the ban, and
    - the 2020 Gillnets Order, in relation to the measures taken to effectively enforce the order.

13. In addition to stating their reasons for so instructing the Secretariat,[39] the Council members asked the Secretariat to prepare an overall work plan to be included in Appendix 5 of the factual record.[40]

14. Pursuant to USMCA/CUSMA Article 24.28(5), the Secretariat delivered the draft factual record for submission SEM-21-002 (*Vaquita Porpoise*) to Council on 10 February 2025. The English and French translations were sent on 21 March 2025.[41] This marked the beginning of a 30-day period for the Parties to make observations on the accuracy of the document, pursuant to USMCA/CUSMA Article 24.28(5).[42]

15. On 12 March 2025 , Mexico submitted comments on the accuracy of the draft factual record. Canada and the United States, for their part, submitted their comments on 23 April and 5 May 2025, respectively. In accordance with USMCA/CUSMA Article 24.28(5), the Secretariat incorporated the relevant observations into the final version of the factual record and submitted it to Council on 7 July 2025.

16. As stipulated by 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 the submission thereof, except where at least two-thirds of Council members instruct it not to do so.

38. SEM-21-002 (*Vaquita Porpoise*), Council Resolution 24-02 (26 June 2024), at: <https://bit.ly/4eW4xyc> [Council Resolution 24-02].
39. Reasons for Council instructions regarding submission SEM-21-002 (*Vaquita Porpoise*) (26 June 2024, at: <https://bit.ly/3XXIDEF>.
40. Overall plan to develop a factual record (5 July 2024), updated 14 January 2025, at: <https://bit.ly/3Wg49Dc> and <https://bit.ly/4kFEXR0>, respectively.
41. CEC Secretariat, Legal Affairs and SEM Unit, English and French translations of factual record for submission SEM-21-002 (*Vaquita Porpoise*) (21 March 2025).
42. The period established by USMCA/CUSMA Article 24.28(5) begins to run as of the date when the Party receives the version of the factual record in its official language.

2. Scope of the factual record

17. In accordance with Council Resolution 24-02, this factual record addresses matters relating to the effective enforcement of the following provisions of Mexican environmental law as they relate to alleged deficiencies in the protection and conservation of the vaquita:

    - Article 55 of the LGVS;
    - Article 56 of the LGVS Regulation;
    - the 1975 Totoaba Fishing Ban, and
    - the 2020 Gillnets Order.

18. Council Resolution 24-02 is included in Appendix 1 of the factual record, while the provisions in question are included in Appendix 3.

19. ECA Article 14 stipulates that "each Party shall cooperate with the Secretariat to provide information relevant for the preparation of a factual record. Requests by the Secretariat for this information shall be in accordance with guidelines established by the Council." On 8 July 2024, the Secretariat sent a request for information, also made available in the public registry of submissions, to the Submitters and the Parties.[43] The next day, it sent the Government of Mexico a request for information (see Appendix 4) concerning various aspects related to its enforcement of the environmental law in question.[44] These included: the exercise of inspection and surveillance powers by the Mexican authorities; the initiation of criminal proceedings in response to illegal totoaba fishing and vaquita bycatch; implementation of medium- and long-term programs for protection and conservation of the totoaba and the vaquita, and the implementation status of measures in the action plan for the protection of the vaquita submitted to CITES by the Government of Mexico (the "CITES Action Plan").[45] After twice notifying the Secretariat of its need for an extension of the period in which to submit the requested information,[46] the Party submitted the information[47] on 18 December 2024, available in the Secretariat's archives.[48]

20. The Secretariat relied on an external 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):[49]

    - Request no. 330024424000601, 15 April 2024, to Profepa[50]

43. SEM Unit, Request for information for preparation of a factual record concerning submission SEM-21-002 (*Vaquita Porpoise*), sent by email (8 July 2024), at: <https://bit.ly/4kPwA5h>.
44. SEM Unit, Request for information for preparation of a factual record concerning submission SEM-21-002 (*Vaquita Porpoise*), to International Affairs Coordinating Unit (*Unidad Coordinadora de Asuntos Internacionales*—UCAI) of Semarnat (9 July 2024), at: <http://cec.org/files/sem/20250113/aaz002.pdf> and <http://cec.org/files/sem/20250113/aaz001.pdf> (appendix). *Cf.* Appendix 4 of this factual record.
45. Semarnat, Semar, and Sader (2023), *Plan de acción de cumplimiento del gobierno de México para prevenir la pesca y el comercio ilegal de totoaba, sus partes y derivados, en protección a la vaquita marina*, at 35, at: <http://cec.org/files/sem/20250113/aaz006.pdf> [CITES Action Plan].
46. UCAI, file nos. UCAI/01972/2024 (26 August 2024) and UCAI/02372/2024 (19 October 2024), at: <http://cec.org/files/sem/20250113/aaz010.pdf> and <http://cec.org/files/sem/20250113/aaz003.pdf>, respectively.
47. UCAI, file no. UCAI/03042/2024 (18 December 2024), at: <http://cec.org/files/sem/20250107/aay004.pdf>.
48. GIS (2024), *Plan de acción de cumplimiento del gobierno de México para prevenir la pesca y el comercio ilegal de totoaba, sus partes y derivados, en protección a la vaquita marina: informe de avances y resultados*, at: <http://cec.org/files/sem/20250107/aay003.pdf> [2024 Progress Report on CITES Action Plan]; CITES Secretariat (2024), *Notification a las Parties*, no. 2023/092, 24 July 2023, at: <http://cec.org/files/sem/20250107/aay002.pdf> ; CITES (2025), *Report of the Trilateral Contact Group on Law Enforcement to Combat the Illegal Trade of Totoaba*, report prepared by Mexico as chair of the Trilateral Contact Group for the 78th meeting of the CITES Standing Committee held 3–8 February 2025, at: <http://cec.org/files/sem/20250107/aay001.pdf>.
49. Requests for information submitted to the PNT can be searched online at <www.plataformadetransparencia.org.mx/>.
50. *Cf.* Profepa, file no. PFPA/1.7/12C.6/1292/2024 (24 May 2024), in response to request for information no. 330024424000601 filed with the PNT, at: <http://cec.org/files/sem/20250131/aba009.zip>.

- Request no. 330020724000053, 15 April 2024, to the Mexican Institute for Sustainable Fisheries and Aquaculture (*Instituto Mexicano de Investigación en Pesca y Acuacultura Sustentables*—IMIPAS; formerly, National Institute of Fisheries and Aquaculture (*Instituto Nacional de Pesca y Acuacultura*—(Inapesca))[51]
- Request no. 330008124000117, 15 April 2024, to Conapesca[52]
- Request no. 330026724001596, 15 April 2024, to Semarnat[53]
- Request no. 330008324000271, 15 April 2024, to the National Protected Natural Areas Commission (*Comisión Nacional de Áreas Naturales Protegidas*—Conanp)[54]
- Request no. 330026624000792, 15 April 2024, to Semar[55]
- Request no. 330024624001136, 15 April 2024, to the Office of the Attorney General of the Republic (*Fiscalía General de la República*—FGR)[56]
- Request no. 330019124000072, 15 April 2024, to the National Institute of Ecology and Climate Change (*Instituto Nacional de Ecología y Cambio Climático*—INECC)[57]
- Request no. 330025424002233, 10 June 2024, to Sader.[58]

21. In addition, the Secretariat requested information and held meetings with officials of Profepa, the National Biodiversity Commission (*Comisión Nacional para el Conocimiento y Uso de la Biodiversidad*—Conabio), Conanp, Conapesca, and IMIPAS, as well as with the Commander of the naval sector of San Felipe, Baja California (BC) and the then Deputy Secretary for Environmental Policy and Planning of Semarnat.[59] The meetings were arranged through the International Affairs Coordinating Unit (*Unidad Coordinadora de Asuntos Internacionales*—UCAI) of Semarnat.

22. On 7 August 2024, the Embassy of Canada to Mexico notified the Ministry of Foreign Relations (*Secretaría de Relaciones Exteriores*) of its intention to send a special mission to Mexico. In its diplomatic note, the Embassy of Canada informed Mexico of a delegation visit to Mexico, requested the corresponding privileges and immunities for CEC officials, and requested assistance to ensure the safety of the special mission members.[60] Acting under the diplomatic note, CEC officials and experts, all in their capacity as special mission members, visited the cities of Ensenada and San Felipe, BC from 9 to 11 September to meet with academics, researchers, and representatives of fisheries and civil society organizations.[61] In addition, they travelled to Mexico City on September 17 and 18 to meet with the Mexican authorities participating in the GIS.

51. *Cf.* IMIPAS, file no. RJL-IMIPAS-DG-UT-079-2024 (17 April 2024), in response to request for information no. 330020724000053 filed with the PNT, at: <http://cec.org/files/sem/20241101/aaw051.pdf>.
52. *Cf.* Conapesca, unnumbered file (9 May 2024), in response to request for information no. 330008124000117 filed with the PNT, at: <http://cec.org/files/sem/20241101/aaw047.pdf>.
53. *Cf.* Semarnat, file no. SEMARNAT/UCVSDHT/UT/1/2024 (27 May 2024), in response to request for information no. 330026724001596 filed with the PNT, at: <http://cec.org/files/sem/20241101/aaw012.docx>.
54. *Cf.* Conanp, file no. DRNOYUGC/359/2024 (14 May 2024), in response to request for information no. 330008324000271 filed with the PNT, at: <http://cec.org/files/sem/20241101/aaw049.pdf>.
55. *Cf.* Semar, file no.1897/24 (14 May 2024), in response to request for information no. 330026624000792 filed with the PNT, at: <http://cec.org/files/sem/20241101/aaw046.pdf>.
56. FGR, file no. FGR/UETAG/001763/2024 (18 April 2024), in response to request for information no. 330024624001136 filed with the PNT, at: <http://cec.org/files/sem/20241101/aaw020.pdf>.
57. INECC, file no. RJJ.400.253/2024 (10 May 2024), in response to request for information no. 330019124000072 filed with the PNT, at: <http://cec.org/files/sem/20250131/aba006.zip>.
58. Sader, unnumbered file (n.d.), in response to request for information no. 330025424002233 filed with the PNT, at: <http://cec.org/files/sem/20241101/aaw050.docx>.
59. See the various requests for meetings with Mexican authorities, at: <http://cec.org/files/sem/20250113/aaz009.zip>.
60. Embassy of Canada, memo no. GR-2203 (7 August 2024).
61. The special mission of the Secretariat was headed by the following CEC officials: Daniel Taillant (Executive Director), Paolo Solano (Director, Legal Affairs and SEM Unit), and Caitlin McCoy (Legal Officer); also participating were Lorenzo Rojas Bracho (marine biologist), Daniel Pech (marine biologist), and Karina Novoa (environmental lawyer).

Photograph 1. Meeting of the special mission of the CEC Secretariat with the GIS

Source: CEC Secretariat, photo taken during the special mission on September 17 and 18 in Mexico City.

23. Pursuant to USMCA/CUSMA Article 24.28(4), the Secretariat considered the information provided by Mexico, as well as relevant technical, scientific, or other information that is publicly available and submitted by interested persons or organizations. It also considered information developed by independent experts and incorporated by the Secretariat for the purposes of this factual record.

2.1 Enforcement context

24. As a preliminary matter, and before addressing the environmental law in question (in accordance with the instructions contained in Council Resolution 24-02), the Secretariat provides an overview of the responsibilities, powers, and duties of the environmental law enforcement authorities in Mexico, and of the provisions relevant to submission SEM-21-002 (*Vaquita Porpoise*) more specifically.

25. Semarnat is the entity responsible for promoting and ensuring the protection, restoration, conservation, and sustainable use of ecosystems, natural resources, and environmental goods and services throughout the nation's territory, with a view to guaranteeing the right to a healthy environment.[62] It has the power to oversee the conservation and protection of species and populations at risk and their natural environments, including the vaquita and the totoaba in the UGC, as well as to take measures for their recovery.[63] In addition, Semarnat is in charge of inspection and surveillance measures related to compliance with classification provisions and protection status of wild flora and fauna in Mexico.[64] Semarnat also oversees scientific research for monitoring of the vaquita population and its habitat under the enforcement plan (for the 2020 Gillnets Order) in the Zero Tolerance Area and the Vaquita Refuge Area ("Z0/VRA Enforcement Plan").[65]

62. Semarnat (n.d.), "¿Qué hacemos? Misión y visión," at: <https://bit.ly/46uoyqu>. *Cf.* Federal Public Administration Act (*Ley Orgánica de la Administración Pública Federal*—LOAPF), Article 32 *bis*.
63. Semar, Semarnat, and Sader (2021), "Lineamientos para la organización y funciones del Grupo Intragubernamental sobre la Sustentabilidad en el Alto Golfo de California," published in the DOF on 15 January 2021, preamble (third and fourth recitals), at: <https://bit.ly/3L0OHVq> [GIS Guidelines].
64. Mexican Official Standard 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, paragraph 10.1, at: <https://bit.ly/46Zg9fd> [NOM-059-Semarnat-2010].
65. 2020 Gillnets Order, fifteenth article, at: <https://bit.ly/48VdSma>.

26. The 2020 Gillnets Order gives the authorities designated in the order (Semarnat, Sader, and Semar) the power to act in accordance with the General Ecological Equilibrium and Environmental Protection Act (*Ley General del Equilibrio Ecológico y la Protección al Ambiente*) to halt any fishing activity in the gillnet ban area, which includes the Zero Tolerance Area (Z0) and the entire Vaquita Refuge Area (VRA);[66] to detain persons engaging in such activities,[67] and to remand offenders to the relevant authorities.[68]

27. Semarnat, through Profepa, is in charge of monitoring compliance of the 2020 Gillnets Order, with the corresponding involvement of Conanp and Sader (through Conapesca), each within the scope of their respective competencies, agencies that must coordinate with Marina to monitor the marine areas delimited and defined in the Order itself, in accordance with the Z0/VRA Enforcement Plan.[69] Likewise, Semarnat is responsible for carrying out relevant environmental surveillance and inspection actions and measures in the northern Gulf of California, and Sader and Conapesca carry out fishing inspection and surveillance actions and measures in that region.[70] Moreover, Semarnat is responsible for working with the governments of Baja California and Sonora to implement mechanisms in support of investment projects that promote economic activities consistent with vaquita protection and recovery, for the benefit of local communities.[71]

28. Semar's (or Marina) duties relate to the coast guard, maritime safety, and maritime traffic control in Mexico's marine areas, coasts, and port facilities. It has the power to carry out marine, aerial, and satellite patrols and surveillance in the Z0 and the VRA.[72] Marina's responsibilities include removal of illegal fishing nets, ghost gear (lost, abandoned or discarded at sea)[73] in the vaquita's distribution area.[74] In addition, it is responsible for preventing all fishing activities in the marine zone delimited by the 2020 Gillnets Order,[75] and for detaining anyone carrying out such activities[76] and remanding them to the relevant authorities.[77]

29. Coordinated by Semar, Conapesca, Profepa, and Conanp, are responsible for the implementation of the Z0/VRA Enforcement Plan,[78] in addition to conducting scheduled maritime inspection and surveillance operations.[79] As a GIS member,[80] Semar takes part in information exchanges relating to traffic of totoaba parts or swim bladders,[81] and is involved in the recovery, elimination, recycling, and/or destruction of illegal fishing gear,[82] among other measures.

66. Id. at Article 17 paragraph I.
67. Id. at Article 17 paragraph II.
68. Id. at Article 17 paragraph III.
69. Id. at Articles 16 and 17. *Cf.* Semar, Semarnat, and Sader (2021), "Plan de aplicación en la Zona de Tolerancia Cero y el Área de Refugio para la Protección de la Vaquita Marina," published in the DOF on 20 January 2021, section 2(a)(1), at: <https://bit.ly/4beWE54> [Z0/VRA Enforcement Plan].
70. Id. at section 2(a)(2).
71. Semarnat (2005), "Programa de protección de la vaquita dentro del área de refugio ubicada en la porción occidental del Alto Golfo de California," published in the DOF on 29 December 2005, paragraph 4.4.2, at: <https://bit.ly/3SZxSOP> [Vaquita Protection Program].
72. 2020 Gillnets Order, preamble (fifth recital) and Articles 13 and 16, at: <https://bit.ly/48VdSma>.
73. *See* Terminology.
74. 2020 Gillnets Order, Article 14, at: <https://bit.ly/48VdSma>.
75. Id. at Article 17 paragraph I.
76. Id. at Article 17 paragraph II.
77. Id. at Article 17 paragraph III.
78. Z0/VRA Enforcement Plan, preamble (penultimate recital), at: <https://bit.ly/4beWE54>.
79. Id. at section 2(b(3).
80. The GIS was created on 15 January 2021 by Semarnat, Sader, and Semar for the purpose of devising, coordinating, supervising, and evaluating measures and strategies for the enforcement of the 2020 Gillnets Order in the Z0 and the VRA. *Cf.* GIS Guidelines, preamble (last recital), at: <https://bit.ly/3L0OHVq>.
81. Id. at section 1(b) and section 3(b).
82. Id. at section 3(e).

30. Profepa is responsible, *inter alia*, for scheduling, arranging, and conducting inspection patrols and operations with the aim of assessing compliance with environmental law, as well as for receiving, addressing, and investigating complaints concerning matters under its jurisdiction.[83] Along with Conapesca, is one of the authorities in charge of supervising enforcement of the 2020 Gillnets Order[84] and may take part in removing illegal and ghost fishing gear in order to protect and conserve the vaquita within its distribution area.[85] Furthermore, Profepa, in coordination with Marina, Conapesca, and Conanp, implements the Z0/VRA Enforcement Plan[86] and takes part in maritime surveillance, inspection, and patrol operations in the Z0 and the VRA.[87]

31. Under the Z0/VRA Enforcement Plan, Profepa is authorized to inspect sites of suspected illegal fishing activities, including totoaba fishing.[88] In addition, it is in charge of addressing citizen complaints and may file criminal complaints with the FGR,[89] among other operational and coordination functions.

32. For its part, Conanp is responsible for the administration of natural areas protected at the federal level;[90] it namely administers conservation and protection policies in such areas,[91] and formulates, promotes, implements, and evaluates projects aimed at the conservation and recovery of priority species and populations.[92] As regards the UGC and the vaquita, Conanp takes part in the implementation of the Z0/VRA Enforcement Plan, in coordination with Marina, Conapesca, and Profepa,[93] by participating in specific collaborative maritime inspection and surveillance activities.[94]

33. Conapesca, a decentralized agency of Sader, is responsible for administering and regulating the nation's fisheries and aquaculture resources; overseeing fishing operations; formulating, coordinating, and implementing the national sustainable fishing policy, and establishing administrative and control methods and measures, among others, applicable to fishing activities for the purpose of fisheries conservation.[95] With respect to the VRA, Conapesca is responsible for establishing or updating the regulations applicable to fishing operations to avoid mortality and possible extinction of the vaquita, as well as detrimental alterations and impacts on its habitat.[96] In addition, it is in charge of coordinating efforts with the Sonora and Baja California state governments, and with the inshore fishing sector, to strengthen the process of individualization of fishing permits and other instruments that provide for responsible and sustainable fishing in the communities of San Felipe, Golfo de Santa Clara, and Puerto Peñasco.[97]

83. Internal Regulation of Semarnat, Article 43 paragraphs I and II (DOF 27/07/2022), at: <https://bit.ly/3X7PudV> [RI-Semarnat].
84. 2020 Gillnets Order, Article 16, at: <https://bit.ly/48VdSma>.
85. Id. at Article 14.
86. Z0/VRA Enforcement Plan, preamble (penultimate recital), at: <https://bit.ly/4beWE54>.
87. Id. at section 3(d)(1) and (6).
88. Id. at section 3(d(2).
89. Id. at section 3(d)(3) and (4).
90. RI-Semarnat, Article 67 paragraph II, at: <https://bit.ly/3X7PudV>.
91. Id. at Article 67 paragraph IV.
92. Id. at Article 67 paragraph VIII.
93. Z0/VRA Enforcement Plan, preamble (penultimate recital), at: <https://bit.ly/4beWE54>.
94. Id. at section 2(b)(3).
95. 2020 Gillnets Order, recital, first paragraph, at: <https://bit.ly/48VdSma>.
96. Vaquita Protection Program, paragraph 4.2.1.1., at: <https://bit.ly/3SZxSOP>.
97. Id.

34. Other vaquita protection and recovery measures for which Conapesca is responsible in the refuge area include promoting and strengthening the program for replacing fishing gear traditionally used by the inshore fleet, and coordinating necessary activities with IMIPAS to evaluate alternative fishing systems that do not pose a risk to the vaquita;[98] remove illegal and ghost fishing gear throughout the vaquita distribution area;[99] administer the registry of authorized gillnets used outside the zone delimited by the 2020 Gillnets Order,[100] and take part in the coordinated implementation of the Z0/VRA Enforcement Plan.[101]

35. As a GIS member, Conapesca participates in information exchanges on measures to prevent violations of the 2020 Gillnets Order;[102] to recover, eliminate, recycle, or destroy illegal, lost, and abandoned fishing gear,[103] and to promote sustainable and responsible fishing, among other aspects.[104]

36. Finally, IMIPAS, a sectorized decentralized public body under Sader, is in charge of directing, coordinating, and guiding fisheries and aquaculture research; developing technological innovations and technology transfers required by the fisheries and aquaculture sector, and creating and updating the National Fisheries Map (*Carta Nacional Pesquera*).[105] This work includes research and development on alternative, vaquita-friendly fishing gear as well as technology transfer and training for the fishermen who will use it.

Photograph 2. Chango ecológico, an alternative fishing net developed by Pesca ABC

Source: CEC Secretariat, photo taken during special mission to San Felipe, BC, 9 to 11 September 2024.

98. Id. at paragraph 4.2.1.5.
99. 2020 Gillnets Order, Article 14, at: <https://bit.ly/48VdSma>.
100. Id. at third transitory article.
101. Id. at fifth transitory article.
102. GIS Guidelines, sections 1(b) and 3(a), at: <https://bit.ly/3L0OHVq>.
103. Id. at section 3(e).
104. Id. at section 3(g).
105. Office of the President of the Republic (2023), "Decreto por el que se reforman diversas disposiciones de la Ley General de Pesca y Acuacultura Sustentables," published in the DOF on 4 December 2023, Articles 4 paragraph XXI, 29, and 32, at: <https://bit.ly/4dOkV2u>.

2.2 Environmental law in question

37. Council Resolution 24-02 instructs the Secretariat to prepare a factual record on the effective enforcement of the following environmental law provisions cited in the submission: LGVS Article 55 and Article 56 of the LGVS Regulation, in relation to measures put in place to effectively enforce those provisions in the context of illegal traffic of totoaba; the 1975 Totoaba Fishing Ban, in relation to measures taken to effectively enforce the ban, and the 2020 Gillnets Order, in relation to measures taken to effectively enforce the Order (hereinafter and taken together, "environmental law in question").[106]

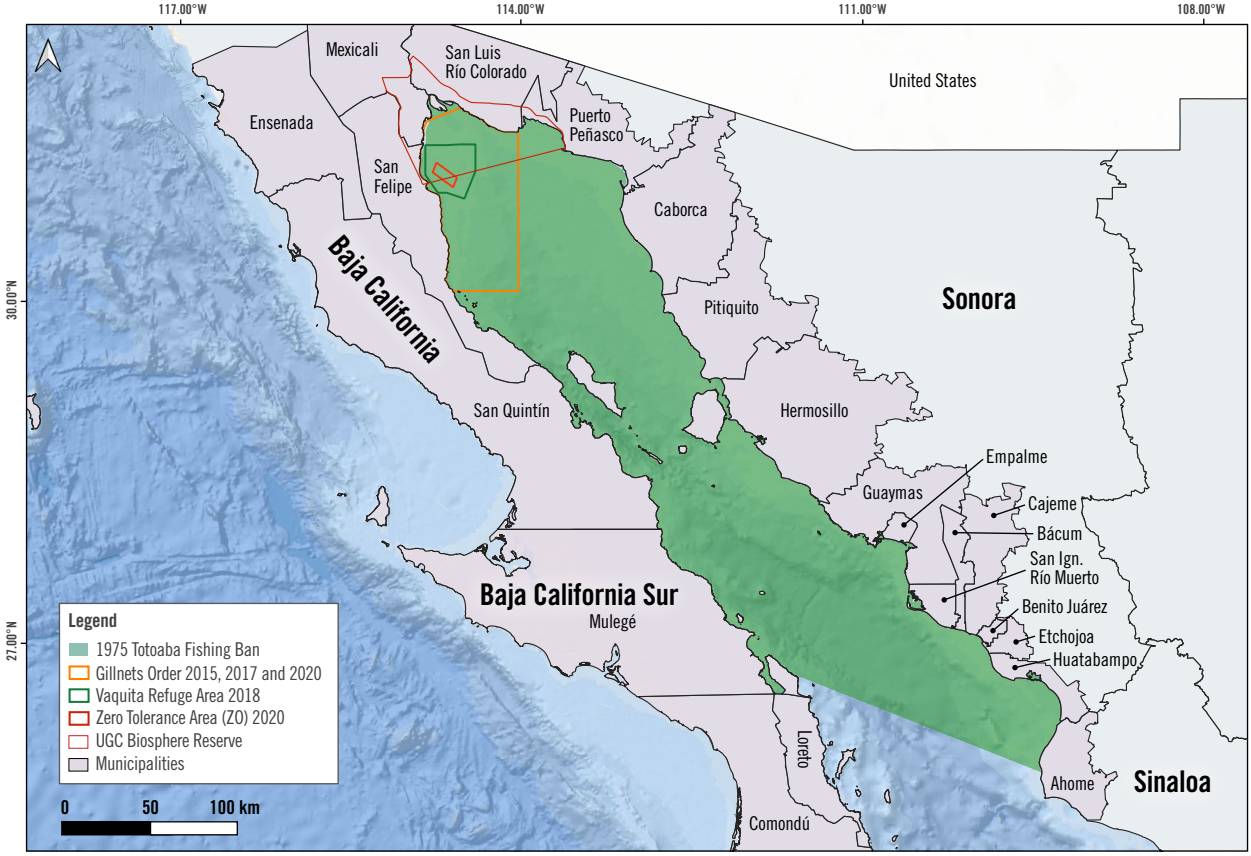
38. **LGVS Article 55** provides that any import, export, or re-export of wildlife specimens, parts, or derivatives included in CITES shall be conducted in accordance with the Convention, the LGVS, and any provisions flowing from them.[107] **Article 56 of the LGVS Regulation** provides that the import, export, and re-export of biological material from species included in the appendices to CITES shall be subject to the provisions of the Convention.[108]

39. In this regard, the legal framework and procedures established in CITES require the Parties to regulate international trade in species included in its Appendices by means of a system of permits and certificates compliant with applicable domestic law. CITES Appendix I includes those species threatened with extinction that are or could be affected by trade, and establishes as a fundamental principle that "trade in specimens of these species must be subject to particularly strict regulation in order not to endanger further their survival and must only be authorized in exceptional circumstances."[109] Thus, the export, re-export, import, and introduction from the sea of specimens of species included in Appendix I are subject to certain requirements for granting the corresponding authorizations and certificates, which includes acts of verification by the CITES Scientific and Management Authorities of the Parties participating in international trade.[110] Totoaba and vaquita are species included in Appendix I, and thus, within the framework of CITES, international trade in both species is subject to strict regulation. Totoaba raised in captivity, including their parts and derivatives, may only be traded in accordance with the registry and applicable procedures under CITES.

40. The **1975 Totoaba Fishing Ban** was adopted in response to the decline in the totoaba population,[111] given the particular vulnerability of the species to commercial and sport fishing as a result of its limited range.[112] The ban recognizes that the data "show a marked decline" in the totoaba population in Golfo de Santa Clara, Puerto Peñasco, and San Felipe as well as in the vicinity of the Colorado River delta, Islas Encantadas, Bahía de Santa Inés, and Bahía San Rafael,[113] a decline that persisted in spite of the measures adopted to limit the catch of this species throughout the year.[114] In addition, the ban notes the possible impact on juveniles of the species, due to both ecological changes and bycatch of juveniles by shrimp boats.[115]

106. Council Resolution 24-02, at 2, at: <https://bit.ly/4eW4xyc>.
107. LGVS Article 55, at: <https://bit.ly/4247xCC>.
108. LGVS Regulation, Article 56, at: <https://bit.ly/3O6598L>.
109. CITES (1973), *Convention on International Trade in Endangered Species of Wild Fauna and Flora*, amended 30 April 1983 [CITES-1973], Article II, paragraph 1, at: <https://bit.ly/43JEU0g>.
110. Id. at Article III.
111. 1975 Totoaba Fishing Ban, preamble (second recital), at: <https://bit.ly/4aZ1AL8>.
112. Id. at preamble (fifth recital).
113. Id. at preamble (second recital).
114. Id. at preamble (third recital).
115. Id. at preamble (seventh recital).

Figure 1. Approximate boundaries of the area established in the 1975 Totoaba Fishing Ban



Source: CEC Secretariat, based on Ministry of Industry and Commerce (*Secretaría de Industria y Comercio*) (1975), *Acuerdo que establece veda para la especie totoaba* (Cynoscion macdonaldi) *en aguas del golfo de California, desde la desembocadura del río Colorado hasta el río Fuerte, Sinaloa, en la costa oriental, y del río Colorado a Bahía Concepción, Baja California [Sur], en la costa occidental*, published in the DOF on 1 August 1975, online at: <https://bit.ly/4aZ1AL8>.

41. Consequently, the 1975 Totoaba Fishing Ban placed a total ban on totoaba fishing in the area from the Colorado River delta to the Fuerte River in Sinaloa, on the east coast, and from the Colorado River to Bahía Concepción, Baja California Sur, on the west coast,[116] subject to penalties.[117] Penalties for non-compliance were provided for in the then Federal Law for the Development of Fisheries (*Ley Federal para el Fomento de Pesca*) and are provided for today in Articles 132 (infractions), 133-146 (administrative penalties) and 147-148 (responsibilities) of the General Sustainable Fisheries and Aquaculture Act (*Ley General de Pesca y Acuacultura Sustentables*). Administrative sanctions include: warnings; fines; administrative arrest; temporary or permanent closure; seizure; and suspension.[118] The ban was to remain in place pending the research results of Inapesca (now IMIPAS).[119] It should be noted that this instrument does not specify the research that was to be conducted, nor the criteria that would have to be met for the ban to be rescinded.

116. *See* Id. at Articles 1 and 2.
117. Id. at Articles 3.
118. LGPAS, Article 133, at: <https://bit.ly/45aZ1oL>.
119. 1975 Totoaba Fishing Ban, preamble, Article 1.

42. The **2020 Gillnets Order** is in force throughout Mexico and mandatory for fishing concession and permit holders as well as for boat captains and masters, motorists, fishermen, and crew members of both small and large vessels, including sport fishermen and sport and recreational fishing service providers with activities inside the delimited area.[120] It places a permanent ban on all actively or passively operated gillnets, , for all fishing activities in the area.[121] Issued jointly by Sader, Semarnat, and Marina and in consultation with relevant technical bodies, the order recognizes the importance of protecting the vaquita, stating that conservation of this species is directly linked to the protection of the totoaba.[122] Additionally, it states that between 2015 and 2018, Mexico resolved to establish various fishing bans in the UGC, some temporary and others permanent.[123] The order stipulates that the nets in question may not be:

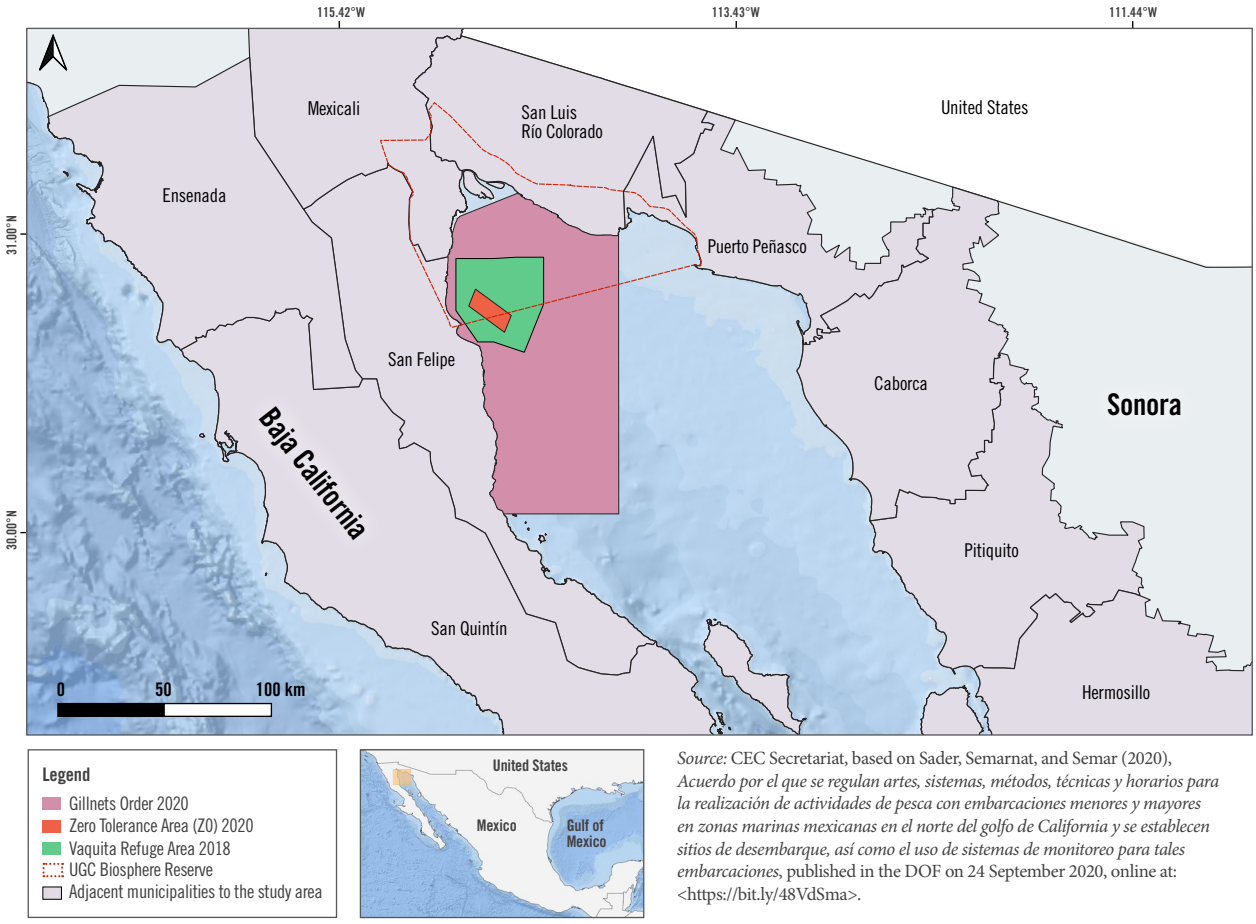
    a. used in any fishing activity, deployed, recovered, or kept aboard or in the possession of a vessel within the delimited area;[124]
    b. carried within the delimited area or within a 10-km perimeter around it, or between any city, village, community, or fishing camp, by any means (including ground or air transportation), nor[125]
    c. manufactured, possessed, sold, or carried in the delimited area or in neighboring settlements, ejidos, communities, or fishing camps.[126]

43. The 2020 Gillnets Order also prohibits all fishing activity and transit through the delimited area between 4:00 p.m. and 5:00 a.m.;[127] provides for the installation of a tamper-proof monitoring system for small vessels (pangas) and larger vessels holding fishing permits and/or concessions for the delimited area,[128] and provides for inspection of all small craft at authorized launch and landing sites.[129] Furthermore, it delimits the Z0, inside of which there is a permanent and total ban on fishing activity by any type of vessel, including sport fishing, shipping, or transit by vessels lacking special written authorization, as well as the use or transportation of any fishing gear.[130] It provides that the fishing gear of any unauthorized vessel travelling through the Z0 will be seized and held by the Mexican authorities.[131]

44. The 2020 Gillnets Order is one of a sequence of instruments banning the use of gillnets and longlines within the vaquita's distribution area. The order mentions the instruments that preceded it, the 2015 Gillnets Order (and instruments extending it) and the 2017 Gillnets Order, which are among the law enforcement mechanisms relevant to an understanding of the measures taken by Mexico.[132]

120. 2020 Gillnets Order, Article 1, at: <https://bit.ly/48VdSma>.
121. Id. at Article 2.
122. Id. at preamble (seventh recital).
123. Id.at preamble (eleventh and nineteenth recitals).
124. Id. at Article 2 paragraph I.
125. Id. at Article 2 paragraph II.
126. Id. at Article 2 paragraph III.
127. Id. at Article 4.
128. Id. at Articles 6–7.
129. Id. at Article 8.
130. Id. at Article 13.
131. Id.
132. Id. at preamble (tenth to fourteenth recitals).

Figure 2. Approximate boundaries of the area established by the 2020 Gillnets Order



Source: CEC Secretariat, based on Sader, Semarnat, and Semar (2020), *Acuerdo por el que se regulan artes, sistemas, métodos, técnicas y horarios para la realización de actividades de pesca con embarcaciones menores y mayores en zonas marinas mexicanas en el norte del golfo de California y se establecen sitios de desembarque, así como el uso de sistemas de monitoreo para tales embarcaciones*, published in the DOF on 24 September 2020, online at: <https://bit.ly/48VdSma>.

45. More recently in 2023, in response to a proposal from the UGC fishing sector, the Mexican Navy (*Armada de México*) began policing an area known as the "extended area" or "the area adjacent" to the Z0, in which diving and trapping are the only permitted fishing methods.[133] Various fishing organizations have called for revision of the 2020 Gillnets Order to reduce the size of the VRA and the area from which gillnets are excluded. No information was obtained as to the existence of a formal proposal; however, representatives of fishing organizations in San Felipe, BC expressed to the Secretariat the need for them to be included in decision-making, for the fishing sector to be compensated, and for allowing transit of vessels through the Z0 to reach other fishing areas.[134] In addition, fishing organizations maintain that it is feasible to implement sport fishing of totoaba in a coordinated fashion, contending that the population of that species allows for its sustainable use.[135] The September 2024 progress report on the CITES Action Plan, sent by the Party to the CITES Secretariat, reports on the actions taken by the Mexican government regarding the use and adoption of alternative fishing gear through Conanp, in coordination with Imipas, including workshops and dialogues with fishing communities, where opinions and proposals were gathered and feasible alternatives and solutions were proposed.[136]

133. Semar (2023), "Autoridades y pescadores analizan acciones para favorecer la protección de la vaquita marina y el desarrollo de la región," press release, 3 October 2023, at: <https://bit.ly/3DQWGDZ>.
134. Federación de Sociedades Cooperativas de Producción Pesquera Ribereña del Puerto de San Felipe and Federación de Cooperativas Ribereñas Andrés Rubio Castro to CEC (21 September 2024), at: <http://cec.org/files/sem/20250131/aba001.pdf>.
135. Interviews with researchers by the Secretariat during the special mission to San Felipe, BC, 9–11 September 2024.
136. 2024 Progress Report on CITES Action Plan at 18, at: <http://cec.org/files/sem/20250107/aay003.pdf>.

Photograph 3. Surveillance by Marina in the Zo

Source: CEC Secretariat, photo taken during special mission to San Felipe, BC, 9 to 11 September 2024.

46. It should be noted that Mexico's implementation of the 2020 Gillnets Order comprised the drafting and publication of the Z0/VRA Enforcement Plan.[137] In addition, an order establishing indicators and implementation triggers for vaquita protection measures (hereinafter, "Implementation Triggers Order") was issued with the aim of contributing to the enforcement of the 2020 Gillnets Order.[138]

137. Z0/VRA Enforcement Plan, at: <https://bit.ly/4beWE54>.

138. Sader, Semarnat, and Semar (2020), *Acuerdo por el que se establecen los indicadores, factores detonantes y acciones predeterminadas, de conformidad con el artículo décimo séptimo del "Acuerdo por el que se regulan artes, sistemas, métodos, técnicas y horarios para la realización de actividades de pesca con embarcaciones menores y mayores en zonas marinas mexicanas en el norte del Golfo de California y se establecen sitios de desembarque, así como el uso de sistemas de monitoreo para tales embarcaciones," publicado el 24 de septiembre de 2020*, published in the DOF on 9 July 2021, at: <https://bit.ly/3HGLgBy> [Implementation Triggers Order].

3. Description of the area of interest and the species in question

3.1 Upper Gulf of California

47. An executive order issued in 1968 establishes as follows the baselines dividing Mexico's marine internal waters from its territorial sea in the Gulf of California: from Cabo San Miguel in Baja California to the southwestern tip of Isla San Esteban, and then from the northeastern tip of the same island to the southern tip of Isla Turner, and from there to Punta Baja in the state of Sonora.[139] This implies that the area of interest is subject to the jurisdiction and sovereignty of Mexico under international law and the Federal Oceans Act (*Ley Federal del Mar*), since it is part of Mexico's marine internal waters (except for a small area between the southwestern end of Isla Tiburón and the southern end of Isla San Esteban that is considered part of the territorial sea).[140] The term "Upper Gulf of California" (UGC) denotes the marine zone delimited on the north by the vertex formed by the coastlines of Baja California and Sonora, and on the southeast by a continuous line running from Punta San Francisquito, BC to Bahía de Kino, Sonora, through the southernmost point of Isla San Lorenzo Island and the southernmost point of San Esteban and Tiburón islands (see Figure 3).[141]

48. The UGC includes marine ecosystems, estuaries, wetlands, tidal flats, and desert areas influenced by the Colorado River delta, and constitutes the largest water system in northwestern Mexico.[142] It is a region of great importance for biodiversity, and its productivity is due to a unique combination of factors, including: coastal wind-driven nutrient upwelling, extreme tidal mixing and turbulence, thermohaline circulation that contributes to the movement of intermediate waters into the mixed layer, confined waves along the coast, and the suspension and redistribution of previously deposited sediments within the water column.[143] The great variety and richness of habitats in the region allows for the coexistence of highly diverse biological communities, from marine invertebrates and migratory birds to marine mammals. There are records of at least 22 species of marine mammals, 149 species of fish, and 5 species of sea turtles, among others. In addition, the UGC is home to endemic species such as the vaquita and the totoaba.[144]

49. The UGC also supports large commercial and subsistence fisheries. Its estuaries, wetlands, and coastal lagoons are renowned as breeding and spawning grounds for at least 73 species living in soft-bottom habitat, which depend on the high turbidity of the water column for feeding and shelter. Moreover, although the physicochemical characteristics of the Colorado River estuary have been altered, it continues to be a spawning area for penaeid shrimp (especially café or brown shrimp and blue shrimp) of great commercial importance,[145] with an annual average harvest estimated at 1,500 to 2,000 tons.[146]

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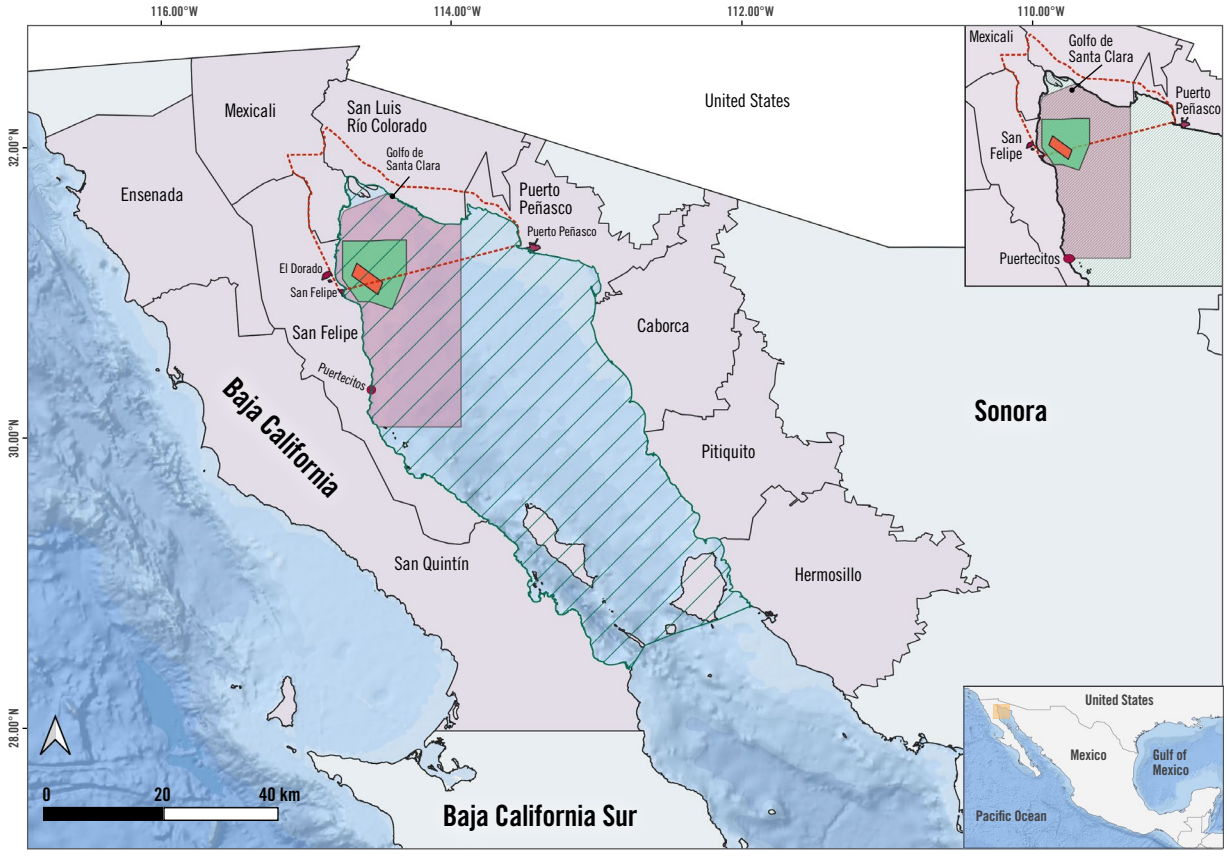
139. Ministry of National Heritage (1968), *Decreto por el que se delimita el mar territorial mexicano en el interior del golfo de California*, published in the DOF on 30 August 1968, at: <https://bit.ly/3PAnriG>.
140. Federal Oceans Act, Articles 34, 35, and 36(I), published in the DOF on 8 January 1986, last reform DOF 09-01-1986, at: <https://bit.ly/425LNZ8>; *United Nations Convention on the Law of the Sea*, Articles 2 and 8, published in the DOF on 1 June 1983, at: <https://bit.ly/4jdCigw>.
141. C. A. Sans Aguilar (2018), *El golfo de California en su totalidad como aguas interiores o territoriales mexicanas*, Semar, Centro de Estudios Superiores Navales, at 10–13, at: <https://bit.ly/3Y55zlD>; A. Sepúlveda Medina (1999), *Dinámica poblacional de los peneidos comerciales en el alto, centro Golfo de California, Topolobampo y costa occidental de la Baja California, en el litoral del Pacífico mexicano*, PhD diss. in marine science, Instituto de Ciencias Marinas y Limnología, Universidad Nacional Autónoma de México, at 11, at: <https://bit.ly/3xJxexJ>; Profepa (2019), "La importancia del Alto Golfo," 21 October 2019, at: <https://bit.ly/3WkaduJ>.
142. Profepa (2018), *El Alto Golfo de California: los esfuerzos para la protección de la vaquita marina y la totoaba*, at 11, at: <https://bit.ly/4d3jDAN>.
143. R. C. Brusca et al. (2017), "Colorado River flow and biological productivity in the Northern Gulf of California, Mexico", *Earth-Science Reviews*, 164:1-30, at: <https://bit.ly/48byGqn>.
144. Conanp (2007), *Programa de conservación y manejo: Reserva de la Biosfera Alto Golfo de California y Delta del Río Colorado*, at 39–44, at: <https://bit.ly/3Ln3TfC>; R. C. Brusca et al. (2005), "Macrofaunal diversity in the Gulf of California," in J. L. E. Cartron, G. Ceballos, and R. S. Felger (comps.), *Biodiversity, Ecosystems, and Conservation in Northern Mexico* (New York: Oxford University Press), 179–203, at: <https://bit.ly/3X95f4a>.
145. C. Valdez Muñoz (2010), "Distribución y abundancia de juveniles de totoaba (*Totoaba macdonaldi*: Gilbert,1891) en relación con las variables ambientales en el Alto Golfo de California y delta del río Colorado," PhD diss., Centro de Investigaciones Biológicas del Noroeste (Cibnor), La Paz, Baja California Sur, at: <https://bit.ly/4d7KzPo>.
146. Profepa (2018), *supra* at 36, at: <https://bit.ly/4d3jDAN>.

50. Anthropogenic threats affecting the area have led to the classification of two endemic species (one fish, the totoaba, and one marine mammal, the vaquita) as "endangered" under Mexican Official Standard NOM-059-Semarnat-2010 (NOM-059).[147]

51. A marine and terrestrial zone in the northern UGC measuring 934,756.25 hectares, 60 percent of which constitutes a marine environment,[148] was declared a protected natural area named the Upper Gulf of California and Colorado River Delta Biosphere Reserve ("UGC Biosphere Reserve") in 1993 (see Figure 3 *supra*).[149]

Figure 3. Upper Gulf of California, Upper Gulf of California and Colorado River Delta Biosphere Reserve and adjacent areas



Source: Produced by the CEC Secretariat based on M. Cariño and M. Monteforte (2021), "Presentación general de la obra," in M. Cariño and J. M. García Redondo (comps.), *Nuestro mar: historia ambiental del golfo de California (siglos XVI-XXI)*, vol. 1 (Granada, Spain: Editorial Comares), at xix, at: <https://bit.ly/46FPV2j>; C. A. Sans Aguilar (2018), *El golfo de California en su totalidad como aguas interiores o territoriales mexicanas*, Marina, Centro de Estudios Superiores Navales, at 10–13, at: <https://bit.ly/3Y55zlD>; Sagarpa (2015), *Acuerdo por el que se suspende temporalmente la pesca comercial mediante el uso de redes de enmalle, cimbras y palangres operadas con embarcaciones menores, en el norte del golfo de California*, published in the DOF on 10 April 2015, at: <https://bit.ly/48Zh28b>; Semarnat (2018), *Acuerdo por el que se modifican diversas disposiciones del diverso por el que se establece el área de Refugio para la Protección de la Vaquita (*Phocoena sinus), published in the DOF on 20 April 2018, at: <https://bit.ly/4de85KS>; Sader, Semarnat, and Semar (2020), *Acuerdo por el que se regulan artes, sistemas, métodos, técnicas y horarios para la realización de actividades de pesca con embarcaciones menores y mayores en zonas marinas mexicanas en el norte del golfo de California y se establecen sitios de desembarque, así como el uso de sistemas de monitoreo para tales embarcaciones*, published in the DOF on 24 September 2020, at: <https://bit.ly/48VdSma>.

147. Id. at 14–19. *Cf.* 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*, at: <https://bit.ly/46Zg9fd>.

148. Conanp (2007), *supra* at 15–16 and 89, at: <https://bit.ly/3Ln3TfC>.

149. Office of the President of the Republic (1993), *Decreto por el que se declara área natural protegida con el carácter de Reserva de la Biosfera, la región conocida como Alto Golfo de California y Delta del Río Colorado, ubicada en aguas del golfo de California y los municipios de Mexicali, Baja California, y de Puerto Peñasco y San Luis Río Colorado, Sonora*, published in the DOF on 10 June 1993, at: <https://bit.ly/3y7tsOV> [UGC Biosphere Reserve Order].

3.2 Vaquita (*Phocoena sinus*)

52. The cetacean species *Phocoena sinus*, commonly known as the vaquita or vaquita porpoise, is an endemic species of the UGC that was first described in 1958 on the basis of skulls found on the coast near San Felipe, BC. The first complete vaquita specimens were found caught in totoaba gillnets many years later, in 1985, during a study conducted to estimate the totoaba population.[150]

53. The currently accepted taxonomic classification[151] of the vaquita is as follows:

Kingdom:	Animalia
Phylum or division:	Chordata
Class:	Mammalia
Order:	Cetartiodactyla
Infraorder:	Cetacea
Family:	Phocoenidae
Genus:	Phocoena
Species:	*Phocoena sinus*

54. The only member of the family Phocoenidae (true porpoises) in Mexico (i.e., the sole Mexican porpoise), the vaquita is also the world's smallest cetacean.[152] The mean total length of neonates is about 70 cm; adult specimens range up to 140 cm for males and 150 cm for females, with a maximum weight of 55 kg.[153]

55. The most striking characteristics of the vaquita are the large black patches around the eyes and mouth which contrast markedly with the surrounding pale gray coloration, the darker gray of the dorsal side and the almost white of the ventral side (see Figure 4). The back of the forehead slopes inward towards the nasal orifice or spiracle on top of the head. The vaquita's head is rounded, and its beak is short, not prominent. Vaquitas are generally robust organisms with a mean maximum circumference of approximately 70 percent of total length, measured just in front of the anterior insertion of the dorsal fin. Nearly triangular, slightly curved, and proportionately taller than in other porpoises, the dorsal fin is another striking feature of the species, while the pectoral fins are notably long and pointed.[154]

56. Sexual maturity in the vaquita is estimated to occur between three and six years of age. Once the age of sexual maturity is reached, females can only calve once every two years or more, probably during the spring. Nevertheless, data gathered in recent studies suggest the probability of annual breeding in *Phocoena sinus*, a hypothesis supported by an analysis of sightings and necropsies of vaquita specimens.[155] The gestation period is 10 to 11 months, and lactation probably lasts eight months. It should be noted that there are examples of other cetacean species that also reproduce every two or three years and yet have shown successful recoveries after the main cause of the reduction in population has been eliminated.[156] Individuals of the species can live up to an estimated 20 years.[157]

150. R. L. Brownell et al. (1987), "External morphology and pigmentation of the vaquita, *Phocoena sinus* (Cetacea: Mammalia)," *Marine Mammal Science* 3(1): 22–30, at: <https://bit.ly/3S2UzRT>.

151. *Cf.* World Register of Marine Species (2024), "*Phocoena sinus* (Norris & McFarland, 1958)," at: <https://bit.ly/3WIYAw9>; W. F. Perrin (2021), World Cetacea Database, *Phocoena sinus* (Norris & McFarland, 1958), at: <https://bit.ly/4ckFPoE>.

152. Conanp-Procer (2015), "Vaquita marina, marsopa del golfo de California, cochito," data sheet, at: <https://bit.ly/44ZoUWE>; Conanp and Conabio (2010), "Vaquita marina," at 1, at: <https://bit.ly/3zxJ5PH>.

153. R. L. Brownell et al. (1987), *supra* at 22–30, at: <https://bit.ly/3S2UzRT>.

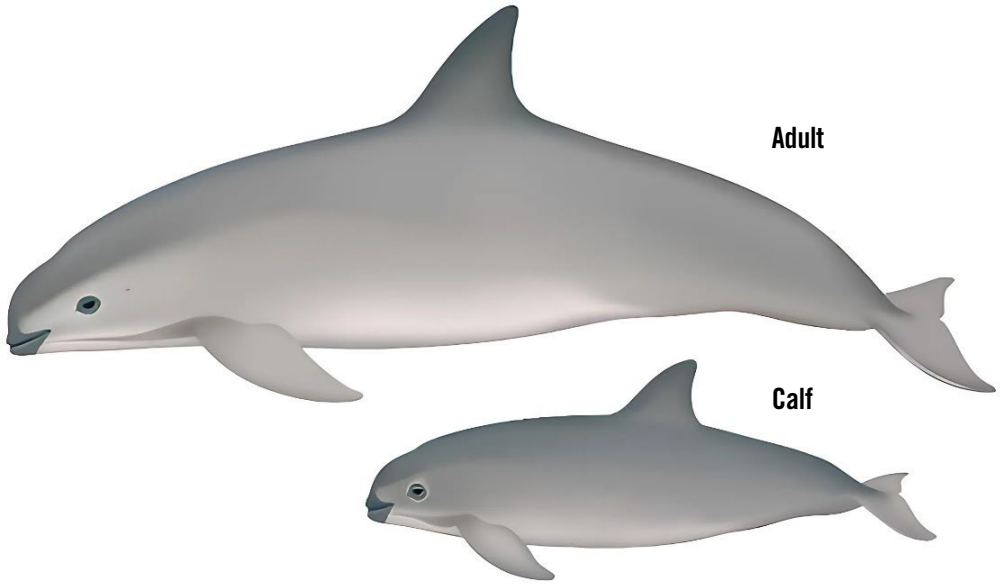
154. O. Vidal, R. L. Brownell Jr, and L. T. Findley (1999), "Vaquita (*Phocoena sinus*) – Norris and McFarland, 1958," in S. H. Ridgway and R. J. Harrison, eds, *Handbook of Marine Mammals*, vol. 6, *The Second Book of Dolphins and the Porpoises* (New York: Academic Press), at 360–1, at: <https://bit.ly/3WVfs4l>. *See also* Conabio (2010), *supra* at 1, at: <https://bit.ly/3zxJ5PH>; Conanp-Procer (2015), *supra* at 1, at: <https://bit.ly/44ZoUWE>.

155. B. L. Taylor et al. (2019), "Likely annual calving in the vaquita, *Phocoena sinus*: A new hope?," *Marine Mammal Science* 35(4): 1603–12, at: <https://bit.ly/4dowGfM>.

156. K. A. Forney et al. (2021), "A multidecadal Bayesian trend analysis of harbor porpoise (*Phocoena phocoena*) populations off California relative to past fishery bycatch", *Marina Mammal Science*, 37(2), at: <https://bit.ly/4jfV5H1>; A. Englund, S. Ingram and E. Rogan (2008), *An updated population status report for bottlenose dolphins using the Lower River Shannon SAC in 2008*, Final Report to the National Parks and Wildlife Service, University College Cork, at: <https://bit.ly/45pq6EO>.

157. A. A. Hohn et al. (1996), "Life history of the vaquita, *Phocoena sinus* (Phocoenidae, Cetacea)," *Journal of Zoology* 239(2): 235–51, at: <https://bit.ly/4cRMlEF>.

Figure 4. General appearance and distinctive morphological features of the vaquita (*Phocoena sinus*)



Source: U. Gorter (2023), "Cetaceans: Dolphins and Porpoises (small toothed whales)," in U. Gorter, *Natural History Illustration*, at: <https://bit.ly/40gk5X7>.

57. As to feeding, the vaquita can be classified as a versatile, non-selective predator of at least 21 species of small fish, squid, and crustaceans found in shallow water and in benthic and demersal habitats.[158] Analysis of stomach contents has shown that the vaquita's diet includes demersal fish and cephalopods and is largely composed of 11 species of fish, two squid species, and three crustaceans.[159]

58. The vaquita lives in warm shallow (11–50 m) waters with generally reduced visibility (0.9–12 m) and at relatively short distances from the coast (11–25 km).[160] Sightings in 1992 and 1993 indicated that the species was solitary or moved in groups of two or three.[161]

59. The vaquita is an evasive species that does not approach boats, which combined with its small size, make sightings of the species rare.[162] This explains why the vaquita is one of the world's most poorly known cetaceans.[163] It should be specified that the vaquita's evasive behavior is a natural strategy for its survival and not an intrinsic weakness or obstacle for its recovery, especially considering other species with similar behavior that have achieved recovery when human pressures are eliminated.[164] As mentioned in the CITES Action Plan report, recovery efforts have been immersed in a context associated with the inherent fragility of the species, among other factors. Nevertheless, knowledge of the vaquita has advanced significantly in recent decades, improving our understanding of its distribution, abundance, biology, and ecology, even though aspects such as its social behavior remain poorly known.

158. L. T. Findley and J. M. Nava (1994), *Food Habits of the Vaquita (*Phocoena sinus*)*, final report, submitted to Conservation International, at 43, at: <http://cec.org/files/sem/20241101/aaw019.pdf>.
159. H. Pérez Cortés Moreno, G. K. Silber, and B. Villa Ramírez (1996), "Contribución al conocimiento de la alimentación de la vaquita marina (*Phocoena sinus*)," *Ciencia Pesquera* (Instituto Nacional de Pesca – Secretaría de Medio Ambiente, Recursos Naturales y Pesca), no. 13, at: <https://bit.ly/4d2ieub>.
160. Conabio (2010), *supra* at 2, at: <https://bit.ly/3zxJ5PH>.
161 T. Gerrodette et al. (1995), "Distribution of the vaquita, *Phocoena sinus*, based on sightings from systematic surveys," *Report of the International Whaling Commission*, special issue 16, table 2, p. 278, at: <https://bit.ly/3C7k0wV>.
162. Conabio (2010), *supra* at 2, at: <https://bit.ly/3zxJ5PH>.
163. Semarnat (2008), *Programa de acción para la conservación de la especie: vaquita (*Phocoena sinus*)*, at 27, at: <https://bit.ly/3zO9Sr5> [PACE-Vaquita].
164 For example, the Iberian lynx (*Lynx pardinus*), the Arctic fox (*Vulpes lagopus*) in Norway, the Mediterranean monk seal (*Monachus monachus*), and the sea otter (*Enhydra lutris*). Expert opinion of the CEC Secretariat (May 2025).

60. Acoustic and visual methods have been used to map the vaquita's current distribution in the UGC and to estimate its abundance, analyze population trends, and obtain key information on its patterns of activity and preferred habitats. Indeed, the vaquita is now one of the world's most highly monitored cetaceans.

61. Like other toothed cetaceans, the vaquita uses echolocation (the emitting and receiving of sound waves) to recognize its environment, navigate, seek food, and identify predators.[165] This orientation and search mechanism is vital in the vaquita's habitat of turbid or low-visibility waters.[166] The high-frequency, narrowband acoustic pulses emitted by the vaquita correspond to a bandwidth of 11–28 kHz, with dominant frequencies oscillating between 128 and 139 kHz (ultrasound). These pulses are short (79–193 μs) and sound like clicks or snaps; they are emitted in groups of 3 to 57 at intervals of 0.019–0.144 seconds apart.[167] This is especially relevant because the sounds emitted by the vaquita are different from those of other toothed whales, which generally produce sound over broader bands or lower frequencies. Accurate knowledge of the characteristics of these pulses has thus made it possible to detect the presence of individuals with considerable precision, using acoustic methods that can distinguish them from other sources of biological noise.[168] This in turn has given rise to multiple abundance and population estimates for the species (Section 4 *infra* presents more detailed information on acoustic monitoring of the vaquita as a tool for estimating its abundance and population size).

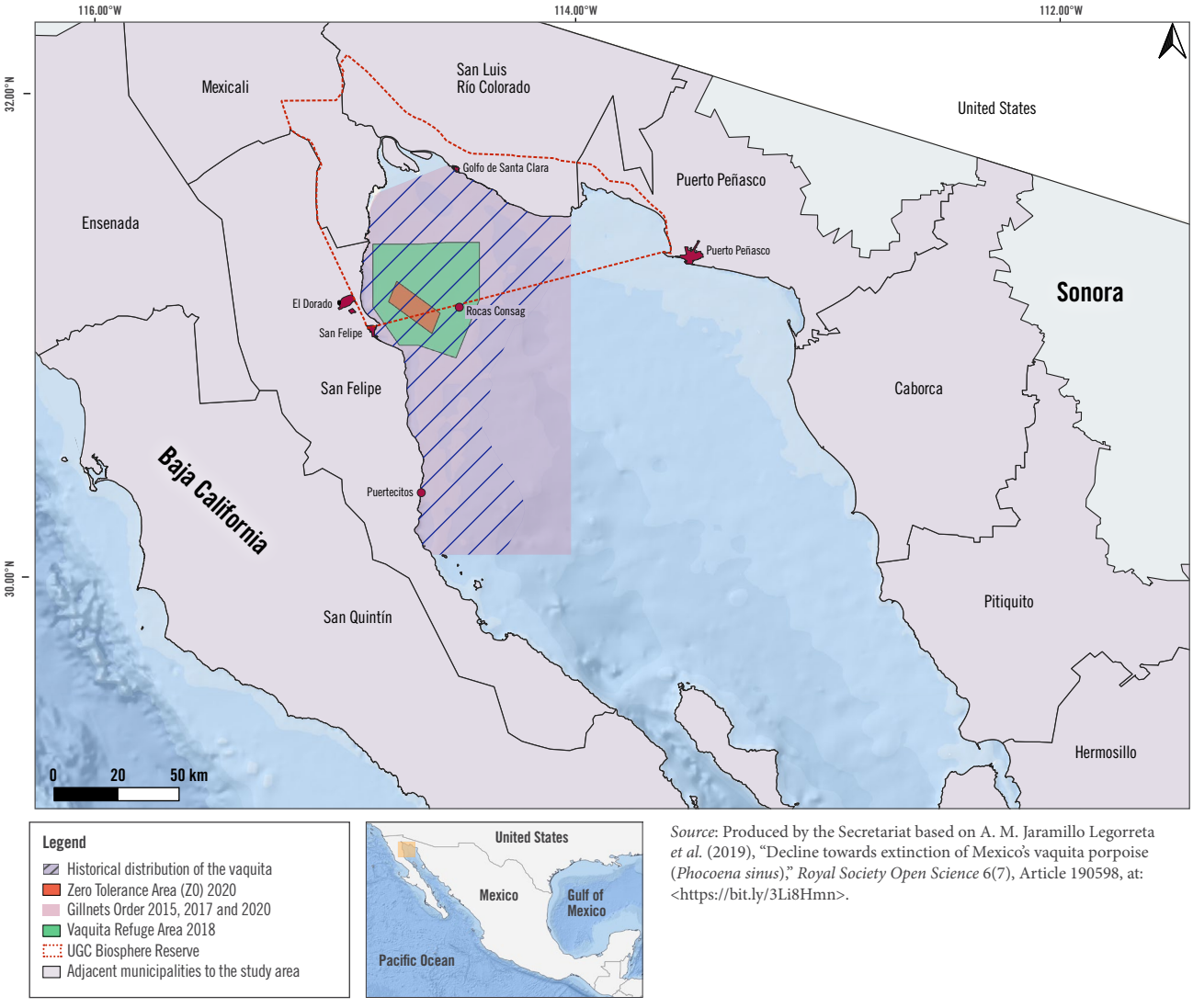
62. In 1997, the vaquita population stood at an estimated 567 individuals; a study in 2008, eleven years later, estimated the population at approximately 245 individuals.[169] Since then, the population has exhibited a constant and marked decline, as indicated by the many studies conducted to date (see section 4 and Table 1).

63. As stated earlier, the vaquita is an endemic species of very restricted distribution, limited to the UGC, mainly north of 30°45'N and west of 114°20'W. Indeed, the range of the vaquita, Mexico's only endemic marine mammal,[170] is one of the most limited.[171] For many years after the initial description of the vaquita, the limits of its distribution were not precisely known, although the absence of sightings or remains elsewhere indicated a distribution limited to the northern Gulf of California.[172] Historical records of studies conducted from the 1990s onward suggest that the vaquita ranged throughout the year mostly north of an imaginary line drawn between Puerto Peñasco, Sonora and Puertecitos, BC, with most of the records found at the far west of the area, offshore from San Felipe and Roca Consag, BC, and also off the coast of Sonora, south of Golfo de Santa Clara (see Figure 5).[173] However, according to a 2008 report,[174] the current area of distribution of the vaquita has been reduced to approximately 1,400 km^2. The few surviving vaquitas now appear to be concentrated in an area of about 24 x 12 km (288 km^2) off the coast of San Felipe, BC.[175]

165. Conabio (2010), *supra* at 1, at: <https://bit.ly/3zxJ5PH>.
166. PACE-Vaquita at 34, at: <https://bit.ly/3zO9Sr5>.
167. T. Gerrodette et al. (2011), "A combined visual and acoustic estimate of 2008 abundance, and change in abundance since 1997, for the vaquita (*Phocoena sinus*)," *Marine Mammal Science* 27(2): E79–E100, at: <https://bit.ly/3zyIUUp>.
168. Id.
169. Id.
170. Id.
171. Conanp-Procer (2015), *supra* at 2, at: <https://bit.ly/44ZoUWE>.
172. CEC (2008), *North American Conservation Action Plan-Vaquita*, Commission for Environmental Cooperation, Montreal, Canada, at 10, at: <https://bit.ly/4cFbItc> [NACAP-Vaquita].
173. PACE-Vaquita at 29, at: <https://bit.ly/3zO9Sr5>.
174. NACAP-Vaquita, data sheet, at: <https://bit.ly/4cFbItc>.
175. L. Rojas Bracho et al. (2022), "More vaquita porpoises survive than expected," *Endangered Species Research* 48: 225–34, at: <https://bit.ly/40czR5k>; L. Rojas Bracho and B. Taylor, (2021), "Vaquita," IUCN Species Survival Commission, Cetacean Specialist Group, August 2021, at: <https://bit.ly/4gPKiCY>; L. Rojas Bracho, R. R. Reeves, and A. M. Jaramillo Legorreta (2006), "Conservation of the vaquita (*Phocoena sinus*)," *Mammal Review* 36(3): 179–216, at: <https://bit.ly/3Wjl9Zq>; T. A. Jefferson et al. (2009), "Photo-identification of the vaquita (*Phocoena sinus*): the world's most endangered cetacean," *Latin American Journal of Aquatic Mammals* 7(1–2): 53–6, at: <https://bit.ly/40gjX9P>.

64. It must be added that in addition to being one of the world's most endangered species, the vaquita "is a naturally rare species, with low abundance, extremely limited distribution and little genetic variability."[176] It is believed that the ancestors of the vaquita moved north over the equator more than 2.5 million years ago, during a Pleistocene cooling period; for this reason, it is considered a relict species. During its migration towards the northern Gulf of California, the vaquita underwent an extreme loss of genomic variability; this condition is added to the extensive bycatch and the complex socio-environmental situation of the UGC.[177] Further to sequencing of the genome of a specimen caught in 2017, it has been suggested that the ancestral vaquitas went through a major population bottleneck in the past, which could explain

Figure 5. Historical distribution of the vaquita



Source: Produced by the Secretariat based on A. M. Jaramillo Legorreta *et al.* (2019), "Decline towards extinction of Mexico's vaquita porpoise (*Phocoena sinus*)," *Royal Society Open Science* 6(7), Article 190598, at: <https://bit.ly/3Li8Hmn>.

176. NACAP-Vaquita, at 59, at: <https://bit.ly/4cFbItc>.
177. L. Rojas Bracho, R. R. Reeves, and A. M. Jaramillo Legorreta (2006), *supra* at: <https://bit.ly/3Wjl9Zq>.

why the remaining individuals continue to enjoy good health despite their tiny population.[178] Advances in knowledge of the population genetics of *Phocoena sinus* have shown that despite its low genetic variability, the species has the potential to recover if gillnet bycatch is eliminated.[179] Consequently, it has been established that "the low genetic diversity of vaquitas results from this natural rarity, and examination of the genome suggests purging of deleterious genes has reduced the potential negative effects of inbreeding."[180] Therefore, entanglement constitutes—according to experts and literature consulted by the Secretariat—the most significant threat to the species. In light of the best available scientific evidence, other risk factors (such as pollution and reduced flow of the Colorado River) are currently irrelevant as threats to vaquita recovery. Experts agree that the undisputed priority must be to immediately and definitively eliminate incidental mortality in their habitat.[181]

3.3 Totoaba (*Totoaba macdonaldi*)

65. The totoaba (*Totoaba macdonaldi*) is a sciaenid fish (family Sciaenidae) whose relatives are commonly known as corvinas or curvinas. It is the only member of the genus *Totoaba* and is endemic to the northern Sea of Cortez or Gulf of California,[182] where it exhibits a pattern of ontogenetic migration. Historically, it ranged from the Colorado River delta, one of the most diverse marine habitats in the world, to Bahía Concepción, Baja California Sur, on the west coast, and up to the mouth of the Fuerte River, Sinaloa, on the east coast.[183]

66. The accepted taxonomic classification[184] of the totoaba is as follows:

Kingdom:	Animalia
Phylum or division:	Chordata
Class:	Teleostei
Order:	Perciformes
Family:	Sciaenidae
Genus:	*Totoaba* (Villamar, 1980)
Species:	*Totoaba macdonaldi* (Gilbert, 1890)

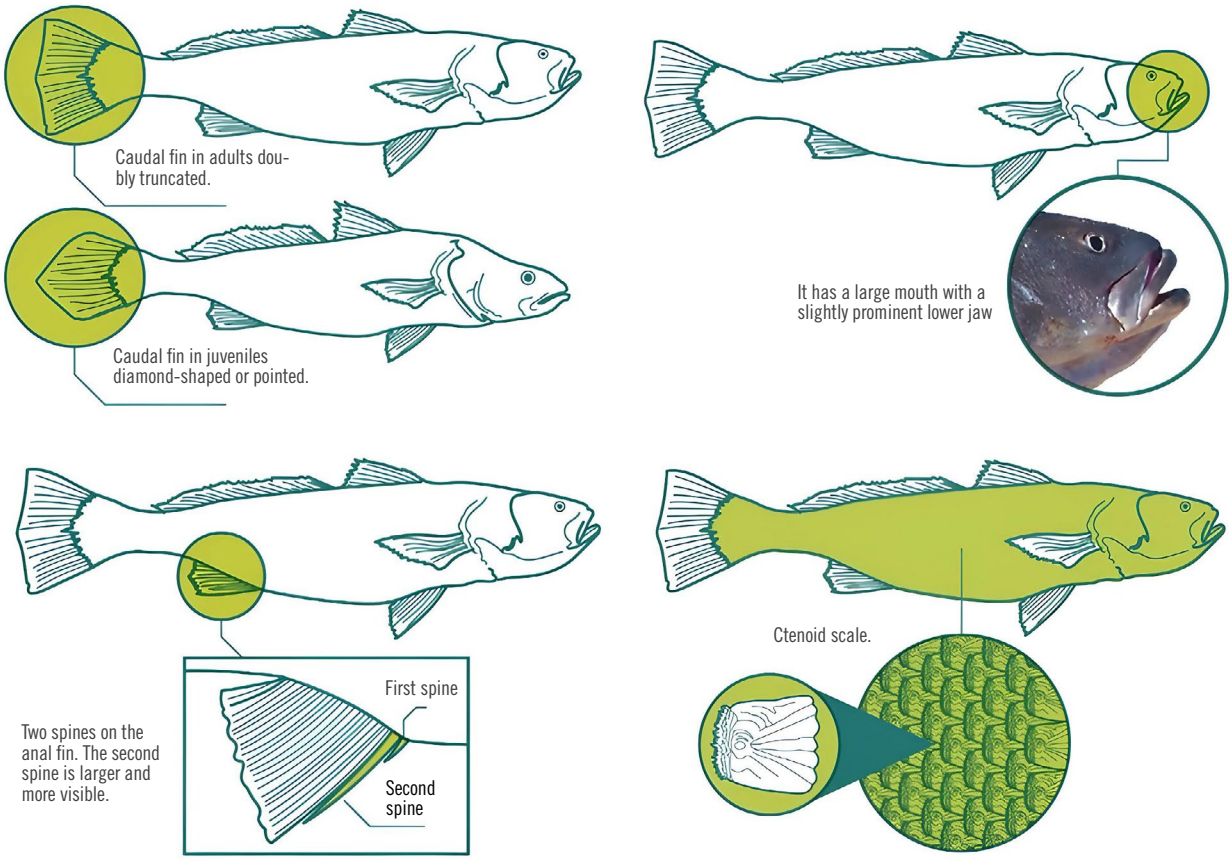
67. The largest species of the family and also the largest fish in the UGC, the totoaba can reach lengths of up to 2 m and weights of over 100 kg,[185] although the most recent records suggest a mean length for adult specimens of 135–158 cm.[186] These dimensions are very similar to the average size of the vaquita (140–150 cm), making the latter particularly susceptible to being tangled in the gillnets used to catch totoaba.[187]

178. P. A. Morin et al. (2021), "Reference genome and demographic history of the most endangered marine mammal, the vaquita," *Molecular Ecology Resources* 21(4): 1008–20, at: <https://bit.ly/3WXpTV1>.
179. A. Robinson et al. (2022), "The critically endangered vaquita is not doomed to extinction by inbreeding depression," *Science* 376(6593): 635–9, at: <https://bit.ly/4cICe4Q>; C. C. Kyriazis et al. (2023), "Models based on best-available information support a low inbreeding load and potential for recovery in the vaquita," *Heredity* 130: 183–7, at: <https://bit.ly/4gS0u6C>.
180. L. Rojas Bracho et al. (2022), *supra* at: <https://bit.ly/40czR5k>.
181. Id. Véanse también: P. A. Morin et al. (2021), *supra* at: <https://bit.ly/3WXpTV1> ; J. A. Robinson et al. (2022), *supra* at: <https://bit.ly/4cICe4Q>.
182. Profepa (2019), "Pez totoaba: el pez más grande del Alto Golfo", Procuraduría Federal de Protección al Ambiente, 11 November 2019, at: <https://bit.ly/46oXzxI>.
183. CITES (2001), *Review of CITES Appendixes based on Resolution Conf. 9.24 (Rev.)* – Totoaba macdonaldi *(Mexican Seabass)*, report prepared by the Mexican scientific authority for CITES, at 1, at: <https://bit.ly/3ZQjSJV>. *Cf.* F. Valenzuela Quiñonez (2014), *Genética y dinámica poblacional de la totoaba (*Totoaba macdonaldi*, Gilbert, 1991) en el golfo de California*, PhD diss. in marine biology, Cibnor, at 90, at: <https://bit.ly/3ZQhAdK>.
184. Integrated Taxonomic Information System (2024), "*Totoaba macdonaldi* (Gilbert, 1890)," at: <https://bit.ly/3yFAlab>.
185. Profepa (2019), "Pez totoaba: el pez más grande del Alto Golfo," at: <https://bit.ly/46oXzxI>; D. Lercari and E. A. Chávez (2007), "Possible causes related to historic stock depletion of the totoaba, *Totoaba macdonaldi* (Perciformes: Sciaenidae), endemic to the Gulf of California," *Science Direct* 86(2–3): 136–42, at: <https://bit.ly/4cVXtj7>.
186. D. Guevara Aguirre and M. A. Cisneros Mata (2020), "La totoaba: revisión histórica," in M. A. Cisneros Mata (ed.), *Evaluación de la población de* Totoaba macdonaldi (Mexico: Inapesca), at 20, at: <https://bit.ly/3SK94u4>.
187. NOAA Fisheries (2024), "Vaquita,", National Marine Fisheries Service-National Oceanic and Atmospheric Administration 22 November 2024 update, at: <https://bit.ly/4cLEzLo>.

68. The totoaba has an elongated, compressed body; a large, pointed mouth; a prominent lower jaw; narrow bands of teeth, including pointed teeth at the tip of the jaw, and a caudal fin with a central point (see Figure 6).[188] It is a long-lived fish with a lifespan of 25–50 years; it reaches sexual maturity around the age of six or seven, when adult females migrate to the Colorado River delta to spawn, normally between March and May.[189] Juveniles or young fish (up to two years of age) use this estuary as their feeding and growing habitat.[190]

69. Totoabas emit a characteristic sound that has earned them the nickname "snorers."[191] Contrary to popular belief, the sound is not produced by the swim bladder, but rather by superfast sonic muscles on either side of the bladder.[192] The totoaba is coveted for its swim bladder, which has made the species a target for illicit fishing and trade in Asia, leading to its overexploitation[193] (for more details on this aspect, see section 5.1.1 *infra*).

Figure 6. General appearance and distinctive characteristics of the totoaba (*Totoaba macdonaldi*)



Source: DataMares (2025), "Totoaba (*Totoaba macdonaldi*)", Mexico, at: <https://bit.ly/4cZnwX9>.

188. Profepa (2019), "Pez totoaba: el pez más grande del Alto Golfo," at: <https://bit.ly/46oXzxI>.
189. Id.
190. D. Lercari and E. A. Chávez (2007), *supra* at: <https://bit.ly/4cVXtj7>; DataMares (2025), "Totoaba (*Totoaba macdonaldi*)," at: <https://bit.ly/4cZnwX9>.
191. Profepa (2019), "Pez totoaba: el pez más grande del Alto Golfo," at: <https://bit.ly/46oXzxI>; DataMares (2025), *supra* at: <https://bit.ly/4cZnwX9>.
192. J. Ramcharitar et al. (2006), "Bioacoustics of fishes of the family Sciaenidae (croakers and drums)," *Transactions of the American Fisheries Society* 135(5): 1409–31, at: <https://bit.ly/4cIlsBS>.
193. Profepa (2019), "Pez totoaba: el pez más grande del Alto Golfo," at: <https://bit.ly/46oXzxI>.

4. Abundance and monitoring of the vaquita

70. Because of the vaquita's small size, discreet behavior (it avoids moving vessels), irregular swimming and surfacing patterns, and relatively long immersion times in the turbid and shallow waters of the UGC, opportunities to observe this species are scarce and its population size has proven extremely difficult to estimate.[194]

71. Thanks to the nearly continuous series of high-frequency narrowband clicks emitted by the vaquita for purposes of echolocation, it is feasible to detect the presence of individuals through the use of passive acoustic sensors. Combined with visual identification, this acoustic monitoring method allows for more precise detection of vaquita specimens and recording of population changes, yielding viable parameters with which to estimate the abundance of the species.[195]

72. Early efforts to monitor the vaquita using passive acoustic methods began in 1997. The Porpoise Detector, a device used to identify and record the sounds emitted by porpoises, was initially used. Connected to a computer by a cable, this device allowed for real-time capture of the clicks produced by the vaquita. Later, the sensor was replaced by the Rainbow Click, which functioned similarly but possessed a more advanced analytical system. Innovations in technology brought autonomous passive acoustic monitoring systems; that is, devices designed to record the sounds of the marine environment independently, without the need for constant human intervention. Most recently, the C-POD, D-POD, and now F-POD systems are being employed. Unlike their predecessors, which must be connected to a computer for real-time capture and analysis, these are automated sensors operating independently and providing continuous records under a range of environmental conditions.[196] Analysis of the acoustic encounter rate—defined as the number of detections per hour—in the vaquita's primary area of distribution, offshore of San Felipe, BC on the west side of the UGC, showed a 58 percent decline in the period running from 1997 to 2007.[197]

73. The accelerated collapse of the vaquita population, with an estimated 34 percent annual decline from 2011 to 2015 (as compared with an estimated 7.6 percent annual decline from 1997 to 2008) evidences the drastic impact of illegal totoaba fishing, which ramped up in early 2010. A robust spatial analysis using visual and acoustic methods estimated that only 59 vaquitas remained in the fall of 2015, for a total decrease of 80 percent between 2011 and 2015 and of 92 percent since 1997.[198]

74. Based on the premise that changes in acoustic activity are a good proxy for changes in population size, an estimate based on geostatistical models adjusted with Bayesian probabilistic methods was performed in 2019[199] using historical data obtained from monitoring programs in 1997, 2008, 2015, 2016, 2017, and 2018. This process resulted in probabilistic estimates that the vaquita population decreased by approximately 99 percent between 1997 and 2018 (Figure 8), with drastic reductions from 2015 to 2018, despite the gillnet ban imposed on the UGC in 2017.[200] The estimate for 2018 suggests that the vaquita population consisted of less than 19 individuals, while for 2024, the expert elicitation method (see paragraph 76 and footnote 203) yielded an estimate of six to eight distinct vaquitas sighted during the observation cruise; a yearling vaquita was sighted, but for the first time it was considered "most probable that no calves were seen."[201]

194. NACAP-Vaquita, at 12, at: <https://bit.ly/4cFbItc>. *See also* PACE-Vaquita at 30, at: <https://bit.ly/3zO9Sr5>.

195. A. M. Jaramillo Legorreta et al. (2016), "Passive acoustic monitoring of the decline of Mexico's critically endangered vaquita," *Conservation Biology* 31(1): 183–91, at: <https://bit.ly/3Lu4gVN>; L. Rojas Bracho et al. (2009), *Assessing Trends in Abundance for Vaquita using Acoustic Monitoring: Within Refuge Plan and Outside Refuge Research Needs*, report of workshop held 19–23 October 2009, at 4–5, at: <https://bit.ly/4d5TdxH>.

196. Chelonia Wildlife Acoustic Monitoring (2023), "F-POD, LF-POD, Deep F-POD," at: <https://bit.ly/4gcXIaJ>; A. M. Jaramillo Legorreta et al. (2023), *Survey Report for Vaquita Research 2023*, at 5 and Appendix 1, p. 7, at: <https://bit.ly/40dU4aQ> and <https://bit.ly/4h2sSmF>, respectively.

197. T. Gerrodette et al. (2011), *supra* at: <https://bit.ly/3zyIUUp>.

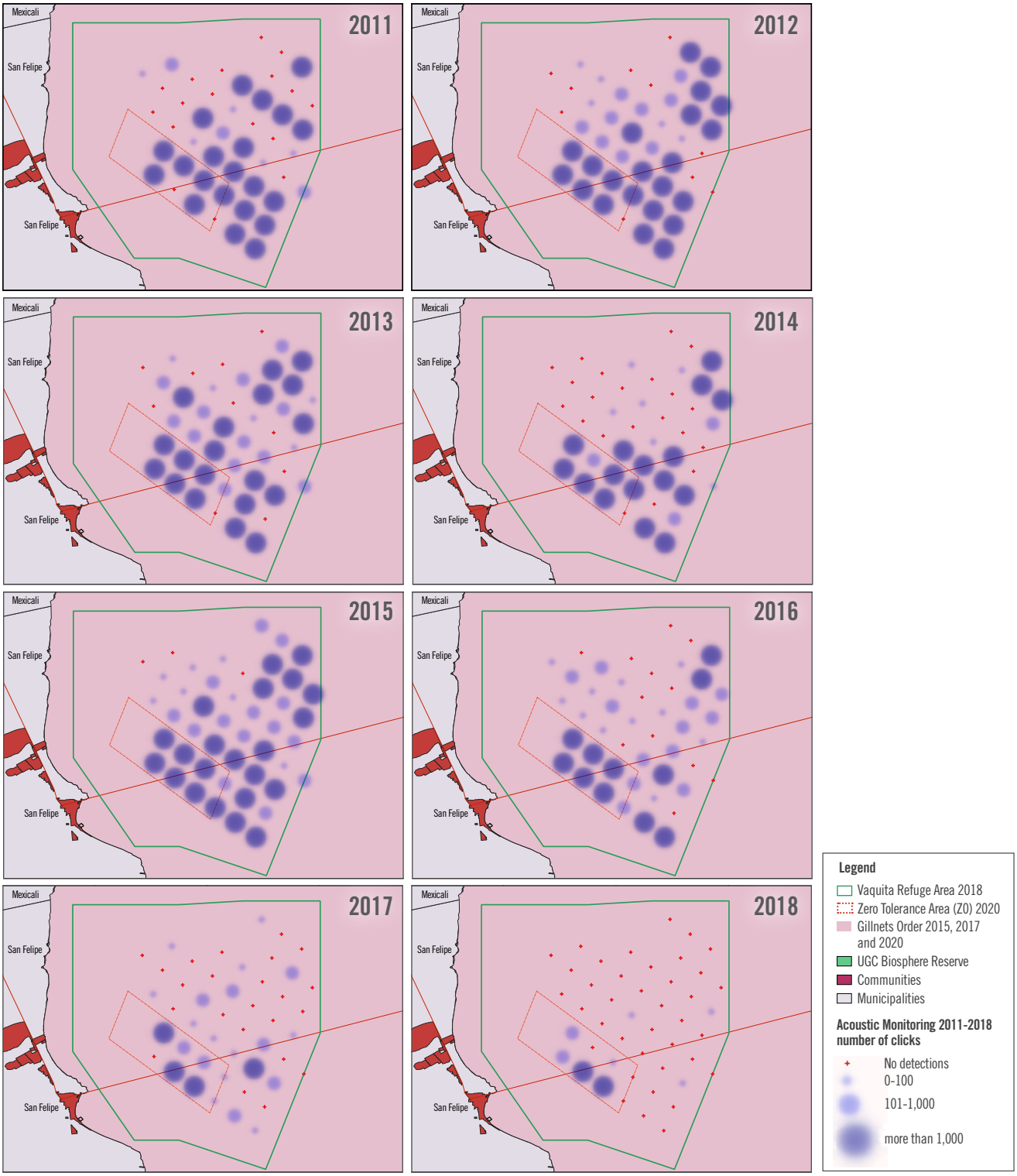
198. B. L. Taylor et al. (2016), "Extinction is imminent for Mexico's endemic porpoise unless fishery bycatch is eliminated," *Conservation Letters* 10(5): 588–95, at: <https://bit.ly/46DtxXk>.

199. The Bayesian probabilistic method is used to update the probability of an event (trends outlined in relation to a hypothesis) to be updated as new information becomes available. It starts with an initial probability that is adjusted, as data is collected, to better reflect reality, which helps to make more informed decisions.

200. A. M. Jaramillo Legorreta et al. (2019), *supra* at: <https://bit.ly/3Li8Hmn>.

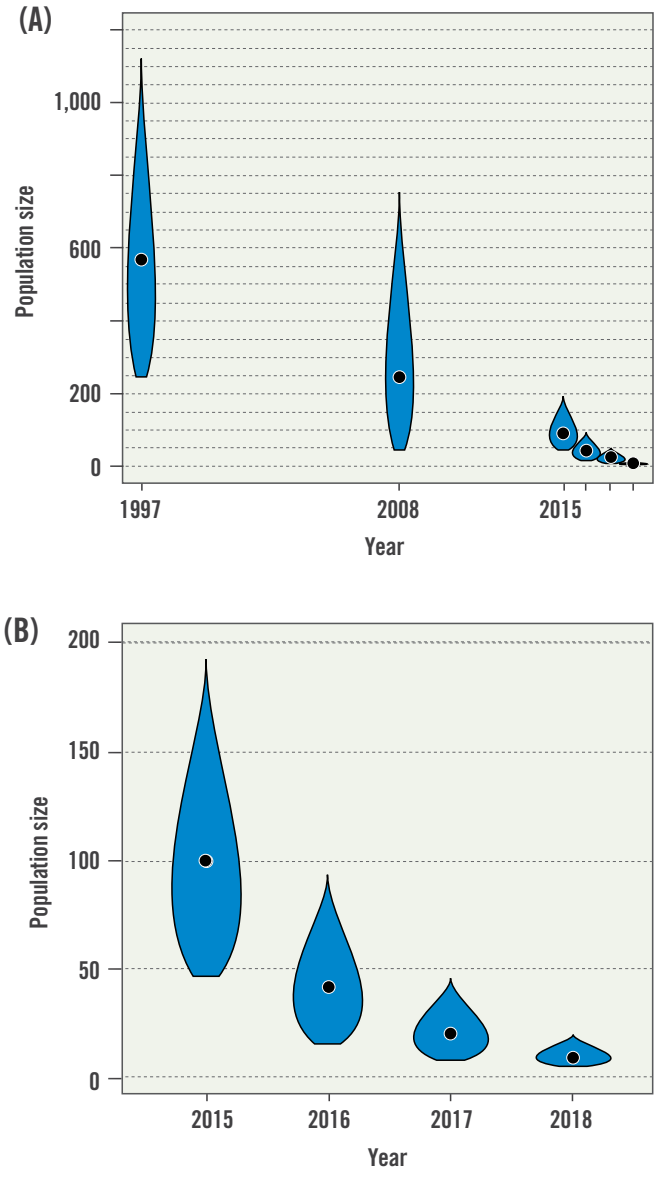
201. Conanp *et al.* (2024), *Reporte del crucero de observación de la vaquita 2024*, Mexico, at 1, at: <https://bit.ly/40J2oAJ>.

Figure 7. Recorded presence of vaquita specimens in its primary area of distribution off the coast of San Felipe, BC



Source: Produced by the Secretariat based on A. M. Jaramillo Legorreta *et al.* (2019), "Decline towards extinction of Mexico's vaquita porpoise (*Phocoena sinus*)," *Royal Society Open Science* 6(7), Article 190598, at: <https://bit.ly/3Li8Hmn>.

Figure 8. Estimated abundance of the vaquita (*Phocoena sinus*) population (1997–2018)



Note: Estimates calculated on the basis of data from monitoring programs carried out in 1997, 2008, and 2015 (a), and population size projections for 2016–2018 based on acoustic monitoring results (b). It should be noted that the data on vaquita recorded in 2017 and 2018 served to revise the 2015 population size estimate. Based on at least seven vaquitas sighted in 2017 and six in 2018, it was considered improbable that the 2015 population was in the lowest range of the original estimate (*Cf.* B. L. Taylor *et al.*, 2016). The authors (A. M. Jaramillo Legorreta *et al.*, 2019) recalculated that the 2015 population estimate would be around 100 vaquitas (median of 93, range of 47 to 191), exceeding the initial estimate of 59.

Source: A. M. Jaramillo Legorreta *et al.* (2019), "Decline towards extinction of Mexico's vaquita porpoise (*Phocoena sinus*)," *Royal Society Open Science* 6(7), Article 190598, at: <https://bit.ly/3Li8Hmn>. *Cf.* B. L. Taylor *et al.* (2016), "Extinction is imminent for Mexico's endemic porpoise unless fishery bycatch is eliminated," Conservation Letters 10(5): 588–95, at: <https://bit.ly/46DtxXk> (with respect to the original estimate of 2015).

75. It must be clarified that the acoustic monitoring program was designed to analyze trends in the population over time, not to estimate population size, since this would entail combining visual transects with acoustic monitoring. However, continued acoustic monitoring faces an ongoing challenge: theft of costly acoustic sensors with the irreplaceable data they contain. In addition to the high costs of conducting a visual transect, the reduced vaquita population makes it practically impossible to obtain enough sightings to estimate population size.[202]

76. As vaquita numbers declined, the distribution of vaquita acoustic activity in the VRA shrank to the area currently known as Zero Tolerance Area (Z0) (see Figure 7 above), a rectangle of about 288 km^2 or roughly 12 by 24 km, and the adjacent extended area. Researchers turned to another method, known as "expert elicitation"[203] to estimate the number of distinct vaquitas sighted. This method has been implemented only in the Z0 and not throughout the vaquita's distribution range.[204] In 2019 and 2021, this method yielded minimum estimates of "around 10 remaining individuals" of the vaquita.[205] The results of the research cruise conducted in 2024 indicated that it is highly probable that no calves were observed, in contrast to previous years' cruises, but that one yearling was sighted.[206] The 2024 research cruise concluded that there was a 75 percent probability that the total number of vaquitas seen was between 6 and 8 individuals. It must be emphasized that this range is lower than the 10-13 animals observed in 2023 in a similar zone and is considered an estimate of the minimum number of vaquitas detected in the study area, which is not equivalent to an estimate of the remaining population. The 2024 cruise reported that all the animals looked healthy and were apparently feeding.[207]

77. Acoustic research was also conducted outside the Z0 in late August and early September 2024.[208] Passive acoustic sensors recorded vaquita activity both within this zone and in parts of the VRA, which was previously considered an area of high frequency for the species (see Figure 7 above). These findings indicate that vaquitas could be using parts of their historical distribution range, offering hope that the reduced numbers observed on the May 2024 research cruise do not necessarily reflect a decline in the total population. However, since there is no evidence of a significant decrease in the use of gillnets outside the Z0 and the adjacent zone known as the "extended area," it will be necessary to implement additional protective measures for vaquitas found in other parts of the VRA.[209]

78. The table below presents various estimates of vaquita abundance produced between 1997 and 2024, some of them based on visual line transect observation techniques, acoustic data, or a combination (1997–2018), others obtained through the expert elicitation method of sighting data (2019–2024).

202. Secretariat's interviews with researchers during the special mission to Ensenada, Baja California, 9–11 September 2024. *See also* L. Rojas Bracho et al. (2022), *supra* at: <https://bit.ly/40czR5k>, and A. M. Jaramillo Legorreta et al. (2023), *supra* at: <https://bit.ly/40dU4aQ>.

203. Expert elicitation is a structured method for compiling specialist knowledge and opinion where the available scientific data is limited or uncertain. In the case of the vaquita, the method is employed to estimate the minimum number of distinct vaquitas sighted, combining the knowledge and opinion of specialists in identification of the species and its behavior, and thus making it possible to determine the minimum number of surviving individuals where direct data is limited.

204. In other words, expert elicitation is applied in an area that corresponds to approximately 12% of the area monitored in 2015.

205. L. Rojas Bracho et al. (2022), *supra* at: <https://bit.ly/40czR5k>.

206. B. Taylor and L. Rojas Bracho (2024), "New findings reveal vaquitas outside protected areas following May 2024 survey," IUCN, Species Survival Commission, Cetacean Specialist Group, 26 December 2024, at: <https://bit.ly/3DZWQZE>.

207. Id.

208. Id.

209 Id.

Table 1. Studies estimating vaquita abundance

Year	Abundance estimate	95% confidence limit	Notes
1997	567	177–1,073	Line transect study designed specifically to estimate the abundance of the vaquita throughout its area of distribution.[i]
2008	245	68–884	Line transect study in the UGC. Deeper-water areas were sampled visually from a research ship, while shallower areas were covered by a sailboat towing an acoustic matrix.[ii]
2015	59	22–145	Visual transects were combined with passive acoustic data collected simultaneously in a robust spatial analysis. It was estimated that there were only 59 remaining vaquitas in the fall of 2015.[iii]
2016	30	8–96	A systematic network of sensors installed starting in 2011 was used, and to offset the loss of non-uniform data, statistical models were also used. The study found an overall decline in acoustic detection of 49% between 2015 and 2016, and a total decline of over 90% between 2011 and 2016. Assuming that acoustic detection rate is proportional to population size, it was estimated that there were approximately 30 remaining vaquitas in November 2016. [iv]
2018	<19	6–19	Acoustic trends were combined with an independent estimate of 2015 population size and visual observations of at least seven vaquitas in 2017 and six in 2018. The estimated rate of decline was 48% in 2017 and 47% in 2018. The total estimated population decline since 2011 is 98.6%, with a probability greater than 99% that the average annual decline exceeds 33%. It was estimated that there were less than 19 remaining vaquitas in the fall of 2018 (posterior mean 9, median 8, credible interval of 95%: 6-19).[v]

Note: Since 2019, surveys consisted of research cruises utilizing visual observation methods supported with expert elicitation (judgment). These surveys have focused on the Z0 and adjacent area.

Year	Estimated number of vaquitas (range) seen in the study area	Notes
2019	7-15	The distribution obtained by elicitation (elicited distribution) for the 2019 season indicated that it was improbable for the true number of vaquitas sighted to be less than 7 or greater than 15. The distribution showed a probability of 84% that the true number of unique vaquitas sighted was between 9 and 13.[vi]
2021	5-13	The elicited distribution indicated that it was improbable that the true number of vaquitas sighted was less than 5 or greater than 13. The final distribution indicated a probability of 78% that the true number of unique vaquitas sighted was between 6 and 10.[vii]
2023	5-17	This elicited distribution indicated that it was improbable that the true number of vaquitas was less than 5 or greater than 17. The distribution showed a probability of 76% that the true number of unique vaquitas sighted was between 8 and 13. The mean estimate of observed vaquitas was 10.[viii]
2024	6-11	The elicited distribution indicated that it was improbable that the true number of vaquitas was less than 6 or greater than 11. The distribution showed a 75% probability that the total number of different individuals observed was between 6 and 8, with a 25% probability that between 9 and 11 individuals were seen. For the first time, no calves were seen.[ix]

Note: Since 2019, surveys consisted of research cruises utilizing visual observation methods supported with expert elicitation (judgment). These surveys have focused on the Z0 and adjacent area.

i. A. M. Jaramillo Legorreta et al. (1999), "A new abundance estimate for vaquitas: First step for recovery," *Marine Mammal Science* 15(4): 957–73, at: <https://bit.ly/4fda3va>.

ii. T. Gerrodette et al. (2011), "A combined visual and acoustic estimate of 2008 abundance, and change in abundance since 1997, for the vaquita, *Phocoena sinus*," *Marine Mammal Science* 27(2): E79–E100, at: <https://bit.ly/3zyIUUp>.

iii. B. L. Taylor et al. (2016), "Extinction is imminent for Mexico's endemic porpoise unless fishery bycatch is eliminated," Conservation Letters 10(5): 588–95, at: <https://bit.ly/46DtxXk>.

iv. L. Thomas et al. (2017), "Last call: Passive acoustic monitoring shows continued rapid decline of critically endangered vaquita," *Journal of the Acoustical Society of America* 142(5): EL512–EL517, at: <https://bit.ly/3zCx4ZB>.

v. A. M. Jaramillo Legorreta et al. (2019), "Decline towards extinction of Mexico's vaquita porpoise (Phocoena sinus)," *Royal Society Open Science* 6(7), Article 190598, at: <https://bit.ly/3Li8Hmn>.

vi. L. Rojas Bracho et al. (2022), "More vaquita porpoises survive than expected," *Endangered Species Research* 48: 225–34, at: <https://bit.ly/40czR5k>.

vii. Id.

viii. A. M. Jaramillo Legorreta et al. (2023), *Survey Report for Vaquita Research 2023*, IUCN, at: <https://bit.ly/40dU4aQ>.

ix. B. Taylor y L. Rojas Bracho (2024), "New findings reveal vaquitas outside protected areas following May 2024 survey," IUCN, Species Survival Commission, Cetacean Specialists Group, 26 December 2024, at: <https://bit.ly/3DZWQZE>.

***Photo*: World Wildlife Fund, (2016), "Cracking down on totoaba trade: the key to saving the vaquita"**

5. Risk factors for the vaquita

79. In general, it has been established that the intensification of fishing is the main cause of marine biodiversity loss on a global scale and constitutes the main threat to cetaceans,[210] especially those that are small and medium-sized, which are often caught as bycatch when entangled in relatively cheap and efficient gillnets, widely used by artisanal fishers around the world.[211] Moreover, species with a limited geographic distribution—such as the vaquita—tend to have very specific habitat requirements, small population sizes and, consequently, greater vulnerability to threats from gillnet fishing.[212] Commercial fishing is one of the main economic activities in the fishing communities of the UGC, particularly in San Felipe, BC and in Golfo de Santa Clara and Puerto Peñasco, Sonora.[213] A range of fishing gear is used in this activity, including *chinchorros* and gillnets.[214] However, the evidence suggests that the use of these nets is the main risk factor for the vaquita, specimens of which are susceptible to dying by being caught in the nets.[215]

80. An involved process took place in the 1990s to regulate fishing in Mexico. In 1992 the Fishing Act (*Ley de Pesca*)[216] was issued, marking the start of tuna and shrimp fishing regulation in national waters.[217] That same year saw the enactment of provisions banning the use of gillnets, in particular those with a mesh size of more than 10 inches (25.4 cm), over an extensive area of the Gulf of California, without specifically mentioning "ghost" nets.[218] According to the results of a program for removal of ghost fishing nets in the UGC, the most commonly recovered nets were those used in the shrimp, corvina, totoaba, and other finfish fisheries; in addition to the large volume of ghost nets in these waters, the continued use of gillnets (banned since 1992) in illegal totoaba fishing is seriously exacerbating the problem.[219] Museo de la Ballena y Ciencias del Mar, A.C. (Museo de la Ballena) reported that from 2016 to 2018, approximately 34,000 tons of illegal nets, abandoned mainly in the VRA and previously used to catch totoaba, were recovered;[220] likewise, the Sea Sheperd Conservation Society (SSCS) removed approximately 163,600 linear meters of nets from vaquita habitat between 2015 and 2018.[221]

210. R. L. Brownell et al. (2019), "Bycatch in gillnet fisheries threatens Critically Endangered small cetaceans and other aquatic megafauna", *Endangered Species Research*, 40: 285-296, at: <https://bit.ly/44ApYCc>.
211. A. J. Read (2008), "The Looming Crisis: Interactions Between Marine Mammals and Fisheries", *Journal of Mammalogy*, 89(3): 541-548, at: <https://bit.ly/43x5nh2>; A. J. Read et al. (2006), "Bycatch of marine mammals in U.S. and global fisheries", *Conservation Biology*, 20(1): 163-169, at: <https://bit.ly/4j3DeD3>.
212. G. T. Braulik, et al. (2023), "Red-list status and extinction risk of the world's whales, dolphins, and porpoises", *Conservation Biology*, 37(5): e14090, at: <https://bit.ly/43eZq75>.
213. PACE-Vaquita at 36, at: <https://bit.ly/3zO9Sr5>.
214. PACE-Vaquita at 38, at: <https://bit.ly/3zO9Sr5>; FAO (2005), "Uso de medidas técnicas en la pesca responsable: regulación de artes de pesca", Chapter 2, in K. L. Cochrane (ed.) *Guía del administrador pesquero: medidas de ordenación y su aplicación*, Food and Agriculture Organization of the United Nations, at: <https://bit.ly/3GLBEIp>.
215. C. D'agrosa, C. E. Lennert-Cody, and O. Vidal (2003), "Vaquita bycatch in Mexico's artisanal gillnet fisheries: Driving a small population to extinction," *Conservation Biology* 14(4): 1110–19, at: <https://bit.ly/3zXZDAS>.
216. Fisheries Act (*Ley de Pesca*), published in the DOF on 25 June 1992; repealed in 2007 by the General Sustainable Fisheries and Aquaculture Act (*Ley General de Pesca y Acuacultura Sustentables—LGPAS*), at: <https://bit.ly/46gvEju>.
217. Mexican Official Standard NOM-002-PESC-1993, *Para ordenar el aprovechamiento de las especies de camarón en aguas de jurisdicción federal de los Estados Unidos Mexicanos*, published in the DOF on 31 December 1993 (repealed by NOM-002-SAG/PESC-2013 in July 2013), at: <https://bit.ly/3Sls7e6>.
218. Sepesca (1992), *Acuerdo por el que se prohíbe el uso de redes agalleras de luz de malla superior a 10 pulgadas construidas con hilo nylon monofilamento, calibre 36 a 40 denominadas totoaberas, durante todo el año en el golfo de California en el área que se indica*, published in the DOF on 13 February 1992, at: <https://bit.ly/3WsLYdL> [1992 Totoaba Net Ban].
219. E. Aceves Bueno *et al*. (2023), "Derelict gear from an illegal fishery: Lessons from gear retrieval efforts in the Upper Gulf of California," *Marine Policy*, vol. 147, at 105387, at: <https://bit.ly/3M9olkx>.
220. Elephant Action League, Wildlife Crime Division (2018), *Operation Fake Gold*, at 29, at: <https://bit.ly/4d4XXE6>.
221. *Id*., at 30.

81. To date, the restrictions issued regarding the use of fishing gear and navigation in the UGC include a ban on the use of gillnets and longlines by small craft and a temporary suspension of commercial fishing (2015);[222] a restriction on navigation, fishing, and tourism activities in the VRA (2017),[223] and a temporary suspension of commercial fishing with longlines operated by small craft (2018).[224] Section 6 provides detailed information on the various legal instruments promulgated for the protection of the totoaba and the vaquita, and in particular, the continuous surveillance and restrictions in force in the Z0.

Photograph 4. Meetings of the Secretariat with Marina and with GIS officials

Source: CEC Secretariat, photographs taken during the special mission to San Felipe, BC , 9–11 September 2024, and to Mexico City, 17–18 September 2024.

222. 2015 Gillnets Order, at: <https://bit.ly/48Zh28b>.

223. Semarnat-Sectur (2017), *Acuerdo por el que se restringen la navegación y las actividades de pesca y de turismo náutico en el polígono indicado dentro de la región conocida como Alto Golfo de California, a efecto de realizar acciones de preservación de la vaquita marina* (Phocoena sinus), published in the DOF on 11 October 2017, at: <https://bit.ly/3WmKwbD>.

224. Sagarpa (2018), *Acuerdo por el que se suspende temporalmente la pesca comercial mediante el uso de cimbras operadas con embarcaciones menores en el norte del Golfo de California, en relación con el similar publicado el 29 de mayo de 2018*, published in the DOF on 18 October 2018, at: <https://bit.ly/3Wi9k4w>.

5.1 Vaquita bycatch mortality

82. Historically, the gillnets used to fish for totoaba, other finfish, and shrimp have been considered the main threat to vaquita survival, due to the high rates of bycatch and death.[225] The earliest confirmed vaquita bycatch records during totoaba fishing date from the 1960s.[226] The expansion of the fishing industry and the switch to nylon nets after the Second World War increased vaquita bycatch, making it necessary to monitor its conservation status.[227]

83. An analysis of fishing effort and vaquita bycatch data showed that gillnets used in fishing activities in the UGC were the main cause of vaquita mortality between 1993 and 1995.[228] Estimates indicate that in that same period, the Golfo de Santa Clara fishing fleet caused the death of 39 vaquitas each year as a result of bycatch; and, since fishing effort in the Golfo de Santa Clara is similar to that of San Felipe, an extrapolation of the results to both ports yields a conclusion that bycatch caused the death of 78 vaquitas in 1993.[229] Another study documented that at least 128 vaquitas died in the period March 1985–February 1992 after being entangled in fishing nets: 65% in totoaba nets; 28% in shark and ray nets, and 7% in nets for larger finfish (e.g., sierra, Scomberomorus spp.) or in shrimp trawl nets.[230]

84. In addition, illegal totoaba fishing has historically been connected to the decline of the vaquita population, given the large quantity of vaquitas caught in illegal and ghost gillnets that has been documented since the 1960s and while the 1975 Totoaba Fishing Ban has been in effect.[231]

85. Specifically since 1975, the International Whaling Commission (IWC) has recommended focusing on shutting down totoaba fishing and addressing the connected problem of illegal totoaba trafficking as a priority for preventing bycatch of species such as the vaquita; some years later, in 1991, it reiterated the pressing need to eliminate gillnet mortality.[232] These recommendations were endorsed by the International Committee for the Recovery of the Vaquita (CIRVA), which stressed that to prevent the extinction of the species, it is critical to completely eliminate bycatch. The recommendations issued by the IWC—with the support of CIRVA and published scientific studies—focus on eliminating bycatch by gillnets. This requires the implementation of alternative fishing gear, and incentives for fishermen in the UGC.[233] More recently, the IWC put out its first *extinction alert* for the vaquita in a statement made public in August 2023, in which the organization's scientific committee emphasized the urgency of acting *without delay* to save the species. Published for the purpose of raising awareness and gaining worldwide support for implementation of the necessary measures, the alert—the first of its kind issued by the IWC since its inception—states that "the extinction of the vaquita is inevitable unless 100% of gillnets are substituted immediately with alternative fishing gears that protect the vaquita and the livelihoods of fishers. If this doesn't happen now, it will be too late."[234]

225. L. Rojas Bracho *et al.* (2024), "Mexico must save the vaquita from gill nets," *Science* 385(6708): 504, at: <https://bit.ly/3ywWV4O>.
226. Entanglement of vaquitas in totoaba gillnets was described in 1961 in K. S. Norris and J. H. Prescott (1961), "Observations on Pacific cetaceans of Californian and Mexican waters," *University of California Publications in Zoology*, 63(4): 349, at: <https://bit.ly/3PMKoiJ>. *See also* A. Guadarrama Pérez *et al.* (2021), "Totoaba y vaquita: análisis histórico y socioambiental de su cuasiextinción," Áreas Naturales Protegidas Scripta 7(2): 51–72, at: <https://bit.ly/45eZxBO>.
227. O. Vidal (1995), "Population biology and incidental mortality of the vaquita, *Phocoena sinus*," *Reports of the International Whaling Commission*, special issue 16, at 247–272, at: <https://bit.ly/3Ny9sZJ>.
228. C. D'agrosa, C. E. Lennert-Cody, and O. Vidal (2003), *supra* at 1110-1119, at: <https://bit.ly/3zXZDAS>.
229. Id.
230. L. Rojas Bracho, R. R. Reeves and A. M. Jaramillo Legorreta (2006), *supra* at: <https://bit.ly/3Wjl9Zq>. *Cf.* C. D'agrosa, C. E. Lennert-Cody, and O. Vidal (2003), *supra* at: <https://bit.ly/3zXZDAS>. There are records of the bigeye croaker, sierra, and Spanish mackerel fisheries having an impact on vaquita mortality. It should be noted that totoaba nets have a mesh size of 20–50.5 cm; shark nets, a mesh size of 10–15 cm, and finfish nets, a mesh size of 8.5 cm. Even with such small mesh, vaquitas, like other small porpoises and marine mammals, can easily become tangled just by grazing the net, if they panic and their head, pectoral fins, or dorsal fin cannot get through the mesh. This is because of their swimming and feeding behavior: often, their struggling to get free wraps the net around their body or tail, only entangling them further. Unable to reach the surface to breathe, they drown within minutes.
231. A. Guadarrama Pérez *et al.* (2021), *supra*, at <https://bit.ly/45eZxBO>.
232. International Whaling Commission (1992), *Reports of the International Whaling Commission*, no. 42, at 76, at: <https://bit.ly/40teZqi>.
233. L. Rojas Bracho and R. R. Reeves (2013), "Vaquitas and gillnets: Mexico's ultimate cetacean conservation challenge," *Endangered Species Research* 21: 77–87, at: <https://bit.ly/3E6HLpu>; L. Rojas Bracho, R. R. Reeves, and A. M. Jaramillo Legorreta (2006), *supra* at: <https://bit.ly/3Wjl9Zq>.
234. International Whaling Commission (2025), "Extinction and cetaceans," at: <https://bit.ly/3C7oiV5>; International Whaling Commission (2023), *A statement from the Scientific Committee of the IWC: Grave concern for the survival of the vaquita porpoise*, Histon, Cambridge, UK, at 5, at: <https://bit.ly/3Wszwuc>.

Photograph 5. Vaquitas caught in gillnets

Source: World Wildlife Fund, (2016), "Cracking down on totoaba trade: the key to saving the vaquita," at: <https://bit.ly/4jBG97s>; Flip Nicklin y WWF (2018), "Last hope for rare porpoise may lie in Newfoundland," at: <https://bit.ly/42j5Gfm>; A. Tinoco Guadarrama (2022), Operación Milagro "Vaquita Marina," Youtube, seconds 26–32, at: <https://bit.ly/42pfbK6>.

5.5.1 Totoaba fishing

86. As indicated above (see paragraph 67), by virtue of its dimensions and distribution, the vaquita is particularly susceptible to being caught in gillnets used to catch totoaba.[235] This fishery has been historically relevant to the cultural, social, and economic development of the inhabitants of the UGC since the late nineteenth century.[236] Until 1920, the commercial use of totoaba was limited to the export of swim bladders, a product in high demand on the Chinese market;[237] however, because of the large quantities of flesh and other fish parts that were being discarded, a group of German fishermen began marketing the totoaba in Guaymas, Sonora. Soon afterward, the species began being marketed in the United States, undergoing a rapid increase in demand as of the mid-1920s.[238] In fact, it has been documented that totoaba fishing activities in the region were a catalyst for human settlement in San Felipe beginning in the 1920s.[239] The totoaba ultimately became a highly prized species, not only in commercial fishing but also as a sport fish, with landings of the species reaching a peak in the 1940s.[240] As the fishery grew, fishing gear evolved over time towards the use of nylon gillnets.[241]

Photograph 6. Totoaba sport fishing

Source: UABC (2016), *La totoaba: gigante del Alto Golfo de California,* Centro de Estudios sobre la Universidad (CESU), Universidad Autónoma de Baja California, at 20, at: <https://bit.ly/3WASf6E>. Featured in the photograph is Tony Reyes, who suggested in 1980 that totoaba sport fishing be regularized. Image obtained by the CEC Secretariat during its field trip to the UABC facilities.

235. L. Rojas Bracho, R. R. Reeves, and A. M. Jaramillo Legorreta (2006), *supra* at: <https://bit.ly/3Wjl9Zq>.
236. A. Guadarrama Pérez *et al.* (2021), *supra* at: <https://bit.ly/45eZxBO>.
237. C. A. Flanagan and J. R. Hendrickson (1976), "Observations on the commercial fishery and reproductive biology of the totoaba, *Cynoscion macdonaldi*, in the northern Gulf of California," *Fishery Bulletin* 74(3): 531– 44, at: <https://bit.ly/3YmCd2d>.
238. G. R. Chute (1928), "The totuáva fishery of the California Gulf: trans-desert trucking of Mexican-caught fish," in *California Fish and Game* 14(1): 275–81, at: <https://bit.ly/46uE6vu>; A. Guadarrama Pérez *et al.* (2021), *supra* at: <https://bit.ly/45eZxBO>.
239. C. A. Flanagan and J. R. Hendrickson (1976), *supra* at: <https://bit.ly/3YmCd2d>. *See also* Profepa (2019), "Totoaba: el pez más grande…", at: <https://bit.ly/46oXzxI>
240. C. A. Flanagan and J. R. Hendrickson (1976), *supra* at: <https://bit.ly/3YmCd2d>; A. Guadarrama Pérez *et al.* (2021), *supra* at: <https://bit.ly/45eZxBO>; M. A. Cisneros Mata, G. Montemayor López, and M. J. Román Rodríguez (1995), "Life history and conservation of *Totoaba macdonaldi*," *Conservation Biology* 9(4): 806– 14, at: <https://bit.ly/4dgzQ5F>.
241. C. A. Flanagan and J. R. Hendrickson (1976), *supra* at: <https://bit.ly/3YmCd2d>.

87. A factor helping to explain the high demand for totoaba and the skyrocketing prices it commands—which have spurred illegal fishing in the species after the declaration of the fishing ban—is the high value placed on its swim bladder in Chinese traditional medicine. Before the popularization of the totoaba, some people in China ate bahaba (*Bahaba taipingnesis*), a native species of the same family, Sciaenidae, as the totoaba, which lived along the coasts of China from the Yangtze River estuary in the south to the Pearl River estuary, including the waters of Hong Kong and Macau.[242] However, overfishing to meet high demand drove the species to the brink of extinction.[243] Due to the popular belief that the swim bladders of the bahaba and the totoaba are considered to have very similar health properties and benefits, it has been asserted that the latter has acted as a substitute, or at least a supplement, for the former on Asian markets.[244]

88. Totoaba swim bladders are usually sold in dried form, mainly on the black market in southeastern China and Hong Kong. They are an ingredient in Chinese traditional medicine that is highly prized for their supposed benefits for blood circulation, skin, renal function, fertility, vitality, and longevity, as well as being said to have aphrodisiac properties.[245] Also highly prized for their high collagen content, totoaba swim bladders are often prepared in soups.[246] The totoaba bladder is a status symbol for those who can purchase it, and it is given as a valuable gift or purchased for investment purposes.[247]

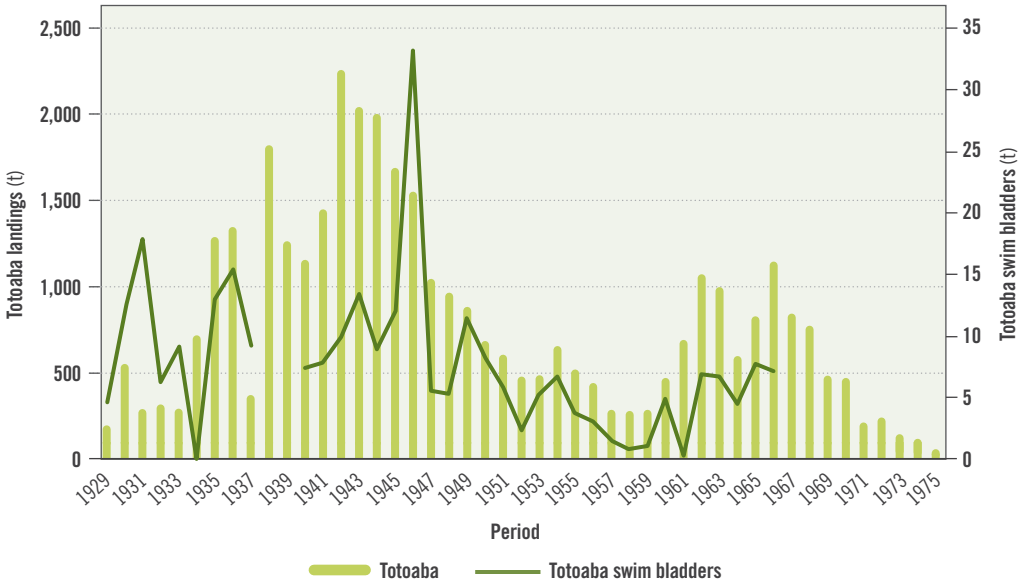
Totoaba fishing in the Gulf of California

89. Commercial fishing records for totoaba are available for the years 1929 to 1975. In the early years, landed volumes were below 500 tons per year; starting in 1934, a constant increase was observed, with a peak of 2,261 tons in 1942, the year when volumes began to decline again. Apart from an apparent new peak in the 1960s, the rapid decline of the totoaba population continued, hitting a historical low of 59 tons in 1975, the year when a total ban was placed on totoaba fishing in the Gulf of California (see Figure 9).[248] Uncontrolled fishing of this species had ultimately forced the Mexican authorities and international bodies to establish various levels of protection (see section 6.21).

90. Totoaba landings (including swim bladders) during the period 1929 to 1936 were classified as "a deep-sea fishery controlled by domestic fishermen"; from 1937 to 1966, there are fishing records (primarily of totoaba, dried totoaba, and totoaba swim bladder and liver) for the states of Baja California, Baja California Sur, Sonora, and Sinaloa, as well as for the United States for a few years.[249] During the period 1929–1975, 99.8 percent of totoaba landings corresponded to the states of Baja California and Sonora, which accounted for 32.5 percent and 67.3 percent, respectively.

242. Mindat (n.d.), "Bahaba taipingensis", at: <https://bit.ly/3WO7mt1>.
243. A. Guadarrama Pérez *et al.* (2021), *supra* at: <https://bit.ly/45eZxBO>. The Chinese bahaba is classified as "critically endangered": IUCN (2019), "Chinese Bahaba, *Bahaba taipingensis*" IUCN Red List of Threatened Species, at: <https://bit.ly/3X8XSsz>.
244. A. Guadarrama Pérez *et al.* (2021), *supra* at: <https://bit.ly/45eZxBO>.
245. Id. *See also* Environmental Investigation Agency (2016), *Collateral damage: How illegal trade in totoaba swim bladders is driving the vaquita to extinction*, EIA, London, at: <https://bit.ly/3M5MDfl>; L. Choon Wei (2019), "The fish totoaba," in *Asian Bestiary,* Southern Collective, at: <https://bit.ly/3AmrryN>.
246. A. Guadarrama Pérez *et al.* (2021), *supra* at: <https://bit.ly/45eZxBO>.
247. C4ADS (2017), *Hooked:How Demand for a Protected Fish Lined the Pockets of Mexican Cartels & Sunk the Future of an Endangered Porpoise Species*, C4ADS Innovation for Peace, at 9, at: <https://bit.ly/46RcEs3>; Elephant Action League, Wildlife Crime Division (2018), *supra* at 9-10, 18, 22, 75, 79 and 88-89, at: <https://bit.ly/4d4XXE6>.
248. F. Rosales Juárez and E. Ramírez González (1987), *Estado actual del conocimiento sobre la totoaba (*Cynoscion macdonaldi*), Gilbert 1890*, Sepesca, at 9–10, at: <https://cec.org/files/sem/20250721/abd001.pdf>; Profepa (2019), "Pez totoaba: el pez más grande del Alto Golfo," at: <https://bit.ly/46oXzxI>.
249. E. Ramírez G. (1967), *Resumen estadístico de la captura anual de totoaba en el golfo de California en el periodo 1929–1966*, "Trabajos de Divulgación" series, vol. 13, no. 124, Instituto Nacional de Investigaciones Biológico Pesqueras, Secretaría de Industria y Comercio, at 4–33, at: <https://cec.org/files/sem/20250721/abd002.pdf>.

Figure 9. Totoaba landings in the Gulf of California (1929–1975)



Source: Produced by the Secretariat based on E. Ramírez G. (1967), *Resumen estadístico de la captura anual de totoaba en el golfo de California en el periodo 1929–1966*, "Trabajos de Divulgación" series, no. 124, vol. 13, Instituto Nacional de Investigaciones Biológico Pesqueras, Secretaría de Industria y Comercio, at 4–33, at: <https://cec.org/files/sem/20250721/abd002.pdf>. F. Rosales Juárez and E. Ramírez González (1987), *Estado actual del conocimiento sobre la totoaba* (Cynoscion macdonaldi), *Gilbert 1890*, Sepesca, at 10, at: <https://cec.org/files/sem/20250721/abd001.pdf>.

91. Since the enactment of the total ban on totoaba fishing in 1975,[250] there has been no official data on fishing of this species, which became clandestine in that year.

Illegal catch and trafficking in totoaba

92. Totoaba fishing in the UGC was prohibited by the 1975 Totoaba Fishing Ban.[251] It is worth pointing out that in addition to the 1975 totoaba fishing, with the declaration of the UGC Biosphere Reserve in 1993,[252] exclusive access by fishing cooperatives to the "reserved" species was abolished.[253] This measure was accompanied by a substantial decrease in subsidies and by an amendment to the Fishing Act.[254] Additionally, the totoaba was included in the NOM-059 list as an endangered endemic species in 1994,[255] so that fishing of the species was not only banned but its capture also became illegal, and subject to environmental and criminal penalties.

250. 1975 Totoaba Fishing Ban, at: <https://bit.ly/4aZ1AL8>.
251. Id.
252. UGC Biosphere Reserve Order, at: <https://bit.ly/3y7tsOV>.
253. A. Bonada Chavarría (2020), "Batallas en el desierto: el surgimiento de los narcobucheros y el tráfico ilegal de totoaba en el Alto Golfo de California y delta del Río Colorado," *HALAC, Historia Ambiental Latinoamericana y Caribeña* 10(3), at 265-299, at: <https://bit.ly/3AlhjX6>. see in particular p. 279.
254. S. Ramírez Sánchez *et al.* (2011), "Surgimiento, formación y persistencia de organizaciones sociales para la pesca ribereña de la península de Baja California," *Región y Sociedad* 23(51), at: <https://bit.ly/4dS8pyv>.
255. Mexican Official Standard NOM-059-Ecol-1994, *Que determina las especies y subespecies 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> [NOM-059-Ecol-1994].

93. The high market prices commanded by totoaba swim bladders through the international supply chain are the main motivation for illegal traffic in this species. From the boat to the first buyer, the product attains a price of USD 3,500 to 5,000 per kilogram. In Mexico, from the first intermediary in San Felipe, BC to the second intermediary in Mexicali, BC, the price of totoaba swim bladders may climb as high as USD 5,000–USD 8,000 per kilogram. On the Chinese market, the price ranges from USD 20,000 to USD 80,000.[256] The period around 2010 saw the emergence of the phenomenon of "totoaba cartels," which have also been nicknamed *narcobucheros*. Although some observers have reported that the drug cartels are separate from the totoaba cartels,[257] it has been established that organized criminals operating in the community of Golfo de Santa Clara, Sonora, may be involved in both drug and totoaba trafficking.[258] According to a report on criminal activity in the area, the groups dedicated to fishing and traffic in swim bladders are made up of: i) local fishermen who have targeted the totoaba as an opportunity for enrichment in a straitened economic context; ii) local fishermen directly in the employ of organized crime, and, iii) organized criminal groups directly involved in totoaba fishing.[259] In general, drug trafficking routes are used by the totoaba cartels for swim bladder shipments.[260]

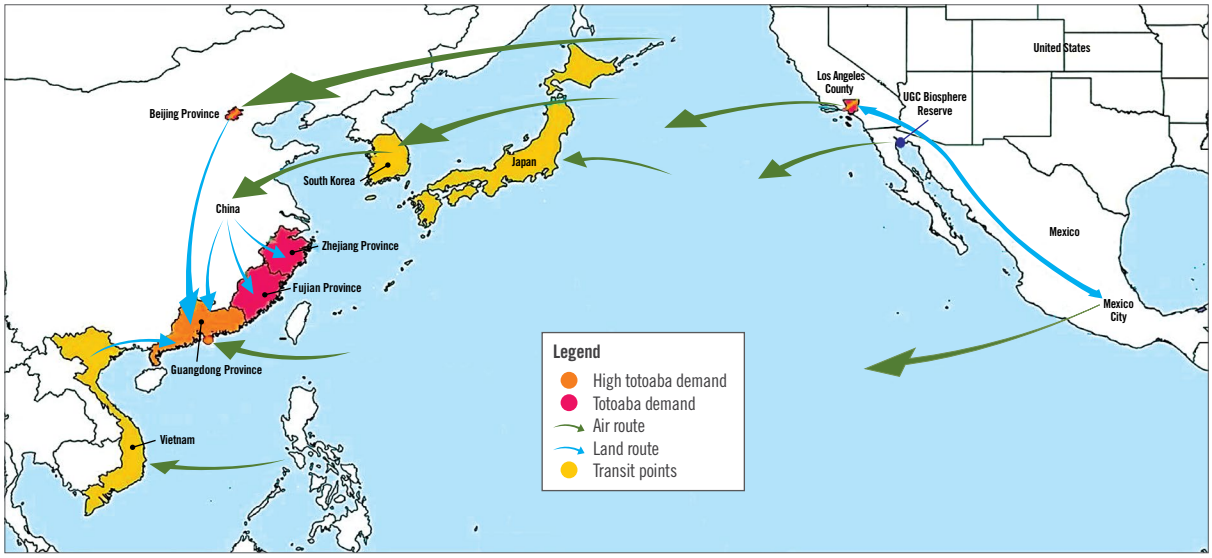
Photograph 7. Totoaba swim bladder

Source: L. M. Enríquez Paredes et al. (2023), *Informe final del proyecto RE006: Evaluación del impacto y pertinencia de las liberaciones experimentales de totoaba (*Totoaba mcdonaldi*) producida en cautiverio como estrategia de conservación de la población silvestre*, final report, SNIB-CONABIO, project no. RE006, Universidad Autónoma de Baja California, México, at 145 at: <https://bit.ly/4cBxZbe>; CITES (n.d.), *Identification Guide: Totoaba (*Totoaba macdonaldi*)*, at: <https://bit.ly/3LtADUk>.

256. Elephant Action League, Wildlife Crime Division (2018), *supra* at: <https://bit.ly/4d4XXE6>.
257. Id. at 58.
258. FGR (2024), "FGR inicia carpeta de investigación en contra de 20 personas tras enfrentamiento armado," Prensa, Comunicado FGR 480/24, 17 September 2024, at: <https://bit.ly/4heapUM>.
259. C4ADS (2017), *supra* at: <https://bit.ly/46RcEs3>.
260 Elephant Action League, Wildlife Crime Division (2018), *supra* at 58, at: <https://bit.ly/4d4XXE6>.

94. A 2018 study on illegal traffic in totoaba documented access routes, related illegal operations, the use of gill-nets, and traffic in swim bladders between Puertecitos, San Felipe, BC and Golfo de Santa Clara, Sonora.[261] Another report described illicit activities and how these are carried out in order to elude law enforcement.[262] Over time, the so-called *totoaberos* changed their fishing method, opting not to leave nets in the water over long periods. Instead, they managed the nets more actively, keeping them in their possession to avoid the ghost net removal program.[263] Totoaba bladders are trafficked to China through Hong Kong, South Korea, Japan and the United States;[264] Mexico has insisted that intelligence cooperation with the United States is essential to curb and combat illegal totoaba trafficking.[265]

Figure 10. International totoaba swim bladder trafficking routes



Source: V. Boilevin, A. Crosta, and S. J. Hennig (2023), "Addressing illegal transnational trade of totoaba and its role in the possible extinction of the vaquita," *Journal of International Wildlife Law & Policy* 26(2): 104–34, at: <https://bit.ly/4dgO6LD>.

Abundance and status of the totoaba population in the Gulf of California

95. The information on the abundance of the species presented in Figure 9 is derived from models based on catch curves that assume that total mortality reflects the rate of population decline.[266] The IUCN Red List Assessment (2020) concluded that there has been an estimated historical and projected decline of at least 30% over three generations (1993-2029) based on the following factors:[267]

    i. Illegal totoaba fishing increased fivefold, from approximately 6,000 individuals (mid-1980s) to 30,000 (2017).

    ii. The total mortality rate of totoaba increased between the mid-1980s and the period of 1991-1993 due to a marked increase in illegal fishing.

261. Id. at 46–67, at: <https://bit.ly/4d4XXE6>.
262. C4ADS (2017), *supra* at: <https://bit.ly/46RcEs3>.
263. Interview by a Secretariat expert with a crew member of the *Narval*, held at the Museo de la Ballena y Ciencias del Mar, La Paz, Baja California Sur, December 2024.
264. Elephant Action League, Wildlife Crime Division (2018), *supra* at 68, at: <https://bit.ly/4d4XXE6>.
265. Interviews with GIS officials conducted by the Secretariat during the special mission carried out on September 17 and 18, 2024 in Mexico City.
266. F. Valenzuela Quiñonez *et al.* (2011), "La totoaba del golfo de California ¿una especie en peligro de extinción?," *Interciencia*, 36(9): 664–71, at: <https://bit.ly/46R9p3R>.
267. IUCN (2020), "Totoaba, *Totoaba macdonaldi*", IUCN Red List of Threatened Species, at: <https://bit.ly/3S9rZhh> [Totoaba-Red List IUCN].

iii. Illegal totoaba fishing in the spawning grounds of the species in the UGC produced a 99% decline in the vaquita population starting in 2011 due to bycatch and is considered highly likely to have also produced a steep decline in the totoaba population during the same period.

iv. Seizures of totoaba bladders increased from an average of 500 per year (2013-2017) to 2,300 per year (2018-2020), pointing to an increase in illegal fishing.

v. The removal of 1,200 ghost fishing nets in the UGC between 2016 and 2020 is another indicator of illegal totoaba fishing activities.

96. It has been suggested that estimates of the abundance and status of the totoaba population have been produced from official records of totoaba landings alone, without sufficient information on illegal fishing and fishing effort, and without population dynamics studies for the species, which has "hampered monitoring of the abundance of the resource and its patterns of growth and mortality."[268] According to some studies, the historical decline in totoaba landings in the 1970s is explained by factors relating to increased fishing effort, salinization of the environment due to reduced flow in the Colorado River, alteration of totoaba spawning grounds, and the Pacific decadal oscillation, which has effects on the mean temperature of the Pacific Ocean.[269]

97. Also, it has been asserted that if the totoaba is endangered, its population should exhibit its former characteristics of a decimated species that has undergone a shrinkage of genetic variability and shows signs of a bottleneck.[270] In this regard, a 2020 study documented that the totoaba population has not undergone a reduction in genetic variability, nor is there evidence of inbreeding depression, as would be expected in a small population.[271] Restocking done by the Universidad Autónoma de Baja California (UABC) with the support of three breeding units may have benefited wild populations.[272] In the last thirty years (since 1997), the UABC and other institutions have released more than 500,000 totoaba juveniles in different parts of the Gulf of California[273] (70,000 in 2023 alone),[274] suggesting that releases of juvenile totoabas for purposes of conservation may be contributing to an expansion of the species' current range.[275]

98. In 2023, the presence of captive-bred individuals among the wild totoaba population was detected through genetic markers that aided in identifying released individuals; nevertheless, their integration into wild populations still remains unclear.[276]

99. The approach to the genetic variability of the species and restocking activities with captive-bred individuals suggest that sport and recreational fishing of totoaba (with hooks and lines) would increase selectivity and reduce "catchability," with a lesser likelihood of overfishing. This would entail the setting of quotas based on population status, as determined by reference points and control rules.[277]

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268. Profepa (2019), "Pez totoaba: el pez más grande del Alto Golfo," online at <https://bit.ly/46oXzxI>.
269. D. Lercari and E. A. Chávez (2007), *supra* at <https://bit.ly/4cVXtj7>.
270. F. Valenzuela Quiñonez (2014), *supra* at 17, at: <https://bit.ly/3ZQhAdK>.
271. D. Guevara Aguirre and M. A. Cisneros Mata (2020), *supra* at 85, at: <https://bit.ly/3SK94u4>.
272. Id. *See also* S. A. Berkeley et al. (2004), "Fisheries sustainability via protection of age structure and spatial distribution of fish populations," *Fisheries* 29(8): 23–32, at: <https://bit.ly/4gi4Brs>.
273. L. M. Enríquez Paredes et al. (2023), *Informe final del proyecto RE006: Evaluación del impacto y pertinencia de las liberaciones experimentales de totoaba (*Totoaba mcdonaldi*) producida en cautiverio como estrategia de conservación de la población silvestre*, UABC, at 94, at: <https://bit.ly/4cBxZbe>.
274. N. A. Gómez Bravo (2023), "Comunidad cimarrona logró en un solo día la mayor cantidad de totoabas liberadas," *Gaceta UABC*, 21 November 2023, at: <https://bit.ly/40Lk7re>.
275. D. Guevara Aguirre and M. A. Cisneros Mata (2020), *supra* at 85, at: <https://bit.ly/3SK94u4>.
276 L. M. Enríquez Paredes et al. (2023), *supra* at 1, 3 and 104, at: <https://bit.ly/4cBxZbe>.
277. D. Guevara Aguirre and M. A. Cisneros Mata (2020), *supra* at 88–9, at: <https://bit.ly/3SK94u4>.

Photograph 8. Release of totoaba juveniles by UABC

Source: P. Moreno Rangel (2016), "Libera Facultad de Ciencias Marinas 10 mil totoabas en Puertecitos," 13 October 2016, *Gaceta UABC*, at: <https://bit.ly/42GUMQT>; G. Negrete (2022), "Hacen liberación de 20 mil alevines de totoaba en San Felipe," *Tribuna de San Luis*, at: <https://bit.ly/412yjwn>; J. Salazar (2023), "Libera UABC 70 mil alevines de totoaba en San Felipe," *La Voz de la Frontera*, at: <https://bit.ly/4hGMwUZ>.

5.1.2 Finfish and shrimp fishing

100. Council Resolution 24-02 instructs the Secretariat to prepare a factual record covering the effective enforcement of the 2020 Gillnets Order. This instrument permanently bans all gillnets from operating actively or passively for fishing activities in the delimited zone in the northern Gulf of California.[278] One of the main factors affecting vaquita habitat is the use of gillnets in the VRA which are commonly used in fisheries in the UGC. Although the use of gillnets in the VRA is banned under the 2020 Gillnets Order, experts and fishermen interviewed by the Secretariat indicate that fishing activities continue at the similar levels and with the same modalities as before the restrictions.[279]

278. 2020 Gillnets Order, second article, at: <https://bit.ly/48VdSma>.

279. Interviews conducted by the Secretariat—with a fishing organization (September 9) and fishing organization leaders (September 10)—during the special mission held September 9–11, 2024, in San Felipe, BC. Interviews conducted by the Secretariat with a fisheries economic studies organization in Ensenada, BC (September 12, 2024), and with a non-governmental organization in San Felipe, BC (virtual on May 22, 2024, and in person on September 12, 2024).

101. Six different types of fisheries, divided among three ports, have developed in the UGC region (Figure 3): San Felipe, Golfo de Santa Clara y Puerto Peñasco,[280] where 254 deep-sea vessels and 498 inshore vessels are operating.[281] Three of these fisheries—shrimp, bigeye croaker, and sierra—have an impact on the vaquita which explains the restrictions on the use of gillnets by means of the 2020 Gillnets Order. Commercial permits have been issued to 113 natural persons and 166 legal persons for the operation of the various fisheries; the gulf corvina, finfish, and shrimp fisheries account for the bulk of these permits.[282]

Table 2. Principal fisheries of the Upper Gulf of California

Fishery	Fishing method
Shrimp	*Chinchorro de línea* (gillnet allowed to drift during the day).
Bigeye croaker (*chano*)	Bottom-set or bottom-drifting gillnets, generally used at night.
Sierra	Surface gillnets with 50% of operations at night.
Gulf corvina	Gillnet drifting or operated by rapidly encircling a school of fish during the day for very short periods, averaging no more than 30 minutes.
Sharks and rays	Longlines, with both day and night operations.
Clams and benthic resources	Diving.

Source: Table produced by the Secretariat based on IMIPAS (2024), "Pesquerías del Alto Golfo de California" Instituto Mexicano de Investigación en Pesca y Acuacultura Sustentables, at: <https://bit.ly/41uB3mR>.

102. Prior to the gillnet ban in the VRA, fishing activities in the three main fisheries, affecting the vaquita and subject to restrictions in accordance with the 2020 Gillnets Order, accounted for 73% of the value of the fishery: shrimp accounted for 42 percent of total catch by value, bigeye croaker 21 percent, sierra 10 percent, and sharks and rays 2 percent.[283]

103. To understand the impact of the gillnet ban, imposed by the 2020 Gillnets Order, on the bigeye croaker, sierra, and shrimp fisheries, a historical analysis was conducted on the notices of landing received at three offices: San Felipe, Golfo de Santa Clara, and Mexicali.[284]

104. Production of bigeye croaker in San Felipe and Golfo de Santa Clara exhibited an increase as of 2021 (see Figures 11 and 12), while sierra shows a significant increase starting in 2022, especially in the Gulf of Santa Clara with a maximum of almost 4,500 tons in 2023 (Figure 12).

105. There are also data indicating an increase in the production of sierra and bigeye croaker in Mexicali especially in 2018 and 2019 (see Figures 13 and 14 respectively). This is because the fishermen in San Felipe began recording their landings with the Mexicali office in 2017.

280. Conapesca (2023), "Producción pesquera," Comisión Nacional de Acuacultura y Pesca, at: <https://bit.ly/3A7f0XO>.

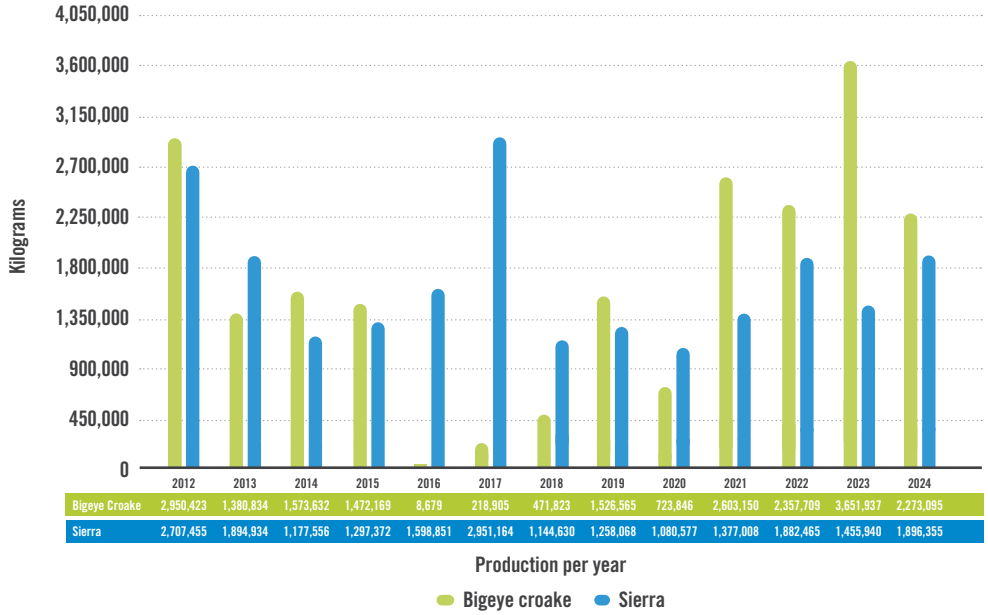
281. The information submitted to CITES by the Government of Mexico indicates that in the period from September 2020 to 15 July 2023, 579 fishing permits were granted: 556 to small craft and 23 to large craft. It should be noted that these figures correspond to fishing titles and not to vessels in operation. GIS (2023), *Plan de acción de cumplimiento del gobierno de México para prevenir la pesca y el comercio ilegal de totoaba, sus partes y derivados, en protección a la vaquita marina: informe de avances y resultados, agosto 2023*, appendix, target 4.2, at 297, at: <https://bit.ly/4fXDtOg> [2023 Progress Report on CITES Action Plan].

282. Conapesca (2023), *supra* at: <https://bit.ly/3A7f0XO>.

283. IMIPAS (2024), "Pesquerías del Alto Golfo de California," Instituto Mexicano de Investigación en Pesca y Acuacultura Sustentables, at: <https://bit.ly/41uB3mR>.

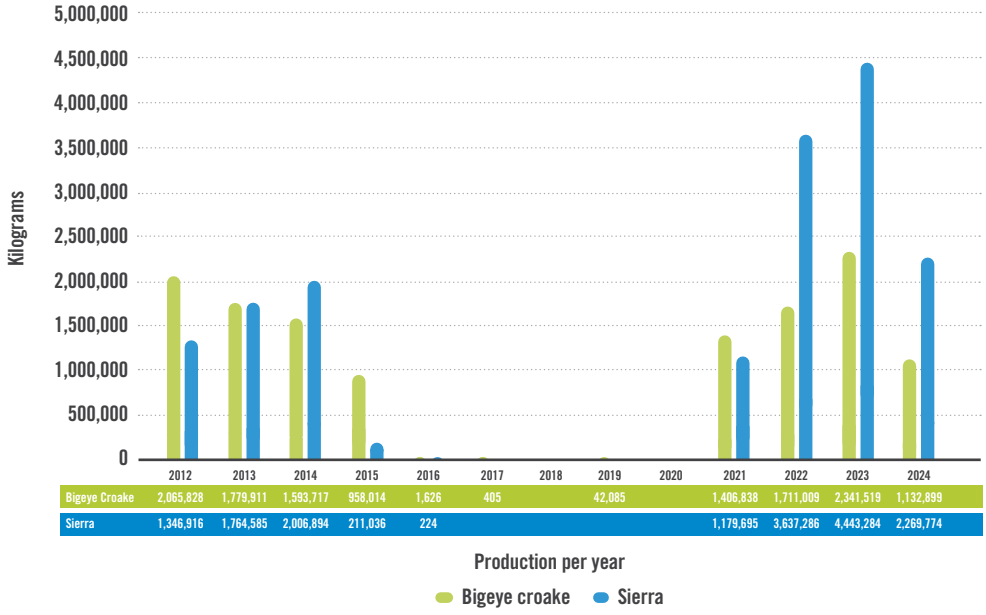
284. Conapesca (2024), "Avisos de arribo, cosecha y producción," Comisión Nacional de Acuacultura y Pesca, México, at: <https://bit.ly/48xsw3D>. For the period 2012–2017, the data was provided by Pesca Responsable y Comercio Justo by email.

Figure 11. Production of bigeye croaker and sierra registered in San Felipe, 2012–August 2024



Source: Produced by the Secretariat based on data provided by Pesca Responsable y Comercio Justo by email, available at: <http://cec.org/files/sem/20250131/aba003.xlsx>. Pesca Responsable y Comercio Justo obtained data for 2012-2017 via access to information requests and on webpages that were functioning at the time. For 2018-2024, data was obtained from Conapesca (2024), "Avisos de arribo, cosecha y producción," Comisión Nacional de Acuacultura y Pesca, at: <https://bit.ly/48xsw3D>.

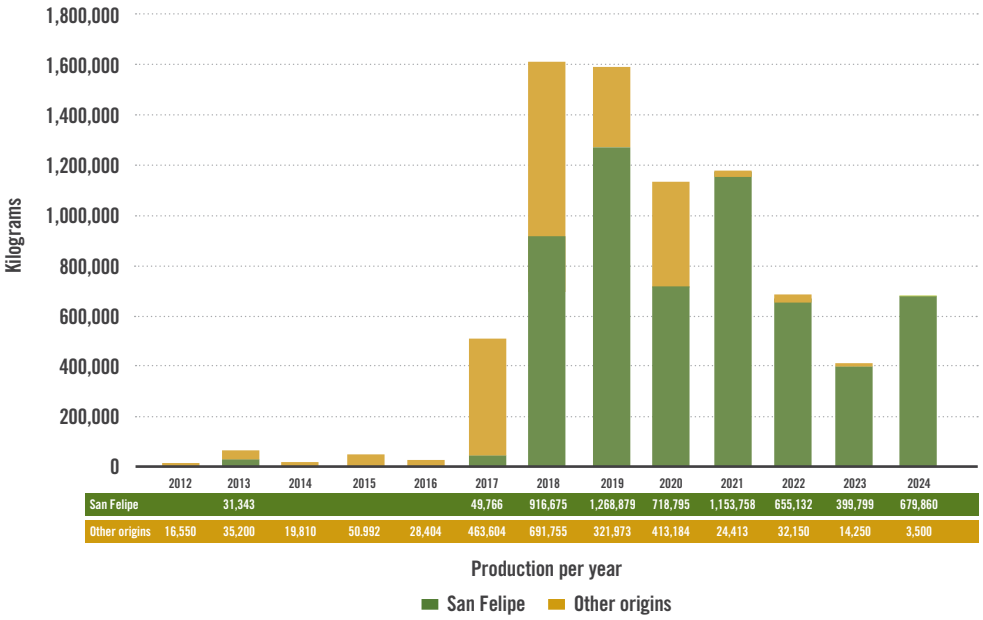
Figure 12. Production of bigeye croaker and sierra registered in Golfo de Santa Clara



Note: Data for bigeye croaker corresponds to 2012–2017, 2019, and 2021– 10 August 2024. Data for sierra corresponds to 2012–2016 and 2021– 10 August 2024.

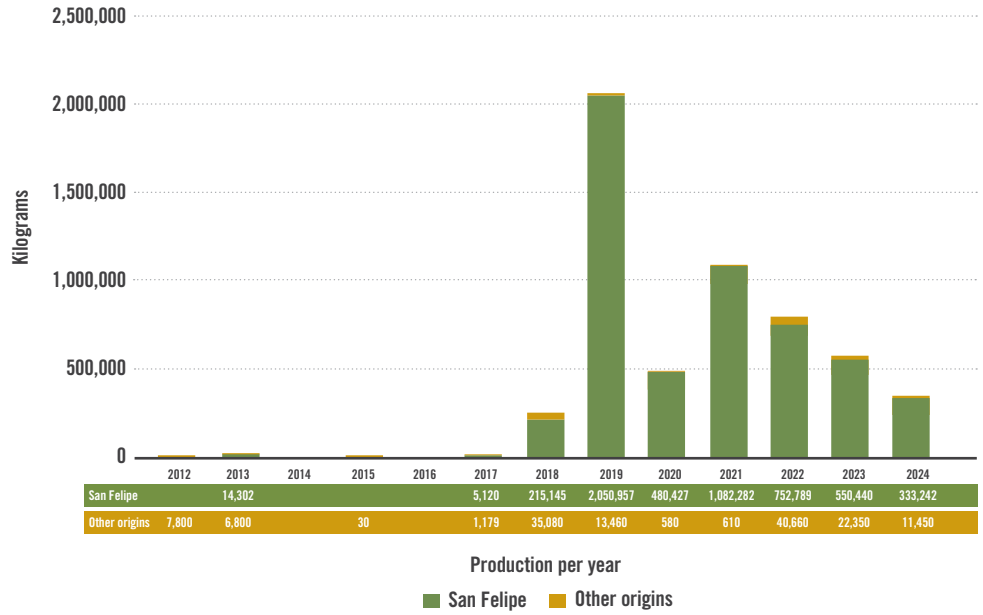
Source: Produced by the Secretariat based on data provided by Pesca Responsable y Comercio Justo by email, available at: <http://cec.org/files/sem/20250131/aba003.xlsx>. Pesca Responsable y Comercio Justo obtained data for 2012-2017 via access to information requests and on webpages that were functioning at the time. For 2018-2024, data was obtained from Conapesca (2024), "Avisos de arribo, cosecha y producción," Comisión Nacional de Acuacultura y Pesca, at: <https://bit.ly/48xsw3D>.

Figure 13. Production of sierra registered in Mexicali, 2012–August 2024



Source: Produced by the Secretariat based on data provided by Pesca Responsable y Comercio Justo by email, available at: <http://cec.org/files/sem/20250131/aba003.xlsx>. Pesca Responsable y Comercio Justo obtained data for 2012-2017 via access to information requests and on webpages that were functioning at the time. For 2018-2024, data was obtained from Conapesca (2024), "Avisos de arribo, cosecha y producción," Comisión Nacional de Acuacultura y Pesca, at: <https://bit.ly/48xsw3D>.

Figure 14. Production of bigeye croaker registered in Mexicali, 2012–August 2024



Source: Produced by the Secretariat based on data provided by Pesca Responsable y Comercio Justo by email, available at: <http://cec.org/files/sem/20250131/aba003.xlsx>. Pesca Responsable y Comercio Justo obtained data for 2012-2017 via access to information requests and on webpages that were functioning at the time. For 2018-2024, data was obtained from Conapesca (2024), "Avisos de arribo, cosecha y producción," Comisión Nacional de Acuacultura y Pesca, at: <https://bit.ly/48xsw3D>.

Figure 15. Production of shrimp in the UGC, 2012–2024

Source: Produced by the Secretariat based on data provided by Pesca Responsable y Comercio Justo by email, available at: <http://cec.org/files/sem/20250131/aba003.xlsx>. Pesca Responsable y Comercio Justo obtained data for 2012-2017 via access to information requests and on webpages that were functioning at the time. For 2018-2024, data was obtained from Conapesca (2024), "Avisos de arribo, cosecha y producción," Comisión Nacional de Acuacultura y Pesca, at: <https://bit.ly/48xsw3D>.

106. In 2020–2021 (see Figure 15), shrimp production underwent an exponential increase and since then, has maintained production similar to 2012–2015 (prior to the imposition of the first fishing restrictions). In addition, the Mexicali office began keeping production records in 2018, which are all linked to San Felipe permit holders.

107. Since 2015, there have been several restrictions on fishing for bigeye croaker, sierra, and shrimp whose impacts on fishing production in Golfo de Santa Clara, extended until 2020 for shrimp and 2021 for sierra and bigeye croaker. In San Felipe, the sierra fishery was not affected, while the bigeye croaker and shrimp fisheries were affected until 2017 and 2019, respectively. Following their initial decline due to the restrictions imposed, the fisheries in question grew to reach levels higher than those recorded in early 2012.

108. Concerning fishing permits, the Golfo de San Clara had 151 permits between 2019 and 2024 for the use of the RS-INP-MEX trawl net (alternative fishing gear).[285] This fishing community had 439 permits for the use of gillnets (*redes agalleras y de enmalle*) prior to the imposition of restrictions.[286]

109. In San Felipe there were 46 permits for the RS-INP-MEX net issued from 2015 to 2024.[287]

285. Conapesca (2024), "Permisos y concesiones de pesca comercial para embarcaciones mayores y menores", datos abiertos, at: <https://bit.ly/3tiouvH>.
286. Id.
287. Id.

5.1.3 Analysis of notices of landings and alternative fisheries

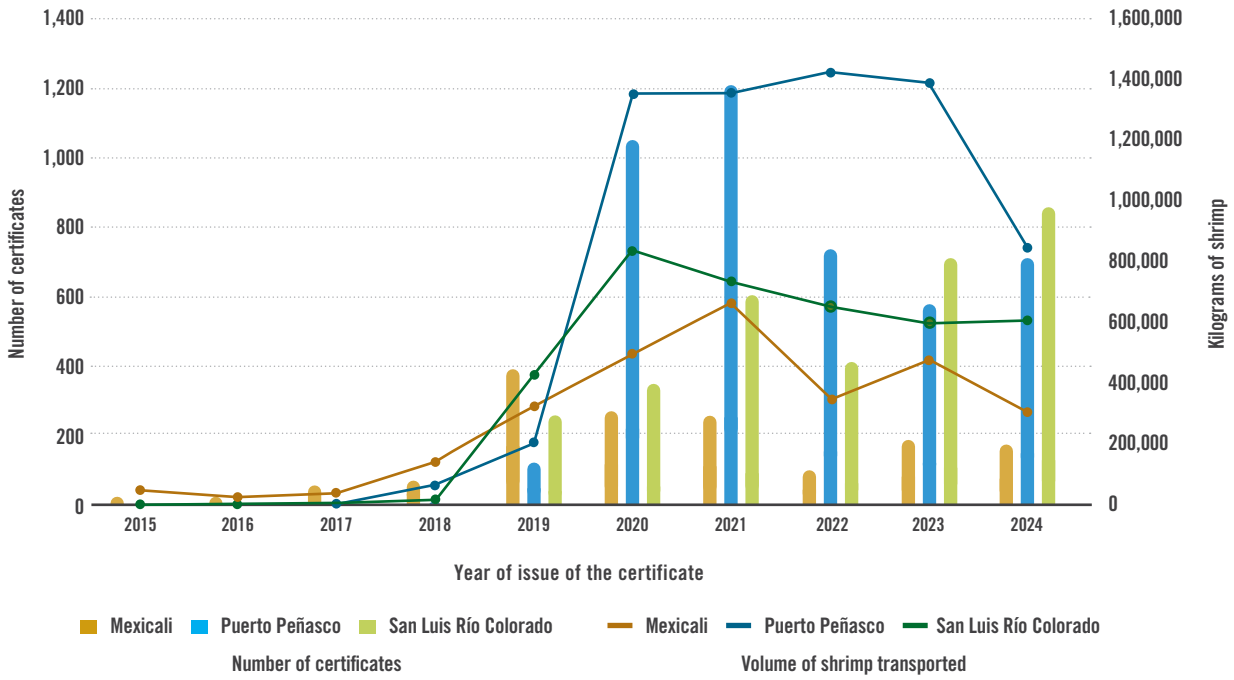
110. An analysis of notices of landings since 2018 suggests that the fisheries of interest regained their productivity after the imposition of gillnet restrictions in the UGC. While data on the effectiveness of the alternative RS-INP-MEX net are not available, available data on fishery production in the UGC suggest that the use of the alternative net maintains—and even exceeds—levels recorded before the restrictions were established. Accounts collected by the Secretariat,[288] as well as public reports, some of them published on the social media accounts of fishing associations in the region,[289] maintain that in reality, the prohibited nets never stopped being used in the Z0 and the VRA.[290] At various meetings between the Secretariat and local fishermen, it was openly stated that "the alternative nets don't work," that they allegedly do not offer the same degree of catch or production efficiency, and that fishermen who do use them are subjected to unfair competition in the absence of fisheries enforcement, and even to threats from other fishermen.[291] The organization *Pesca Alternativa de Baja California* (Pesca ABC) has developed a catalogue of species caught with alternative fishing gear,[292] whose effectiveness is comparable to that of gillnets, according to preliminary reports by the organization.[293]

288. Interviews conducted by the Secretariat—with a fishing organization (September 9) and fishing organization leaders (September 10)—during the special mission held September 9–11, 2024, in San Felipe, BC. Interviews conducted by the Secretariat with a fisheries economic studies organization in Ensenada, BC, and with a non-governmental organization in San Felipe, BC (both on September 12, 2024).
289. The Secretariat documented various social media posts concerning the use of fishing gear in the zone; *see* <http://cec.org/files/sem/20250205/abb001.zip>.
290. *See, e.g.*, E. Méndez (2024), "Alertan sobre blanqueamiento de camarón en hábitat de vaquita para venta en EU," *Excelsior*, at: <https://bit.ly/40yO0v4>.
291. Various reports state that resistance to the use of alternative nets is due in large part to the fishermen's lack of interest in adopting them. *See* Expert Committee on Fishing Technologies (2017), *Alternative Gear to Gillnets in the Upper Gulf of California (2004-2016)*, at 11, at: <https://bit.ly/4htvvxn>.
292. Pesca Alternativa de Baja California (2024), *Catálogo de especies del Alto Golfo de California obtenidas sin redes de enmalle*, at: <https://bit.ly/42HSaSC>.
293. Pesca Alternativa de Baja California (n.d.), *Report on Sustainable Seafood Production*, in press.

111. The available information and the testimonials of fisherman and experts consulted by the Secretariat indicate that small boats in the UGC elude restrictions ensuing from the 2020 Gillnets Order, and other trade-related restrictions, by sending their catch to processors in southern Sonora and northern Sinaloa, where the corresponding export documents are reissued, as if the fish originated in these latter regions.[294] In the last decade, there has been a substantial increase in the number of certificates (*guías de pesca*) issued for interstate transportation of shrimp, particularly blue shrimp and brown shrimp from the municipalities of Mexicali, Puerto Peñasco, and San Luis Río Colorado (see Figure 16 below).[295]

112. Experts and fishermen consulted have indicated that fishing activities continue at the same levels and using the same methods as prior to the restrictions.

Figure 16. Certificates for interstate transportation (*guías de pesca*) of shrimp issued in Mexicali, Puerto Peñasco, and San Luis Río Colorado, 2015–2024



Source: Produced by the Secretariat based on Conapesca (2024), "Guías de pesca," open-source data, at: <https://bit.ly/4aycAiV>.

294. Interviews with fishing organizations conducted by the Secretariat during the special mission to San Felipe, BC, 9–11 September 2024.
295. Conapesca (2024), "Guías de Pesca", Comisión Nacional de Acuacultura y Pesca, at: <https://bit.ly/4aycAiV>.

5.2 Opinions on other risk factors for the vaquita

113. Other explanations advanced for high vaquita mortality include the alteration of water flow in the Colorado River and the high contaminant load from wastewater discharges. On this aspect, a Conanp report suggested that among the impacts and threats facing biodiversity in the UGC Biosphere Reserve are those of organic pollution caused by discharges of wastewater from urban areas and shrimp farms; a significant reduction and disappearance of water and nutrient flows from the Colorado River, and increased pesticides from agriculture.[296] However, the study in question did not establish any connection between these activities and vaquita mortality.[297]

114. Concerning pollution from excess inflows of silt, changes in flow patterns, and increased salinity caused by alterations to the Colorado River, it has been suggested that these pose threats to the survival of the vaquita.[298] On this score, a 2018 study was conducted on the socioeconomic aspects of the region based on interviews with 146 small-scale fishermen in Golfo de Santa Clara.[299] The study found that the vaquita's habitat had been affected by alteration of water flow in the Colorado River, and went on to add that the vaquita has always been an estuarine species, not a marine species.[300] This report was criticized by other oceanographers, who stated that its findings "are incongruent with their own data, their logic is untenable, their analyses fail to consider current illegal fishing practices, and their recommendations are unjustified and misdirected."[301] The source concluded that "vaquita face extinction because of bycatch, not because of the lack of river flow."[302]

115. Another study documented that changes in water flow occur during annual seasonal cycles and that these changes have not affected the productivity of the UGC.[303] Similarly, changes in water salinity caused by alteration of the Colorado River have been insignificant and cannot be concluded to have had an effect on vaquita habitat.[304] In the absence of solid evidence, the Cetacean Specialists Group (GEC) of the Species Survival Commission (CSE) of the International Union for the Conservation of Nature (IUCN) and other experts[305] have refuted this hypothesis.[306] Studies on vaquita population size, risk of extinction, and causes of mortality, which took into account alteration of water flows in the Colorado River, have found that bycatch in gillnets continues to pose the greatest risk for vaquita mortality.[307] It must also be noted that there are no major urban centers in the region, nor any active shrimp farms, nor has any scientific basis been found for the assertion that flow alteration in the Colorado River is a risk factor for the vaquita. One report states:

296. Conanp (2007), *supra* at 66–7, 89, at: <https://bit.ly/3Ln3TfC>.
297. Id.
298. D. Lercari and E. A. Chávez (2007), "Possible causes related to historic stock depletion of the totoaba, *Totoaba macdonaldi* (Perciformes: Sciaenidae), endemic to the Gulf of California," *Science Direct* 86(2–3): 136–42, at: <https://bit.ly/4cVXtj7>.
299. N. Manjarrez Bringas *et al.* (2018), "Lessons for sustainable development: Marine mammal conservation policies and its social and economic effects," *Sustainability* 10(7): 1–13, at: <https://bit.ly/3LmiPKS>.
300. Id.
301. K. W. Flessa *et al.* (2019), "Vaquita face extinction from bycatch: Comment on Manjarrez-Bringas, N. *et al.*, Lessons for sustainable development: Marine mammal conservation policies and its social and economic effect; *Sustainability* 2018, 10, 2185," *Sustainability* 11(7): 2161, at: <https://bit.ly/4jko0uL>.
302. Id.
303. R. C. Brusca *et al.* (2017), *supra* at: <https://bit.ly/48byGqn>.
304. V. F. Camacho Ibar (2019), "¿Qué tan estuarino era el hábitat de la vaquita marina? o ¿Era la vaquita estuarina?," presentation given in a lecture series on the vaquita, Caracol Museo de Ciencias, 1 August 2019, Instituto de Investigaciones Oceanológicas, Universidad Autónoma de Baja California, Mexico, at: <http://cec.org/files/sem/20250131/aba008.pptx>.
305 For example: R. C. Brusca and O. Vidal (2025), "Commentary: State of knowledge of the population of the vaquita (*Phocoena sinus*) from the Upper Gulf of California: a bibliometric análisis," *Front. Conserv. Sci*, 6:1564571, at: <https://bit.ly/4kvlba0> ("The idea that the Colorado River once created a large brackish-water estuary in the Gulf of California is a myth.").
306. IUCN-SSC to Mexican government officials (26 March 2021), scientific evidence refuting false allegations, at: <https://bit.ly/3WlptHM>; IUCN-CSG to Secretary General of CITES, 3 November 2023, letter to CITES Secretariat in re "Mexico's progress and results report on its compliance action plan to prevent fishing for and illegal trade in totoaba, their parts and/or derivatives, to protect the vaquita (notification no. 2023/112 Compliance Action Plan)," at: <https://bit.ly/3xXs1lT>.
307. J. A. Robinson *et al.* (2022), "The critically endangered vaquita is not doomed to extinction by inbreeding depression," *Science* 376(6593): 635–9, at: <https://bit.ly/4cICe4Q>; F. Gulland *et al.* (2020), "Vaquitas (*Phocoena sinus*) continue to die from bycatch not pollutants," *Veterinary Record* 187(7): 1–4, at: <https://bit.ly/3xR0JOa>; L. Rojas Bracho *et al.* (2019), "Unsubstantiated claims can lead to tragic conservation outcomes," *BioScience* 69(1): 12–14, at: <https://bit.ly/3LrAeBV>.

> There also is no evidence for decline in vaquita prey species that might have been caused by reductions in river flow, nor any evidence that pollutants (specifically chlorinated hydrocarbon pesticides), that in the past could have been carried to the Northern Gulf of California by Colorado River water, pose a risk.[308]

116. The presence of chemical pollutants relating to the use of pesticides and fertilizers, as well as the presence of metals in the UGC, have been put forward as other possible risks to the survival of the vaquita. In 1993, heart, kidney, and liver samples were taken from a vaquita that had recently drowned in a totoaba net off the coast of Golfo de Santa Clara and were analyzed for heavy metals (copper, cadmium, manganese, iron, zinc, nickel, cobalt, chromium, and lead). Levels of metals in the tissues examined were low.[309] Another study published in 2020 analyzed 9 vaquitas found dead between 2016 and 2018 for PCBs (polychlorinated biphenyls), DDT (dichlorodiphenyltrichloroethane), and PBDEs (polybrominated diphenyl ethers). The concentrations found are lower than the toxicity thresholds for cetaceans.[310]

Photo: Image taken from video by Fabián Rodríguez / *Comisión Nacional de Áreas Naturales Protegidas* and National Marine Mammal Foundation, 2024

308. R. C. Brusca *et al.* (2017), *supra* at: <https://bit.ly/48byGqn>.
309. F. Gulland *et al.* (2020), *supra* at: <https://bit.ly/3xR0JOa>; L. Rojas Bracho *et al.* (2019), "Unsubstantiated claims…," at: <https://bit.ly/3LrAeBV>; B. Villar R., F. Páez Osuna, and H. Pérez Cortés M. (1993), "Concentraciones de metales pesados en el tejido cardiaco, hepático y renal de la vaquita *Phocoena sinus* (Mammalia, Phocoenidae)," *Anales Inst. de Biol. Univ. Nac. Autón. México Ser. Zool.* 64(1): 61–72, at: <https://bit.ly/4fccwq4>.
310. F. Gulland *et al.* (2020), *supra* at: <https://bit.ly/3xR0JOa>; L. Rojas Bracho *et al.* (2019), "Unsubstantiated claims…," at: <https://bit.ly/3LrAeBV>.

Photo: Tomas A. Jefferson / Viva Vaquita

6. Measures taken by Mexico

117. This section presents the measures taken by the Party in question to enforce the environmental laws covered by this factual record. It also presents information on the various mechanisms and initiatives ongoing in Mexico for protection of the vaquita and the totoaba.

6.1 Background

118. For decades, Mexico has been drafting and implementing various instruments for the protection of the vaquita, the totoaba, and their habitat (see Figure 4), which contribute to the enforcement of the environmental provisions addressed by this factual record.

119. In 1955, a refuge area was declared for the protection of the "most valuable fish species" in the Gulf of California,[311] in the waters of the northern UGC where these species usually spawn, and included a ban on all fishing in that area, except sport fishing.[312] The area delimited in 1955 coincides today to the core zone (known as "Colorado River Delta") of the UGC Biosphere Reserve, created on 10 June 1993.[313]

120. In 1974 a reserve, breeding, and repopulation area was declared for all fish species in the Colorado River delta area of the Gulf of California.[314] The corresponding order repealed the order issued in 1955,[315] and banned, again and without exceptions, all fishing in the refuge area.[316]

121. In 1993, an extensive marine and land area in the northern part of the UGC was declared a protected natural area with the status of a biosphere reserve.[317] Through the order creating the Upper Gulf of California and Colorado River Delta Biosphere Reserve, a total, indefinite ban was established on the hunting and fishing of 16 species, including the vaquita and the totoaba.[318]

6.2 Legal instruments for the protection of the totoaba and the vaquita

122. There is a variety of legal instruments for the protection of the totoaba and the vaquita, including coercive mechanisms such as bans, listing in a protected class, temporary fishing suspensions, fishing gear bans, and declaration of restricted shipping zones, among others, which are enforced by administrative and criminal measures. Non-coercive mechanisms include management plans, reserve areas, subsidies, educational programs, and incentives. In addition, international trade restrictions have been imposed on fish products originating in the UGC, all with the intention of protecting the vaquita. The institutional efforts along with the estimated population size of the species are shown in the figure below.

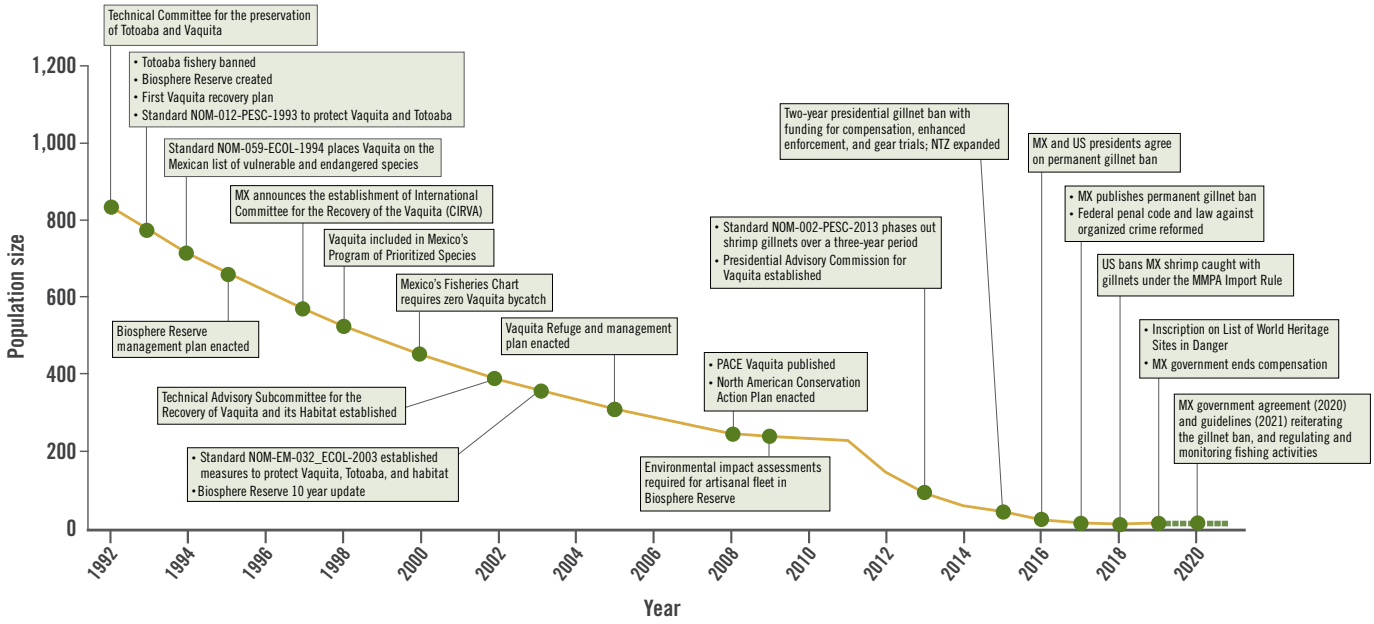
311. Semar (1955), *Acuerdo que establece veda y fija zona de refugio para protección de todas las especies de pesca en el Golfo de California*, published in the DOF on 22 February 1955, at: <https://bit.ly/467JqVt>.
312. Id. at second part of order.
313. UGC Biosphere Reserve Order, at: <https://bit.ly/3y7tsOV>.
314. SIC (now Ministry of the Economy) (1974), Acuerdo que determina como zona de reserva de cultivo o repoblación para todas las especies de pesca, la desembocadura del río Colorado en el Golfo de California, published in the DOF on 30 May 1974, at: <https://bit.ly/3WceE9I>.
315. Id. at preamble (second recital) and Transitory Article 2.
316. Id. at Article 3.
317. UGC Biosphere Reserve Order, at: <https://bit.ly/3y7tsOV>.
318. Id. at tenth article.

Table 3. Legal instruments for the protection of the vaquita and the totoaba

Year	Instrument	Objective
1949	Temporary ban on shark fishing in connection with totoaba bycatch.	To reduce totoaba bycatch during the spawning period of the species.
1955	Closed refuge area for the protection of fish species in their spawning area and breeding in the northern of the Gulf of California.	To protect important fisheries such as shrimp, totoaba, grouper, and others.
1955	Temporary closure and regulation of totoaba, cabaicucho and shark fisheries in the Gulf of California.	For conservation of the totoaba and white seabass fisheries so as to obtain sustained maximum production, and to rehabilitate the area.
1974	Reserve, breeding, and restocking area for all fish species in the Colorado River delta area of the Gulf of California.	To increase the populations of commercial species such as shrimp, totoaba, grouper, and others.
1975	1975 Totoaba Fishing Ban.	To conserve the totoaba.
1992	Order prohibiting the use of gillnets known as totoaberas	To protect the vaquita from gillnets.
1993	Upper Gulf of California and Colorado River Delta Biosphere Reserve	To protect the region's ecosystems, favoring sustainable development of coastal communities, and a rational and sustainable resource use.
1994	Mexican Official Standard NOM-012-PESC-1993	To prohibit fishing activities in the UGC and the use of totoaba nets.
1994	Mexican Official Standard NOM-059 (original version published as NOM-059-Ecol-1994 and updated in 2010 as NOM-059-SEMARNAT-2010, the version currently in force)	To establish risk categories and specifications for the inclusion, exclusion, or change in the list of species at risk.
2002	Emergency Mexican Official Standard NOM-EM-139-ECOL-2002	To establish measures for the protection of marine and coastal ecosystems as well as species subject to special protection in waters of the UGC Biosphere Reserve.
2005-2009	Economic compensation program for gillnet fisheries and promotion of alternatives to fishing in the UGC	To contribute to halting fishing with gillnets and to give fishermen access to other economic activities.
2005	Vaquita Refuge Area (VRA)	To protect the vaquita through conservation and management measures that allow for the recovery of the population within a defined area in the western portion of the Upper Gulf of California, off the coast of the state of Baja California, and corresponding to the area with the highest concentration of the species.
2005	Vaquita Protection Program	To establish conservation guidelines and promote measures to regulate productive activities within the VRA.
2007	Species at Risk Conservation Program	To develop economic alternatives for highly disadvantaged regions and promote the conservation of environmental goods and services.
2008	Action Program for the Conservation of the Species: Vaquita (Phocoena sinus) (PACE-Vaquita)	To conserve and recover the species through promotion of sustainable management of marine and coastal resources in the UGC.
2013	Mexican Official Standard NOM-002-SAG/PESC-2013	To regulate the harvest of shrimp species with emphasis on the UGC. Authorized the RS-INP-MEX trawl net.
2015	2015 Gillnets Order	To establish temporary suspension of commercial fishing with gillnets and/or longlines in the UGC.
2017	2017 Gillnets Order	To establish a gillnet ban in the UGC; prohibited the use of gillnets with various conditions.
2018	Extension of the Vaquita Refuge Area	To extend the VRA polygon to cover the area with the highest concentration of vaquitas, off the coast of BC, near San Felipe, in order to allow and promote the recovery of the population.
2020	2020 Gillnets Order	To establish the Z0/VRA Enforcement Plan.
2021	Implementation Triggers Order	To establish the thresholds that trigger measures and allocation of resources for surveillance and monitoring in the Z0.

Source: Table produced by the Secretariat based on M. Bobadilla et al. (2011), "Evolution of environmental policy instruments implemented for the protection of totoaba and the vaquita porpoise in the Upper Gulf of California," *Environmental Science & Policy* 14(8): 998–1007, at: <https://bit.ly/3EgyECD>.

Figure 17. Measures and instruments adopted for the protection of the vaquita and population size of the species, 1992–2020



Note: Schematic description of vaquita population decline based on data from CIRVA (2014), *Report of the Fifth Meeting of the International "Comité Internacional para la Recuperación de la Vaquita" (CIRVA–5)*, at: <https://bit.ly/4g0XBzX>; A. M. Jaramillo Legorreta *et al.* (1999), "A new abundance estimate for vaquitas: First step for recovery," *Marine Mammal Science* 15(4): 957–73, at: <https://bit.ly/4fda3va>; L. Rojas Bracho *et al.* (2020), *Survey Report for Vaquita Photographic Identification Research 2019*, IUCN, at: <https://bit.ly/3Bllxiv>.

Source: E. Sanjurjo Rivera *et al.* (2021), "An economic perspective on policies to save the vaquita: Conservation actions, wildlife trafficking, and the structure of incentives," *Frontiers in Marine Science*, vol. 8, at: <https://bit.ly/3ZNVYzR>.

6.2.1 Totoaba

123. While the emphasis is justifiably placed on the conservation status of the vaquita today, fishing restrictions initially focused on the totoaba, then a species of high commercial value. The first such measure arose in 1949, when shark fishing permit holders were prohibited from using "gillnets or *chinchorros*" at the mouth of the Colorado River and in the northern Gulf of California, with the aim of reducing totoaba bycatch.[319] Later, in 1955, a seasonal ban was placed on totoaba fishing; specifications were established for fishing gear, and a minimum catch size for totoaba was imposed.[320]

124. After the 1955 partial ban on totoaba fishing, no other instruments relevant to the management of the species were issued until the mid-1970s, when domestic and international attention was drawn to the need to address the protection status of the totoaba. The 1975 Totoaba Fishing Ban[321] placed a total ban on totoaba fishing;[322] the following year, CITES held its first meeting of the Conference of the Parties (CoP1),[323]

319. Semar (1949), *Acuerdo que modifica el sistema de captura del tiburón, en la desembocadura del río Colorado y parte norte del golfo de California o mar de Cortés*, published in the DOF on 19 May 1949, at: <https://bit.ly/3XUVfwn>.
320 Semar (1955), *Acuerdo que establece vedas y reglamenta la pesca de las especies conocidas con los nombres de totoaba y cabaicucho y establece normas para la pesca del tiburón en el Golfo de California*, published in the DOF on 22 February 1955, at: <https://bit.ly/3LDZuoy>.
321. 1975 Totoaba Fishing Ban, at: <https://bit.ly/4aZ1AL8>.
322. Id. at Article 1.
323. CITES (1976), *First Meeting of the Conference of the Parties, 02 - 06 November 1976, Bern, Switzerland,* at: <https://cites.org/esp/node/1270>.

Photograph 9. Sport fishing of totoaba

Source: Author unknown. Obtained by the CEC Secretariat during the special mission of 9–11 September 2024 to the Universidad Autónoma de Baja California facilities.

the totoaba was included in Appendix I.[324] Appendix I includes "all species threatened with extinction which are or may be affected by trade;" according to CITES, "trade in specimens of these species must be subject to particularly strict regulation in order not to endanger further their survival and must only be authorized in exceptional circumstances."[325] Nearly ten years later, in 1986, the totoaba was included on the IUCN Red List[326] as a "threatened" species; in 1996, it was listed as "critically endangered,"[327] and in 2020 as "vulnerable." This change in classification is the of a better application of the Red List categories and criteria, as well as a greater data availability.[328] In the United States, the totoaba has been listed as an endangered species under the Endangered Species Act since 1979.[329]

125. In 1994, after to the publication of criteria for listing of species,[330] the Mexican Official Standard NOM-059-Ecol-1994 was adopted, the original version of NOM-059, which listed the totoaba as an endangered endemic species (category P*).[331] The totoaba is still in the same category under NOM-059.[332]

324. CITES (1976), "Amendments to Appendices I and II of the Convention adopted by the Conference of the Parties to the Convention during its first meeting," at 58, at: <https://cites.org/esp/node/1270>.
325. CITES-1973, Article II, paragraph 1, at: <https://bit.ly/4gwpZuC>.
326. Totoaba-Red List IUCN at <https://bit.ly/3S9rZhh>.
327. M. A. Cisneros Mata *et al.* (2021), "*Totoaba macdonaldi*," *The IUCN Red List of Threatened Species*, 2021: e.T22003A2780880, at: <https://bit.ly/3AX1KFA>.
328 Totoaba-Red List IUCN at <https://bit.ly/3S9rZhh>.
329. NOAA Fisheries (2023), "Totoaba: Conservation & Management," National Marine Fisheries Service- National Oceanic and Atmospheric Administration, at: <https://bit.ly/3XnA2JF>.
330. Ministry of Urban Development and Ecology (*Secretaría de Desarrollo Urbano y Ecología*; now Semarnat) (1991), *Acuerdo por el que se establecen los criterios ecológicos CT-CERN-001-91 que determinan las especies raras, amenazadas, en peligro de extinción o sujetas a protección especial y sus endemismos, de la flora y la fauna terrestres y acuáticas en la República Mexicana*, published in the DOF on 17 May 1991, online at <https://bit.ly/461q0Sa>.
331. NOM-059-Ecol-1994, *Que determina las especies y subespecies 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, at: <https://bit.ly/3tgSFU0>.
332. NOM-059-Semarnat-2010, at: <https://bit.ly/46Zg9fd>.

6.2.2 Vaquita

i. Inclusion on lists of protected species

126. The vaquita was included on the IUCN Red List of Threatened Species in 1978 as "vulnerable." In 1990 it was reclassified as "endangered," and has been listed as a "critically endangered" species since 1996.[333]

127. CITES, for its part, included the vaquita in Appendix I in 1979,[334] a little over two years after inclusion of the totoaba.

128. In Mexico, NOM-059, published in 1994, listed the vaquita as an endangered endemic species (category P*).[335] The vaquita is still in the same category under the current version of NOM-059.[336]

ii. International Committee for the Recovery of the Vaquita

129. In 1996, at the 48th meeting of the IWC in Aberdeen, UK, Mexico presented a recovery strategy for the vaquita.[337] An important component of the meeting was the Mexican authorities' proposal to create a committee made up of domestic and international scientists, called the CIRVA,[338] tasked with drafting a plan for the recovery of the species. From 1997 to 2004, CIRVA issued various reports[339] and conducted a study (published in 2004) to assess the risk factors contributing to the decline of the vaquita population.[340]

iii. UGC Biosphere Reserve and Vaquita Refuge Area

130. The UGC Biosphere Reserve[341] was created in 1993 with the intention of "conserving and protecting the representative ecosystems of the region, biodiversity, evolutionary processes, breeding, spawning, migration and feeding habitats for marine species of ecological and commercial importance," and most importantly, endemic, threatened, and endangered species such as the vaquita and the totoaba.[342]

131. In 2005, after CIRVA recommended the establishment of a refuge area including the area with the highest concentration of vaquitas and encompassing an area larger than the UGC Biosphere Reserve,[343] Mexico decided to establish the Vaquita Refuge Area with a total area of 1,263.85 km^2, which would include both the zone within the protected natural area and waters outside the UGC Biosphere Reserve in the western portion of the Upper Gulf of California.[344] That same year the Refuge Program, a protection program for the vaquita within the refuge area located in the western UGC, was created.[345] The purpose of the program was to establish conservation guidelines and to promote measures for regulating economic activity within the vaquita reserve area. Three years later, Mexico created a management system for the VRA that was incorporated into PACE-Vaquita (see paragraph 133).[346]

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333. IUCN (2022), "Vaquita," IUCN Red List of Threatened Species, at: <https://bit.ly/4fcHYFB> [Vaquita-Red List UICN] *See also* IUCN (2008), WCC 2008 RES 025, "Avoiding extinction of the Vaquita Porpoise *Phocoena sinus*," 2008 World Conservation Congress, Barcelona, at: <https://portals.iucn.org/library/node/44175> [UICN-Resolution 4.025].
334. CITES (1979), "Amendments to Appendices I and II of the Convention, adopted at the second meeting of the Conference of the Parties, San José, Costa Rica, 19 to 30 March 1979, at 72, at: <https://bit.ly/4jI2sbt>.
335. NOM-059-Ecol-1994, at: <https://bit.ly/3tgSFU0>.
336. NOM-059-Semarnat-2010, at: <https://bit.ly/46Zg9fd>.
337. International Whaling Commission (1997), *Forty-Seventh Report of the International Whaling Commission*, Aberdeen, UK at 22, at: <https://bit.ly/4d4sjpy>.
338. Id.
339. CIRVA (n.d.), *Scientific Reports of First Meeting, 25–26 January 1997; Second Meeting, 7–11 February 1999; Third Meeting, 18–24 January 2004*, at: <https://bit.ly/3B6YTKl>.
340. CIRVA (2004), *Report of the Third Meeting of the International Committee for the Recovery of the Vaquita (CIRVA)*, 18–24 January 2004, Ensenada, Baja California, Mexico, at: <https://bit.ly/3B6YTKl>.
341. UGC Biosphere Reserve Order, at: <https://bit.ly/3y7tsOV>.
342. Conanp (2007), *supra* at 21, at: <https://bit.ly/3Ln3TfC>.
343. Id. at 3–13.
344. Semarnat (2005), *Acuerdo mediante el cual se establece el Área de Refugio para la Protección de la Vaquita (*Phocoena sinus*)*, published in the DOF on 8 September 2005, preamble (*considerando*), at: <https://bit.ly/3zM1xEx>. It should be noted that in 2018, it was determined that the VRA should be expanded (to 1,841 km^2) to include the area with the highest concentration of vaquitas, near the port of San Felipe, BC, in order to allow and promote the recovery of the population. *Cf.* Semarnat (2018), *Acuerdo por el que se modifican diversas disposiciones del diverso por el que se establece el área de Refugio para la Protección de la Vaquita (*Phocoena sinus*)*, published in the DOF on 20 April 2018, at: <https://bit.ly/4de85KS>.
345. *Programa de proteccion de la vaquita dentro del area de refugio ubicada en la porcion occidental del Alto Golfo De California*, at: <https://bit.ly/3SZxSOP>.
346. *See* L. Rojas Bracho and R. R. Reeves (2013), *supra* at: <https://bit.ly/3E6HLpu> (describing the Refuge Program).

Photograph 10. Upper Gulf of California and Colorado River Delta Biosphere Reserve

Source: Flickr (2020), "The Upper Gulf of California and Colorado River Delta Biosphere Reserve," NASA Johnson, at: <https://bit.ly/3Eeu4op>.

iv. Protection programs

132. In 2007 the Species at Risk Conservation Program (*Programa de Conservación de Especies en Riesgo*—Procer) was launched and it included the vaquita. One purpose of Procer is to develop economic alternatives in disadvantaged regions and to promote the conservation of environmental goods and services.[347]

133. In 2008, Semarnat published the *Action Program for the Conservation of the Species: Vaquita (*Phocoena sinus*)*, or PACE-Vaquita,[348] with the objective of conserving and recovering the species through the promotion of sustainable marine and coastal resource management in the UGC. The comprehensive sustainable management strategy of PACE-Vaquita is divided into six conservation subprograms covering protection (law enforcement, inspection, and surveillance measures); management; restoration; knowledge; culture; and governance.[349]

v. Standards and regulations

134. While the vaquita has been included in Appendix I of CITES since 1979, it was not until 1992 that an order was issued by Mexico banning the use of gillnets known as *totoaberas*.[350] This order recognized that adult totoabas migrate to the Colorado River delta, the same habitat occupied by the vaquita, from October to May.[351] A Mexican official standard, issued in 1994 (NOM-012-PESC-1993), placed maximum protection for the vaquita and the totoaba.[352] This standard prohibited all fishing activity in the UGC Biosphere Reserve as well as the use of *totoaberas* all year long along the east coast of the Gulf of California.[353]

347. Conanp (n.d.), *Programa de Conservación de Especies en Riesgo: Procer, 2007–2012*, at 8, at: <https://bit.ly/49vBpM1>.
348. PACE-Vaquita, at: <https://bit.ly/3zO9Sr5>.
349. Id.
350. 1992 Totoaba Net Ban, at: <https://bit.ly/3WsLYdL>.
351. Id. at preamble (sixth recital) and first article.
352. Mexican Official Standard NOM-012-PESC-1993, *Por la que se establecen medidas para la protección de las especies de totoaba y vaquita en aguas de jurisdicción federal del Golfo de California*, published in the DOF on 29 June 1994, at: <https://bit.ly/3WmCf8E>.
353. Id. at §§ 3.1 and 3.2. This term refers to gillnets of mesh size greater than 10 inches, made with nylon monofilament of caliber 36 to 40. *See* NOM-012-PESC-1993.

135. An emergency Mexican official standard, NOM-EM-139-2002, was issued in 2002, placing a ban on the use of gillnets of mesh size greater than six inches (15 cm) with the aim of reducing vaquita mortality by 66 percent[354]. This standard preceded the obligation of deep-sea fishermen to have environmental impact authorization to carry out their activities.[355]

136. In 2013, standard NOM-002-SAG/PESC-2013 was published, establishing technical specifications, criteria, and procedures for regulation of shrimp fishing in waters under federal jurisdiction with specific reference to the UGC Biosphere Reserve where fishing was limited to the buffer zone.[356] The standard set out specifications for the use of trawl nets by large craft, including the requirement to use fish and turtle excluder devices,[357] and in the case of small craft, authorized a form of alternative fishing gear termed the RS-INP-MEX trawl net.[358] This net is in the form of a short tunnel with a cork line length of 15.24 m, exhibiting widening of the mesh along the body of the net and including fish and turtle excluder devices.[359]

137. In meetings in January 2017 where Inapesca representatives participated, it was pointed out that "the least efficient fishing gear is the RS-INP-MEX." Likewise, the agreements included in the minutes of the meeting stated that "the RS-INP-MEX trawl yielded the lowest results in terms of catch and size, and the highest fuel consumption and bycatch" and it was suggested that NOM-002-SAG-PESC/2013 be amended to exclude consideration of shrimp trawl nets known as *chinchorros de línea* as a potential alternative.[360] The Secretariat did not identify information on catch per unit effort data (i.e. efficiency) for the RS-INP-MEX. The Party reported the existence of alternative fishing gear to CITES in 2023 and 2024, including shrimp trawl nets, finfish trawl nets, rigid traps, handlines, and a multiline troll system (*curricán*) for marine finfish.[361] See section 6.5.2 for relevant information on alternative fishing gear.

vi. 2015, 2017, and 2020 Gillnets Orders

138. The 2015 Gillnets Order temporarily suspended (for two years) commercial fishing using gillnets or longlines operated by small craft in in a specific area in the northern Gulf of California, with an exception for fishing of gulf corvina which was still allowed.[362] The 2015 Gillnets Order was extended three times: until May 2017,[363] until June 2017,[364] and until 31 August 2017.[365]

354. Emergency Mexican Official Standard NOM-EM-139-ECOL-2002, *Que establece las medidas de protección de los ecosistemas marinos y costeros y de las especies sujetas a protección especial en aguas de la Reserva de la Biosfera Alto Golfo de California y Delta del Río Colorado*, published in the DOF on 23 September 2002, at: <https://bit.ly/3SO4DhV>.
355. Conanp (2007), *supra* at 17, at: <https://bit.ly/3Ln3TfC>.
356. Mexican Official Standard NOM-002-SAG/PESC-2013, *Para ordenar el aprovechamiento de las especies de camarón en aguas de jurisdicción federal de los Estados Unidos Mexicanos*, published in the DOF on 11 July 2013, at: <https://bit.ly/3y3sG5g>. See, in particular, regulatory appendix C: "Shrimp catch in the Upper Gulf of California and Colorado River Delta Biosphere Reserve".
357. Id. at section C.2, "Características y especificaciones."
358. Id.
359. Id.
360. Inapesca, *Reunión de planeación del proyecto "Desarrollo de artes de pesca sustentables para el Alto Golfo de California," Mexicali, Baja California a* 30 *de enero del 2017*, Instituto Nacional de Pesca y Acuacultura, at: <http://cec.org/files/sem/20250131/aba007.docx>.
361. *Cf.* 2023 Progress Report on CITES Action Plan, at: <https://bit.ly/4fXDtOg>; 2024 Progress Report on CITES Action Plan, at: <http://cec.org/files/sem/20250107/aay003.pdf>.
362. 2015 Gillnets Order, at: <https://bit.ly/48Zh28b>.
363. Sagarpa (2017), *Acuerdo por el que se amplía la vigencia del similar por el que se suspende temporalmente la pesca comercial mediante el uso de redes de enmalle, cimbras y/o palangres operadas con embarcaciones menores, en el Norte del Golfo de California, publicado el 10 de abril de 2015*, published in the DOF on 11 April 2017, at: <https://bit.ly/3OQeKAm>.
364. Sagarpa (2017), *Acuerdo por el que se amplía por segunda ocasión la vigencia del similar por el que se suspende temporalmente la pesca comercial mediante el uso de redes de enmalle, cimbras y/o palangres operadas con embarcaciones menores, en el Norte del Golfo de California, publicado el 10 de abril de 2015*, published in the DOF on 1 June 2017, at: <https://bit.ly/3VDWvBV>.
365. Sagarpa (2017), *Acuerdo por el que se amplía por tercera ocasión la vigencia del similar por el que se suspende temporalmente la pesca comercial mediante el uso de redes de enmalle, cimbras y/o palangres operadas con embarcaciones menores, en el Norte del Golfo de California, publicado el 10 de abril de 2015*, published in the DOF on 30 June 2017, at: <https://bit.ly/49wUCNl>.

139. The 2017 Gillnets Order, published on 30 June 2017, established the area where gillnets were prohibited in the northern Gulf of California; banned the use of gillnets, operated passively or left dormant for fishing activities, as well as transportation thereof; established schedules for fishing activities; prescribed the use of monitoring systems, and established loading and landing sites, among other measures.[366]

140. The 2020 Gillnets Order, published on 24 September 2024, repealed the 2017 Gillnets Order.[367] This order (see paragraphs 42, 43, and 44 *supra*) makes it mandatory for everyone engaging in fishing activities in the UGC within the gillnet exclusion area to perform their activities outside the Z0 and in accordance with the restrictions, requirements, schedules, and authorized fishing gear (see section 2.2).[368] The 2020 Gillnets Order provides for the establishment of the Z0/VRA Enforcement Plan[369] by assigning responsibilities to the various authorities. It also provides for the implementation of a satellite monitoring system for small and large craft, and, among other mechanisms, the exchange of information with US agencies.[370]

141. With regard to "the establishment of trigger factors to [ensure] effective compliance" with the 2020 Gillnets Order,[371] a separate order was published on 9 July 2021 establishing indicators and trigger factors for predetermined actions for the protection of the vaquita marina.[372] This "Implementation Triggers Order" establishes ranges for two indicators: (1) the numbers of boats in the Z0 (1 to 65 boats/day) and (2) the nets encountered and recovered (between 1 and 500 meters of net/day) that trigger predetermined actions (from monitoring, continuous surveillance, and deterrence, up to and including closing of areas and banning of all types of fishing), and specifies the percentage of resources that can be allocated for surveillance, monitoring, and search and recovery of nets (from 60 to 100 percent).[373]

6.3 Protection schemes implemented within the CITES framework

142. As stated earlier, signatory countries under CITES are required to control trade of species threatened with extinction included in Appendix I of the Convention under a particularly strict regulation.[374] The totoaba has been included in CITES Appendix I since 1976 (first meeting of the Conference of the Parties),[375] while the vaquita was included in Appendix I in 1979.[376]

143. By virtue of the regulations placed on trade in totoaba within the framework of CITES, one of the decisions made at the 19th meeting of the Conference of the Parties (CoP19) in November 2022 was to urge the Government of Mexico to adopt immediate measures to prevent the use of gillnets in the VRA and the Z0 and to submit a timely report on compliance with this request.[377] In early 2023, the Government of Mexico submitted its CITES Action Plan,[378] presenting the lines of action, with specific goals and milestones, whereby the country proposed to comply with the measures to prevent illegal fishing and trade in totoaba and its parts and derivatives, for the protection of the vaquita. That same year, Mexico began keeping implementation records relating to the plan and has been submitting annual reports of progress and results to CITES, in accordance with the determinations made within the framework of the aforementioned convention.

366. 2017 Gillnets Order, at: <https://bit.ly/48yGlOX>.
367. 2020 Gillnets Order, at: <https://bit.ly/48VdSma>. *Cf.* Transitory Article 8.
368. Id. at Article 1-13
369. Id. at Transitory Articles 5 and 6.
370. Z0/VRA Enforcement Plan, at: <http://bit.ly/4beWE54>.
371. 2020 Gillnets Order, Article 17 at <https://bit.ly/48VdSma>.
372. Implementation Triggers Order, at: <https://bit.ly/3HGLgBy>.
373. Id. at Article 6.
374. CITES-1973, Article 2, fundamental principle 1, at: <https://bit.ly/4gwpZuC>.
375. CITES (1976), "Amendments to Appendices I and II," at: <https://bit.ly/4jFnhEw>.
376. CITES (1979), *supra* at: <https://bit.ly/4jI2sbt>.
377. CITES (2022), Decision 18.293 (Rev. CoP19), at 46–47, at: <https://bit.ly/42B2KuH>.
378. CITES Action Plan, at: <http://cec.org/files/sem/20250113/aaz006.pdf>.

144. It must be underscored that CITES is a "covered agreement" under USMCA/CUSMA Article 24.8(4)(a), meaning that each Party must adopt the relevant measures to comply with its obligations under the Agreement and exchange information about its implementation (USMCA/CUSMA Article 24.8(3)).[379]

145. One of the seven lines of action that make up the CITES Action Plan is the operation of a Trilateral Law Enforcement Contact Group (ECG), comprised of Mexico, China and the United States, currently chaired by Mexico, with the objective of "strengthening collaboration and information exchange, as well as activities aimed at addressing the illegal supply and demand of totoaba swim bladders,"[380] given the need for comprehensive, cooperative and shared responsibility. The Trilateral Contact Group on Law Enforcement to Combat the Illegal Trade in Totoaba was called for in the outcomes of the "Trilateral Meeting China/United States/Mexico on the Combat Against Illegal Traffic of Totoaba Fish (*Totoaba macdonaldi*)" that took place 23-25 August 2017, in Ensenada, Mexico. In 2023, Mexico requested that the CITES Secretariat convene and mediate a meeting between China, the United States, and Mexico with the aim of resolving discrepancies in the Terms of Reference for the group. After six years of negotiations, under Mexico's leadership, the three countries reached an agreement on the Terms of Reference for the operation of the ECG in September 2023, and the group's inaugural meeting was held on 7 March 2024.[381]

146. In its most recent report on totoaba (*Totoaba macdonaldi*), the CITES Secretariat issued a series of conclusions and recommendations directed to Mexico and another series of recommendations directed to the United States (in addition to others directed to China).[382] In the case of Mexico, it welcomed "the continued progress made by Mexico in the implementation of its Compliance Action Plan," requested that it continue with activities of a permanent nature, address recommendations on specific issues to ensure compliance with pending matters, and report prior to the next meeting of the CITES Standing Committee on the milestones of the CITES Action Plan that have not yet been achieved. In the case of the United States, the recommendation established the need for the United States to strengthen:

> the collection of information and intelligence on individuals within its territory who facilitate the transit of illegal shipments of totoaba specimens through its territory, their modus operandi for receiving, storing and exporting such illegal shipments, and to address their activities through intelligence-based investigations and operations, including the exchange of information with Mexican and Chinese authorities, as appropriate, in support of follow-up investigations along the illegal trade chain; as well as consider the risk of commercial seafood shipments transiting through its territory being used to conceal and smuggle illegal shipments of totoaba swim bladders and implement strict inspection measures for such shipments…[383]

147. The CITES Secretariat also encouraged the United States to submit a report on the activities carried out and the results obtained in this area to the 81st Meeting of the CITES Standing Committee.

379. USMCA/CUSMA Articles 1.3 and 28.4, at: <https://bit.ly/43MDjGX> and <https://bit.ly/3XPYl3H>.

380 CITES Action Plan, "Action item 7", at 49, at: <http://cec.org/files/sem/20250113/aaz006.pdf>.

381. CITES (2025), Cuestiones relacionadas con el cumplimiento: Totoaba (*Totoaba macdonaldi*), *Informe de la Secretaría*, 78th meeting of the Standing Committee of the Convention on International Trade in Endangered Species of Wild Fauna and Flora, will take place from 3–8 February 2025, Geneva (Switzerland), at: <https://bit.ly/4juTcq5>. *See also* Informe de Avances del Plan de Acción-CITES 2024, pp. 112-113, at: <http://cec.org/files/sem/20250107/aay003.pdf>.

382. CITES (2025) *supra* at 6, 7 and 11-14, at: <https://bit.ly/4juTcq5>.

383. Id. at 7-9, 11, 13 and 14, at: <https://bit.ly/4juTcq5>.

Photograph 11. UABC totoaba breeding facility

Source: CEC Secretariat, taken during the field trip to the Universidad Autónoma de Baja California facility.

6.4 Institutional coordination measures

148. In the 2024 progress report on the CITES Action Plan, the Party states that seven joint protocols were developed for enforcement of the fisheries, environmental, maritime, and coast guard laws, regulations, and standards, to improve the coordination of the authorities' efforts to combat illegal traffic in totoaba in the UGC. The protocols included training for all Profepa, Conapesca, and Marina personnel working in the UGC.[384]

149. On another note, the Party informed that the inter-institutional work of Semar, Conanp, Conapesca, and IMIPAS led to the design and development of activities and workshops to train fishermen's organizations in the use of authorized alternative systems. It also states that in 2023, three awareness-raising workshops were held to deter illegal fishing and the use, production, sale, and transportation of banned nets. These workshops were attended by 113 individuals representing 197 fishing cooperatives and 179 fishing permit holders. In June 2024, three workshops were held in San Felipe, Golfo de Santa Clara, and Puerto Peñasco, with a total of 62 fishermen in attendance.[385]

384. 2024 Progress Report on CITES Action Plan, at 6, at <http://cec.org/files/sem/20250107/aay003.pdf>.
385. Id. at 12.

150. The Party reports that the measures taken in 2023 to prevent boats from entering the Z0 and to keep the area clear of gillnets served to detect 49 percent fewer boats in the Z0 and 95 percent fewer in the VRA. During its site visit, the members of the Secretariat's special mission were able to observe equipment, technology, boats and, in general, the efforts coordinated by various institutions to keep the Z0 free of gillnets. The Party reports that four boats were detected in the Z0 in May 2024 but does not indicate whether sanctions were applied.[386] Although no relevant administrative decisions were issued between April and December 2023, between January and September 2024 decisions were issued in 19 inspection proceedings that resulted in fines of MXN 5,387,632.70 and the seizure of 17 gillnets (6,900 m) and other property, along with small boats and outboard motors.[387]

6.5 Enforcement of the environmental law in question

151. USMCA/CUSMA Article 24.4(2) recognizes that the Parties retain the right to exercise discretion in regard to investigatory, prosecutorial, regulatory, and compliance matters, and to the allocation of environmental enforcement resources with respect to other environmental laws determined to have higher priorities.[388] Similarly, USMCA/CUSMA Article 24.22(5) recognizes that each Party retains the right to exercise administrative, investigatory, and enforcement discretion in its implementation of measures to combat and prevent illegal wildlife trade, including by taking into account the available evidence and the seriousness of the suspected violations.[389]

152. In its September 2024 progress report on the CITES Action Plan, the Party submitted detailed information to the CITES Secretariat on inspection and surveillance[390] with a focus on substantiating its measures to effectively enforce LGVS Article 55, Article 56 of the LGVS Regulation, the 1975 Totoaba Fishing Ban, and the 2020 Gillnets Order.

6.5.1 Inspection and surveillance measures

153. In relation to boat inspection measures, Mexico reported that there are currently 2,223 fishermen and 741 small craft linked to the 22 fishing permits in effect. The Party reports that from the beginning of implementation of the action plan in April 2023 and until September 2024, there were 5,191 inspections of boats at sites authorized under the 2020 Gillnets Order.[391]

154. As part of the intelligence and resource optimization strategy, the Party states that surveillance activities are not carried out at fixed times, but are determined based on information about weather conditions, tides, catch trends in the fisheries, and movements of fishermen within the localities.[392]

155. Mexico reported that Marina, Conapesca, and Profepa set up 711 inspection points for loading and landing of small and large craft; of these, 484 points are located at authorized sites and the remainder (227) are located at strategic points. Inspections at these points did not result in any administrative sanctions being applied.[393]

386. Id. at 6.
387. Id. at 38.
388. USMCA/CUSMA Article 24.4(2), at: <https://bit.ly/420Lb6x> and <https://bit.ly/4itON6R>.
389. Id. at Article 24.22 (5) and (6).
390. 2024 Progress Report on CITES Action Plan, at: <http://cec.org/files/sem/20250107/aay003.pdf>.
391. Id. at 13.
392. Id.
393. Id. at 14.

156. In addition, the Party reported to the CITES Secretariat on the installation of a long-range video surveillance system, known as Sivila, at strategic points with an initial coverage of 3 km, which with the operation of recently installed equipment extends its range to a radius of 25 km (13.5 nautical miles), "as a source of information and intelligence for the relevant authorities."[394]

Photograph 12. Tower with long-range surveillance system

Source: CEC Secretariat, photograph taken during the field trip to Marina's facilities and equipment in San Felipe, BC.

157. Concerning acts of inspection, the Party reported that an *extraordinary inspection program* was implemented between 18 April 2023 and 30 September 2024, with 94 environmental inspections and 126 fisheries-related inspections, the latter focused mainly on fish stores (38.8 percent), restaurants (26.1 percent), and freezers (17.4 percent).[395]

394. Id. at 17.
395. Id. at 20.

158. In relation to the coordination of activities, Conapesca established 738 random land-based fisheries inspection and verification points during the period from April 2023 to September 2024. Additionally, in 2023, Sedena, assisted by Profepa, set up 96 check points, and 40 during 2024.[396]

159. In relation to the results of the maritime patrol program implemented by Semar, Mexico informs that the 12 buoys delimiting the Z0 were supervised every month since May 2023, although the number of buoys may change as a result of weather conditions and vandalism.[397] On 23 September 2024, Profepa conducted a maritime patrol that detected seven buoys at that moment delimiting the Z0.[398] The Party maintains that Profepa has already filed the corresponding reports and taken the necessary steps with the insurance company to replace the other five buoys.[399]

160. Concerning ongoing monitoring of the Z0, Marina has deployed ocean patrols, accompanied by 24/7 terrain radar monitoring. According to documents provided by Mexico, the naval sector of San Felipe, BC is notified whenever a boat is detected in the Z0; it then deploys an interception patrol or a Defender-class boat, which travels with an inspection and verification group made up of coast guard and harbor master personnel, a Marina inspector, and a Conapesca official.[400] During the special mission from 9 to 11 September 2024, the CEC Secretariat was able to observe the equipment and technology, as well as the deployment of considerable effort to maintain patrols, surveillance, and control in the Z0 and the extended area.

Photograph 13. Tower with long-range surveillance system

Source: CEC Secretariat, photograph taken during the field trip to Marina's facilities and equipment in San Felipe, BC.

396. Id. at 21.
397 Id. at 28.
398. Id.
399. Id.
400. Id. at 30.

161. Mexico reports that from the entry into force of the CITES Action Plan until September 2024, a cumulative number of 129 boats were detected in the Z0. It further states that from April-December 2023 there was a 49 percent reduction in the number of boats identified in the restricted area with respect to April-December 2022.[401]

162. The Marina naval sector of San Felipe, in coordination with the SSCS, conducts 24-hour continuous (24h) monitoring using the radar of the ocean patrol and SSCS *Sea Horse* patrol boat. With respect to the surface radar, it has an effective radar range of 12 nautical miles (22 km).[402] As a result of this monitoring operation, a total of 206 boats have been detected within the VRA since the implementation of the CITES Action Plan.[403] The environmental organization's monitoring complements Semar's ground-based radar.[404]

163. The Party states in its report to the CITES Secretariat that although inspection and verification points were established on the San Felipe, BC pier in 2022, the Party did not have the personnel necessary to check all boats at all landing sites.[405] Three additional strategic inspection points were established in 2023, and a total of 5191 verifications of small craft in 2024 resulted in 29 administrative decisions finding that fisheries-related offenses had occurred.[406] According to the information obtained by the Secretariat, illegal totoaba fishermen know and avoid these check points.[407]

164. In relation to inspection patrols, the Party reports that in the period from 2022 to September 2024, the number of maritime patrols increased from 166 to 278, while land patrols increased from 190 to 409, with a 50 percent increase in the personnel assigned to these patrols.[408] Both manned and unmanned aerial units were used for the marine and land patrols.

165. For monitoring fishing boats, Marina developed a small craft locating system (*Sistema de Localización de Embarcaciones Menores*—SISLEM). The Party states that information sessions were held with the San Felipe, BC fishing sector in May 2024 to explain this project and seek the fishing community's collaboration with the installation of the devices. Software development was completed in September 2024, and installation of the peripheral servers began; additionally, a total of 98 positioning terminals were received for installation on boats.[409]

166. On 23 June 2023, the GIS approved protocols intended to optimize the implementation of decisions by the relevant authorities. Under the protocols, Semar, Conapesca, and Profepa are carrying out the necessary steps to perform inspection and surveillance, verification at roadblocks and on boats, processing of inspection orders and complaints, communication with authorities, and gathering evidence of offenses. Mexico states that these measures are being taken in accordance with maritime, fisheries, and environmental law.[410]

401. Id. at 31.
402. Id. at 32.
403. Id.
404. For example, Sea Shepherd's daily report indicates that on 12 May 2025, 93 vessels in the VRA were reported throughout the day, *See* SSCS (2025), "Daily Science Report", monitoring activity of the vessel "M/V Seahorse corresponding 12/05/2025, at: <http://bit.ly/3FY3rWd>.
405. 2024 Progress Report on CITES Action Plan, at 11, at: <http://cec.org/files/sem/20250107/aay003.pdf>.
406. Id.
407. Elephant Action League, Wildlife Crime Division (2018), *supra* at 46-67, at: <https://bit.ly/4d4XXE6>.
408. 2024 Progress Report on CITES Action Plan at 33, at: <http://cec.org/files/sem/20250107/aay003.pdf>.
409. Id. at 51.
410. Id. at 46–7.

6.5.2 Measures relating to prosecution

167. From January 2018 to September 2024, 100 investigation files were opened, of which 30 were referred for prosecution, six are currently being processed, nine led to trial court convictions, and six led to convictions after abbreviated proceedings.[411] The Party reports that 17 individuals have been sentenced to prison terms and that it has levied fines in excess of 114 million pesos for redress for harm.[412]

168. The FGR has asked the General Secretariat of Interpol to publish various notifications relating to *modus operandi*, location of persons of interest, information about the identity of persons or their whereabouts, as well as sending eco-messages and diffusions (alerts).[413] In this regard, USMCA/CUSMA Article 24.22(6)(b) stipulates that each Party shall "treat intentional transnational trafficking of wildlife protected under its laws, as a serious crime as defined in the *United Nations Convention on Transnational Organized Crime*."[414] The Financial Intelligence Unit (*Unidad de Inteligencia Financiera*) of the Ministry of the Treasury and Public Credit (*Secretaría de Hacienda y Crédito Público*—SHCP-UIF) has developed a methodology for detecting organized criminal activity in the financial sphere.[415]

169. The Party noted in the CITES report that Profepa held 22 hearings before the Federal Judicial Branch (*Poder Judicial de la Federación*) between May 2023 and July 2024, in which it provided key testimony in criminal proceedings relating to illegal activity in the UGC.[416]

170. The Party further reported that 29 administrative decisions were issued between April 2023 and September 2024 in connection with sites authorized for fishing activities; these derived in the fines for a total of MXN 1,494,374.70 and seizure of illegal items, among them 44 gillnets with a total length of over 11,200 meters.[417]

171. In addition, it states that 19 inspection records concerning activities detected in the Z0 were resolved; fines of over 5 million pesos were levied;[418] and 17 gillnets with a total length of 6,900 meters were confiscated, along with small boats and outboard motors, all in the period from January to September 2024.[419] Additionally, an environmental inspection of an establishment in the municipality of Guaymas, Sonora conducted in 2024 during the extraordinary inspections program, led to the seizure of 665 kg of totoaba parts and derivatives, resulting in an administrative proceeding and a criminal complaint of environmental offenses filed with the FGR.[420]

172. Two extraordinary inspections in 2024 resulting from maritime surveillance in the Z0 gave rise in both cases to the application of safety measures such as seizure of two boats and its fishing gear. The proceedings are in progress for the issuance of the corresponding notice of violations (*acuerdo de emplazamiento*) detected during an inspection.[421]

411. Id. at 64.
412. Id. The total amount is MXN 114,536,006.86, equivalent to USD 5,649,712 on 24 January 2025, at: <www.xe.com/>.
413. Id. at 62. Eco-messages are communications between national authorities and Interpol regarding crime and the environment (in this case, crimes related to the international trade in endangered flora and fauna).
414. USMCA/CUSMA Article 24.22(7).
415. 2024 Progress Report on CITES Action Plan, at 63, at: <http://cec.org/files/sem/20250107/aay003.pdf>.
416. Id. at 59.
417. Id. at 14.
418. The total amount is MXN 5,387,632.70, equivalent to USD 259,877.39 at the exchange rate applicable on 27 January 2025, at: <www.xe.com/>.
419. 2024 Progress Report on CITES Action Plan, at 38, at: <http://cec.org/files/sem/20250107/aay003.pdf>.
420. Id. at 21.
421. Id. at 42.

173. Mexico highlighted various extrajudicial measures aimed at reinforcing surveillance in the Z0 and promoting compliance with fisheries and environmental law.[422] It states that an informational document was produced for the fisheries sector detailing the criminal proceedings and penalties applicable to anyone illegally entering the Z0. Furthermore, nine information sessions were held where a total of 185 representatives of cooperatives participated.[423]

174. In terms of training, a collaborative process between Semar, Conapesca, Profepa and Sader, law enforcement sessions and workshops were created.[424] In addition, an inter-institutional working group was established, with the participation of Semar, FGR, National Customs Agency of Mexico (*Agencia Nacional de Aduanas*—ANAM), SHCP-UIF, and Profepa for exchange of strategic information on organized criminal groups.[425]

175. Mexico also reported that training sessions were offered to government employees from Profepa, Conapesca, ANAM and the National Guard (*Guardia Nacional*), focusing on international traffic in species, with an emphasis on environmental inspections at ports, airports, and borders.[426] These activities were complemented by the filing of five complaints with the Office of the Federal Public Prosecutor (*Ministerio Público Federal*) related to seizures of totoaba swim bladders at the customs offices of the United States and Thailand as well as during domestic inspections.[427]

6.5.3 Other enforcement actions related to fisheries in the UGC

Installation of net prevention devices (concrete blocks) and destruction of illegal fishing gear

176. In October 2022, with the goal of deterring the setting of gillnets in the Z0, Marina was in charge of installing 193 concrete blocks with steel hooks in the area to intercept nets, which are then collected and destroyed at Marina's facilities (see photos 14 and 15).[428] This discourages the setting of new nets and eliminates ghost nets from the Z0. In August 2024, based on the results obtained and on the recommendation of experts, Marina began placing an additional 216 net prevention devices along the boundary of the Z0 and within a portion of it—that is, in the "extended area"—where specialists documented the presence of the vaquita. In total, Marina has placed 409 concrete blocks in the UGC.[429] In this regard, the block installation project is covered by a conditional environmental impact approval issued on 28 June 2022.[430]

177. Semar, in coordination with Conapesca and Profepa, developed a work program for detection, removal, and destruction of ghost nets in the VRA. It reported that, between April 2023 and September 2024, it had seized 15 gillnets (4,824 m) as a precautionary measure and 29 more (6,880 m) were recovered and destroyed.[431]

422. Id. at 37.
423. Id.
424. Id. at 47.
425. Id. at 65.
426. Id. at 58–61.
427. Id. at 58.
428. 2024 Progress Report on CITES Action Plan at 36, at: <http://cec.org/files/sem/20250107/aay003.pdf>.
429. Id.
430. DGIRA , Environmental Impact and Risk Branch (2022), file no. SGPA/DGIRA/DG-03812-22 (28 June 2022), Dirección General de Impacto y Riesgo Ambiental of Semarnat at: <https://bit.ly/4bD5pps>. The authorization corresponds to the installation of 193 concrete blocks and does not comprise the 409 blocks that were ultimately installed (see p. 37).
431. 2024 Progress Report on CITES Action Plan, at 44, at: <http://cec.org/files/sem/20250107/aay003.pdf>.

Photograph 14. Placement of net prevention devices

Source: CEC Secretariat, photo taken during the field trip to the Marina facilities and equipment in San Felipe, BC.

Photograph 15. Destruction of ghost nets by Marina

Source: CEC Secretariat, photo taken during the field trip to the Marina facilities and equipment in San Felipe, BC.

Alternative fishing gear

178. The Party reports that IMIPAS has conducted studies since 2004 aimed at developing alternative fishing gear, and states that these studies have been endorsed by the Expert Committee on Fishing Technologies (ECOFT); it maintains that alternatives to gillnets already exist and can be immediately and progressively deployed.[432]

Table 4. Alternative fishing gear

Gear	Fishery	Description
Shrimp trawl net	Shrimp	Short tunnel-type trawl net, with cork line 15.24 meters (50 ft) long, made of strong synthetic-fiber fabric (braided, knot-free) 1.2 mm in diameter, mesh along the belly of the net (wings, belly, and codend) with the following characteristics: wings 60 mm, belly 50 mm, lengthening piece 40 mm, purse 40 mm (NOM-002-SAG/PESC-2013).
Suripera net	Shrimp	Consists of two codends, skirt, and square, made of polyamide (PA) monofilament, mesh size 30 mm, thread diameter 0.47 mm, with lead line length of 14.15 m.
Finfish trawl net	Marine finfish	Trawl net with cork line no greater than 19.81 m (65 ft), minimum mesh size 75 mm, thread diameter 0.95–1.2 mm, made of monofilament or braided multifilament fabric.
Rigid trap	Marine finfish	Rectangular or cubic rigid trap, built of galvanized steel wire mesh (50.8 mm) coated with polyvinyl alcohol (PVC). Dimensions 120 x 90 x 60 cm, in two sections, the first consisting of two side entrances in the form of truncated cones with upper diameter of 25 cm and lower diameter of 15 cm, with a place to hold the bait or lure; the second consisting of the space holding the catch.
Hook-and-line	Marine finfish	Main line made of monofilament, 0.70 mm in diameter and variable length, fitted with one (1) or three (3) straight number 6 (six) hooks and sinker.
Longlines	Marine finfish	Passive fishing gear (fish has to swim to the gear to be caught) made of lines and hooks. It consists of a main line from which secondary hooked lines hang. The main line hangs from two or more lines connecting it to buoys on the surface. It can be anchored to the bottom (set) or allowed to drift.

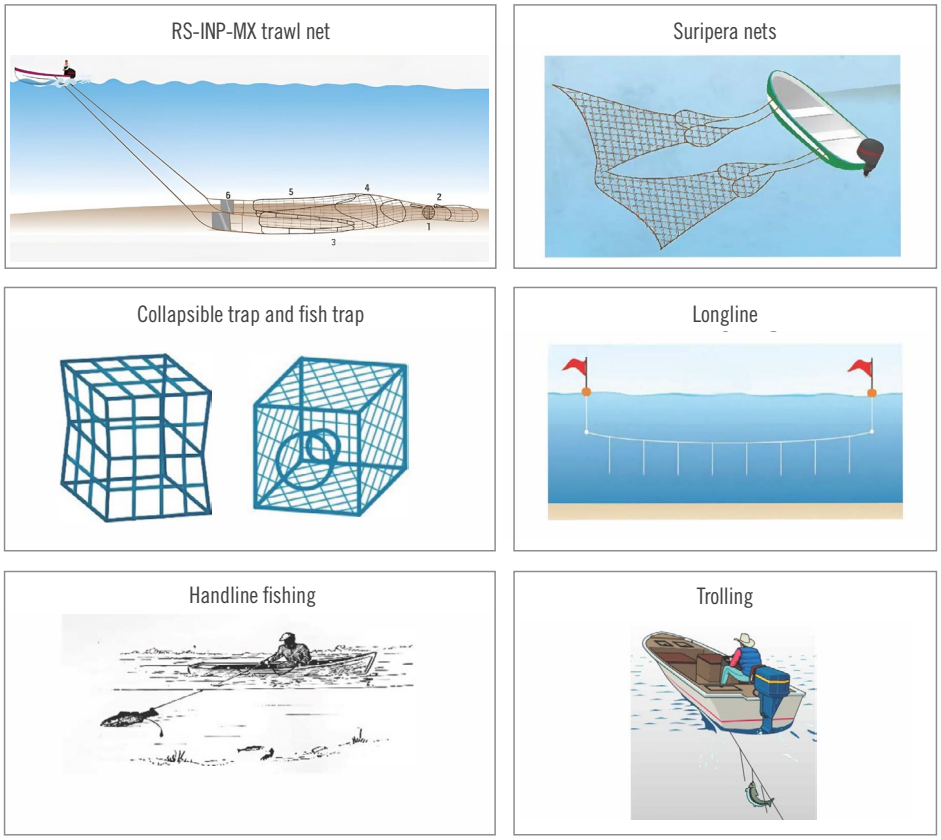
Source: GIS (2024), *Report on Progress and Results of the CITES Action Plan*, Intragovernmental Group on Sustainability in the Upper Gulf of California, September 2024 [2024 Progress Report on CITES Action Plan], at 72–3, at: <http://cec.org/files/sem/20250107/aay003.pdf>; ECOFT (2017), *Alternative Gear to Gillnets in the Upper Gulf of California*, at 28, at: <http://cec.org/files/sem/20250131/aba005.pdf>; Draft Amendment to Mexican Official Standard NOM-029-PESC-2006, *Pesca responsable de tiburones y rayas- Especificaciones para su aprovechamiento*, published in the DOF on 11 February 2015, at: <https://bit.ly/4hzEcGx>.

179. With regard to the testing of alternative fishing gear, the ECOFT report states that "other non-gillnet fisheries are available but [are] still employed at a minor scale,"[433] and further states that for these fishing systems to function adequately, it is critical to eliminate gillnets from traditional fishing areas.[434] In 2017, ECOFT recommended a gillnet ban as the first step in the transition toward a gillnet-free UGC, and stressed the urgency of developing alternative fishing gear and establishing sustainable fisheries.

180. The enforcement of these measures is essential to the effective operation of alternative fishing systems. On this note, some San Felipe fishermen told the Secretariat's representatives and experts that they continue to use gillnets with the argument that there are no viable alternative options or due to the lack of uniform enforcement of restrictions.[435] However, Pesca ABC has tested alternative nets, documented their efficiency and according to preliminary reports from the organization, their effectiveness is comparable to gillnets.[436] Although the information provided by the Party does not contain any documentation of this aspect, Pesca ABC maintains that progress has been accomplished through testing with certain fishermen, even though

432. CITES Action Plan 2023 at 35, at: <http://cec.org/files/sem/20250113/aaz006.pdf>.
433. ECOFT (2017), *Alternative Gear to Gillnets in the Upper Gulf of California*, at 29, at: <https://bit.ly/4htvvxn>.
434. Id.
435. Interviews by the Secretariat with fishermen during the special mission to San Felipe, BC, 9–11 September 2024.
436. Pesca Alternativa de Baja California (2023), *2023 Annual Report*, at 15–17, at: <https://bit.ly/40nt0Wz>.

Figure 18. Alternative fishing gear



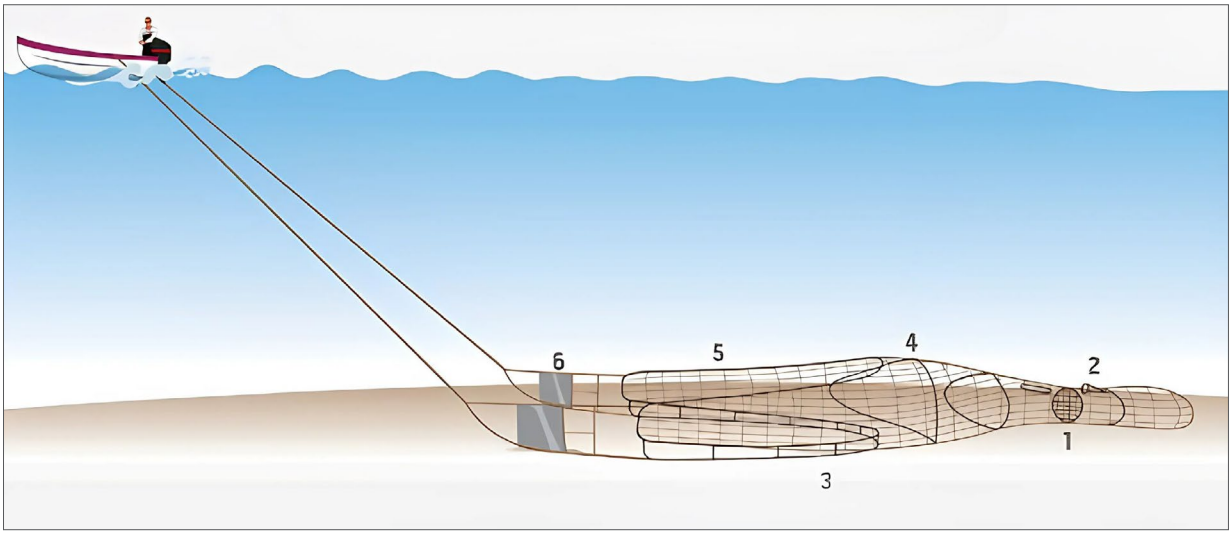
Source: Government of Mexico (2024), *Manual para prevenir, mitigar y corregir los daños causados por las redes de pesca fantasma en México*, at 19, at: <https://bit.ly/42FDgfH>; Inapesca (2000), *Catálogo de los sistemas de captura de las principales pesquerías comerciales*, ch. 3, "Líneas de anzuelo," at 74 and 76, at: <https://bit.ly/4eWKlN0>; ECOFT (2017), *Alternative Gear to Gillnets in the Upper Gulf of California*, at 8–9, 11–12, at: <https://bit.ly/4kG3q8G>.

its members have faced threats from other fishermen opposed to the use of alternative fishing gear,[437] a situation that should be addressed by the fisheries authority.[438] Both local fishermen and Pesca ABC have stated that it would be advantageous to offer certification for products fished with alternative gear in order to increase their market value.[439]

181. Testimony gathered during the Secretariat's interviews, coupled with public reports—some published on the social media pages of regional fishermen—suggest that fishermen have never stopped using banned nets.[440] Fishermen told the Secretariat in meetings that "the alternative nets don't work" because they yield smaller catches, and so they have not been adopted.[441] Some fishing organizations contend that the fisheries authority is "absent" (see section 5.1.3).[442]

437. Interviews conducted by the Secretariat with representatives of Pesca Alternativa de Baja California (September 9) during the special mission that took place from September 9 to 11, 2024 in San Felipe, BC.
438. Interviews conducted by the Secretariat with fishing organization leaders (September 10) during the special mission that took place from September 9 to 11, 2024 in San Felipe, BC.
439. Interviews conducted by the Secretariat—with representatives of Pesca Alternativa de Baja California (September 9) and fishing organization leaders (September 10)— during the special mission that took place from September 9 to 11, 2024 in San Felipe, BC; interview with a fisheries economic studies organization in Ensenada, BC, conducted by the Secretariat on September 12, 2024.
440. *See, e.g.*, E. Méndez (2024), *supra* at: <https://bit.ly/40yO0v4>.
441. Various reports have indicated that the resistance to the use of alternative nets is due in large part to fishermen being uninterested in adopting them. *See* ECOFT (2017), *Alternative Gear to Gillnets in the Upper Gulf of California*, at 11, at: <https://bit.ly/4htvvxn>.
442. Interviews by the Secretariat with fishermen during the special mission conducted 9–11 September 2024 in San Felipe, BC.

Figure 19. RS-INP-MX trawl net



Note: 1) Turtle excluder device; 2) "fisheye" device to reduce bycatch; 3) dual tension lead lines; 4) Spectra Mesh; 5) progressive reduction of mesh size, and 6) hydrodynamic doors.

Source: ECOFT (2017), *Alternative Gear to Gillnets in the Upper Gulf of California*, at 15, at: <https://bit.ly/3ZxDJON>

Fishing permits

182. According to Mexico's report to the CITES Secretariat, 579 fishing permits were issued in the UGC between September 2020 and 15 July 2023, 556 for small craft and 23 for large craft.[443] In all cases, 13 types of alternative fishing gear were exclusively authorized for the UGC, without any gillnet permits being issued.[444]

183. The Party states that in 2024, Conapesca drafted terms of reference for a program for the registration and accreditation of fishermen active in the UGC, and also for the special program for marking small craft and for fishing gear used on those vessels stipulated in the 2020 Gillnets Order. The implementation of both programs will begin upon approval of the corresponding terms of reference, which are now undergoing budget assessment.[445]

184. In addition, the Party states that Conapesca received 233 fishing permit applications in the UGC between April 2023 and September 2024, of which 121 resulted in permits for the use of alternative fishing systems and gear (76 were in process and 36 were rejected).[446] Of the permits issued, four correspond to the use of the RS-INP-MX trawl net in San Felipe, for a total of 43 authorized nets of this type. For Golfo de Santa Clara, 47 permits were issued for the same period, 35 in 2023 and 12 in 2024, for a total of 212 RS-INP-MX trawl nets.[447]

443. Progress report on CITES Action Plan 2023 at 297, at: <https://bit.ly/4fXDtOg>.
444. Id.
445. 2024 Progress Report on CITES Action Plan, at 68–71 and 77, at: <http://cec.org/files/sem/20250107/aay003.pdf>.
446. Id. at 68.
447. Conapesca (2024), "Permisos y concesiones de pesca comercial para embarcaciones mayores y menores," Comisión Nacional de Acuacultura y Pesca, at: <https://bit.ly/3tiouvH> (consulted on July 2, 2025).

6.5.4 Vaquita monitoring measures

185. Historical results of acoustic monitoring activities show that "[t]he annual average decline [of the acoustic activity] between 2011 and 2018 has a posterior mean of 47% annually (95% CRI 54% decline to 40% decline), corresponding to a total decline of 99% over the 7-year period".[448] Mexico noted that the average annual decline of the acoustic detection rate for 2021-2023 was reduced to 14.4 percent in the Z0[449] (although the calculation weighting methodology was not identified). The 193 concrete blocks placed by Marina in 2022 may account for this change in the average change of acoustic detection rate in the Z0.

186. In 2021, given the importance of information on the status of the vaquita and to continue acoustic monitoring of the species, acoustic detection was implemented in the Z0, with repeated efforts in 2022 and 2023. In this last year, the GIS developed a work plan for vaquita monitoring which establishes methodology, identification of monitoring sites and timelines. To this end, 85 acoustic detectors were purchased for continuous monitoring of the vaquita. Conanp collaborated with the fishing community (Pesca ABC and Sociedad Cooperativa Islas del Golfo) for installation of 330 moorings with acoustic sensors in the Z0.[450].

187. In August 2024, Conanp informed the GIS of acoustic monitoring advances in the Z0.[451] According to the information presented to the Secretariat by Conanp, it has new submersible acoustic sensors that are programmable to emerge in order to collect data.[452] The results of the continuous monitoring for 2023 showed 208 detections in 25 of the total sites recorded during 46,204 monitoring hours logged at 43 sampling sites. Between June and September 2024, in 32 sites, 178 detections were recorded during 31,961 monitoring hours at 22 sites in the Z0 sampling network. It is worth noting that in 2024, efforts were made to extend acoustic monitoring beyond the Z0, which allowed the recording of 19 additional acoustic encounters in the ARV.[453]

188. The Party reports that an acoustic and visual vaquita observation cruise took place from 10 to 26 May 2023 with the participation of Marina; experts from the US; the SSCS; a group of scientific experts, and a total of eight local observers from the community of San Felipe, BC. The cruise produced 61 acoustic detections and 16 sightings. The experts stated that the individuals sighted were healthy and without apparent marks.[454] In addition, the expert elicitation method was used to determine that "the minimum population size was 10 to 13 individuals."[455]

189. A second acoustic and visual observation cruise was held from 5 to 26 May 2024 in the Z0 and surroundings, yielding 70 acoustic encounters and nine sightings, five of which were over 20 minutes in duration, allowing photos and video to be taken. The expert elicitation method was used to determine number of distinct individuals observed in 2024 was six to eight vaquitas;[456] this is the lowest number on record using this method.

448. A. M. Jaramillo Legorreta et al. (2019), *supra* at: <https://bit.ly/3Li8Hmn>.
449. 2024 Progress Report on CITES Action Plan, at 8, at: <http://cec.org/files/sem/20250107/aay003.pdf>.
450. Id. at 82-83.
451. Id. at 84.
452. Interviews by the Secretariat with researchers during the special mission to Mexico City, 17–18 September 2024.
453. 2024 Progress Report on CITES Action Plan, at 8, 81, at: <http://cec.org/files/sem/20250107/aay003.pdf>.
454. Id. at 85.
455. Id. at 87.
456. Id. at 86.

6.6 Measures taken by various sectors of society

190. Various sectors have stressed the need to take effective measures aimed at protecting the vaquita. Following is the Secretariat's account of organizations working, frequently in close coordination with the Government of Mexico, for conservation of the vaquita, recovery of the totoaba, and sometimes in supporting the effective environmental law enforcement.

191. The role played by the **IUCN** dates back to the inclusion of the vaquita on the Red List of Threatened Species in 1978.[457] In this regard, the IUCN Cetacean Specialists Group promotes and facilitates cetacean conservation measures around the world and functions as a catalyst, a clearinghouse, and a facilitator of cetacean research.[458] The IUCN has emphasized the need for stricter measures to protect the vaquita. In 2007, it sent a letter to the president of Mexico in which it stated that "Mexico's vaquita is now the marine mammal species, and perhaps the species of large mammals in general, in greatest danger of extinction around the world,"[459] warning that if measures were not taken to eliminate the bycatch problem, the vaquita will be the second cetacean species to go extinct in recent years.[460]

192. **SSCS** has been working in close coordination with the Government of Mexico, and particularly with Marina, on removal of illegal fishing gear in the UGC since 2015. The organization has three boats working on net removal and vessel monitoring (surveillance) activities in the VRA. SSCS has removed 808 pieces of illegal fishing gear (equivalent to 163,600 m in length). In addition, the organization is working with the local community to recycle materials from illegal fishing gear into other products, thus ensuring that these materials do not return to the ocean but instead become a source of income for the community affected by the fishing restrictions. Since November 2017, the organization has been carrying out Operation Milagro IV in an effort to save the vaquita from extinction.[461]

193. **Elephant Action League** (EAL) has been investigating and compiling information on the totoaba swim bladder supply chain since 2017. One of its most important publications traces the totoaba supply chain in Mexico to organizations selling swim bladders in China. Through "Operation Fake Gold," EAL conducted a study in 2017 that involved field operations to gather information about traffic in swim bladders and the existence of cartels in the UGC.[462]

194. Founded in La Paz, Baja California Sur in 1995, **Museo de la Ballena y Ciencias del Mar** is a cultural and educational institution supporting scientific research and public education on cetaceans, chelonians, and other marine species of high ecological value.[463] In addition to spread knowledge of cetaceans and other species of high ecological value and to promote study, research, and conservation of these species, the organization's mission is to promote conservation of the marine environment more generally. The organization has been employing the ship *Narval* to remove ghost, derelict or abandoned nets since 2016 and to locate and remove illegal gillnets in the UGC.[464]. The organization has removed more than 34,000 m of illegal, ghost, derelict or abandoned nets from the UGC and in 2017 participated in the "Vaquita CPR [Conservation, Protection, Recovery]" project, providing the 132-foot ship *Pacific Monarch*, a 41-foot yacht, and the *Narvalita*.[465]

457. Vaquita-Red List UICN at: <https://bit.ly/4fcHYFB>. *See also* UICN-Resolution 4.025 at: <https://portals.iucn.org/library/node/44175>.
458. IUCN (n.d.), "IUCN SSC Cetacean Specialist Group," International Union for the Conservation of Nature, at: <https://bit.ly/3E0ghS9>.
459. IUCN to Permanent Mission of Mexico to the United Nations and other International Organizations based in Switzerland, 2 March 2007, at 1, at: <https://bit.ly/4ff9Mcg>.
460. Id.
461. Elephant Action League, Wildlife Crime Division (2018), *supra* at 30–1, at: <https://bit.ly/4d4XXE6>.
462. Id. at 7–8.
463. Semarnat (2017), "Museo de la Ballena, aliado de la conservación,", Secretaría de Medio Ambiente y Recursos Naturales, 25 October 2017 at: <https://bit.ly/4ht3wOz>.
464. Elephant Action League, Wildlife Crime Division (2018), *supra* at 29, at: <https://bit.ly/4d4XXE6>.
465. Id.

195. **Pesca Alternativa de Baja California** (Pesca ABC) is an organization made up of San Felipe, BC fishermen that has four strategic lines of action: species monitoring, ghost net removal, sustainable fishing, and education and awareness.[466] In addition to contributing to innovations in alternative fishing gear. The organization has recovered 10,476 kg of no longer used fishing nets since 2016, which have passed through its collection center for recycling or destruction and final disposal; in 2022–2023, it logged 55,587 hours of acoustic monitoring of the vaquita and has used the *ikejime* method for harvesting 20,600 kg of value-added fish since 2022.[467]

196. The Submitters of submission SEM-21-002 (**Center for Biological Diversity, Animal Welfare Institute, Natural Resources Defense Council,** and **Environmental Investigation Agency**) are organizations working to save the vaquita from extinction. Through legal and other action, these organizations have made sustained efforts to draw the attention of the Mexico and United States governments to the issue.

197. **Centro Intercultural de Estudios sobre Desiertos y Océanos** (CEDO) and **Environmental Defense Fund** (EDF) have collaborated with IMIPAS, the Mexican fisheries research organization, and with UGC fishing communities to implement sustainable fishing methods. This work centers around the development of solutions that allow for more responsible fishing in the Gulf, along with fisheries management measures and planning for their implementation.[468]

198. **The Global Ghost Gear Initiative** has coordinated ghost net removal in the UGC. The organization's projects have relied on the participation of civil society organizations, government bodies, and local industry. As part of its multi-institutional and cross-border initiative, the organization achieved the removal of over 1,300 nets between 2016 and 2020 in the VRA.[469]

199. After a 2016 announcement on coordination of efforts by the governments of Mexico and the United States to protect the vaquita,[470] **World Wildlife Fund** (WWF Mexico) worked to implement sustainable fishing technologies in the UGC and sat on a committee made up of experts from Texas A&M University, the National Marine Fisheries Service of the National Oceanic and Atmospheric Administration (NOAA Fisheries), Sveriges Lantbruksuniversitet (Swedish University of Agricultural Science), Danmarks Tekniske Universitet (Technological University of Denmark), Fisheries and Oceans Canada, the New England Aquarium, the United Nations Food and Agriculture Organization, and Inapesca.[471]

466. Pesca Alternativa de Baja California (2023), *supra* at 9, at: <https://bit.ly/40nt0Wz>.

467 Pesca ABC (s.f.), "Nuestro trabajo", infographic on the homepage of the organization's website, Pesca Alternativa de Baja California, at: <https://bit.ly/44tp7Bp> (consulted on July 2, 2025). *Ike Jime* is a traditional Japanese slaughter technique that involves instantaneously killing a fish by inserting a spike into its brain cavity. The fish is then thoroughly bled and undergoes spinal cord destruction (shinkei jime) before getting iced down. With this method, the fish has better consistency and flavor, as well as greater durability, which in turn adds value to the product. *See* AFTCO (2023), "The Complete Guide to Ike Jime", American Fishing Tackle Company, at: <https://bit.ly/4lFQIGN>; Pesca ABC (2023), *supra*, at 15, at: <https://bit.ly/40nt0Wz>.

468. IMIPAS (2022), "Cambio climático: evaluación de vulnerabilidad de las comunidades costeras, y de cambio en la disponibilidad de los recursos pesqueros y acuícolas de la costa de México", Instituto Mexicano de Investigación en Pesca y Acuacultura Sustentables, 7 June 2022, at: <https://bit.ly/4ewNGly>; H. Reyes Bonilla *et al.* (2021), *Evaluaciones de vulnerabilidad de las comunidades costeras y de cambio en la disponibilidad de los recursos pesqueros y acuícolas de la costa de México*, October 2021, Fondo para la Defensa del Medio Ambiente (EDF México) – Universidad Autónoma de Baja California Sur (UABCS), La Paz, Baja California Sur, México, at: <https://bit.ly/3I8UPg2>; IMIPAS (2021), "Firman Inapesca y EDF de México convenio de colaboración para promover pesca sostenible en México", Instituto Mexicano de Investigación en Pesca y Acuacultura Sustentables, 15 July 2021, et: <https://bit.ly/44eFO4X>; CEDO (2020), "Nuestros programas: pesca y acuacultura sostenible", Centro Intercultural para el Estudio de Desiertos y Océanos, Mexico, at: <https://bit.ly/4kmObQH>.

469. GGGI (s.f.), "GGGI Signature Project – North American Net Collection Initiative (NANCI)", project background (2016-2020), Global Ghost Gear Iniciative, at: <http://bit.ly/4nw6Vji>.

470. World Wildlife Fund (2016), "México y Estados Unidos intensifican las medidas para salvar a la vaquita," at: <https://bit.ly/4g5g9hQ>.

471. World Wildlife Fund (2016), "El Gobierno de México y WWF establecen comité internacional de expertos para impulsar artes de pesca que no atrapen vaquitas", 28 July 2016, at: <https://bit.ly/4lBomNO>.

200. **Pronatura Noroeste** promotes the development of inclusive and sustainable fishing in fishing communities of the UGC; and it runs, among other initiatives, an ocean fisheries traceability project. This project promotes cooperation all along the supply chain using blockchain technology; that is, a decentralized ledger that records transactions through a network of computers. Its implementation allows customers to make decisions based on conservation concerns and allows fishermen to place a value on the adoption of sustainable fishing gear in the market.[472] Pronatura Noroeste also promotes a project for the removal of ghost gear, which includes a training course on their impact on marine fauna and actions to reduce those impacts.[473]

201. **Cetacean Action Treasury** supports Mexican organizations such as Pesca ABC and Pronatura Noroeste in developing a community focus for vaquita recovery, promoting conditions conducive to the transition to vaquita-friendly sustainable fishing, and fostering civic participation in conservation efforts. Since 2019, the organization has worked to develop alternative fishing gear, create higher-value markets for vaquita-friendly ocean products, and train and equip local citizens in mammal conservation and rescue of species caught in gillnets in the UGC.[474]

202. The totoaba breeding facility of the **Universidad Autónoma de Baja California** has made it possible to release over 150,000 juveniles of this species over the last 30 years; combined with the efforts of other institutions, a total of 500,000 juveniles have been released in different regions of the Gulf of California.[475] The last activity reported in 2022 by UABC was the release of 20,000 juveniles along the beaches of San Felipe, BC.[476] Concerning the sustainable use of the species, recent studies have shown that the use of farmed totoaba swim bladders as an alternative to conventional collagen sources or as a functional food would reduce the generation of subproducts and yield added value for totoaba farming operations.[477] In addition, UABC announced in December 2024 that it would begin marketing farmed totoaba,[478] adding to the existing totoaba farming being done by the company Earth Ocean Farms.[479]

472 Pronatura Noreste (2024), "'Trazabilidad en la pesca del Alto Golfo de California," tool to strengthen sustainable fishing in the UGC and protect the habitat of the vaquita, Pronatura Noreste, A.C., June 20, 2024, at: <https://bit.ly/40ucHHL>.

473. Pronatura Noroeste (2025), "Comunidades del Golfo de Santa Clara y San Felipe luchan por un mar libre de plásticos y redes fantasma", 11 February 2025, at: <https://bit.ly/4lgpyGA>; Pronatura Noroeste (n.d.), "Redes fantasma y plásticos: una amenaza invisible", online course, at: <https://bit.ly/4lFHIBx>.

474. Cetacean Action Treasury (2024), "Vaquita emergency," at: <https://www.cetact.org/>.

475. L. M. Enríquez Paredes et al. (2023), *supra* at 94, at: <https://bit.ly/4cBxZbe>.

476. UABC (2022), "Libera UABC 20,000 totoabas en San Felipe," *Gaceta UABC,* Universidad Autónoma de Baja California, 29 April 2022, at: <https://bit.ly/42AzNiz>.

477. H. Cruz-López *et al.* (2023), "Swim bladder of farmed *Totoaba macdonaldi*: A source of value-added collagen," *Marine Drugs* 21(3): 173, at: <https://bit.ly/3ZWZ58w>

478. L. Lamas, "UABC comercializará totoaba golfina," *Zeta Tijuana*, 12 December 2024, at: <https://bit.ly/4jgqU3y>.

479. CITES (2019), *Registro de establecimientos que crían en cautividad especies de fauna incluidas en el Apéndice I con fines comerciales: registro del establecimiento "Earth Ocean Farms. S. de R.L. de C.V." que cría en cautividad* Totoaba macdonaldi, SC71 Doc. 17, at: <https://cites.org/esp/node/86896>.

7. Ongoing commitment to transparency

203. Factual records provide detailed information regarding asserted failures to effectively enforce environmental laws in North America that may be helpful to 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 the Party's enforcement efforts. The information contained in this document has been prepared and presented exclusively by the Secretariat of the CEC—incorporating the comments of the Parties on the accuracy of the draft—in compliance with its authority and in accordance with the procedures established in the framework of the USMCA/CUSMA. The factual record does not necessarily reflect the views of the Parties.

204. In accordance with USMCA/CUSMA Article 24.28(3), this factual record is prepared "without prejudice to any further steps that may be taken" with respect to submission SEM21-002 (*Vaquita Porpoise*).[480]

205. Pursuant to USMCA/CUSMA Article 24.25(1), the Parties

> recognize the importance of cooperation as a mechanism to implement this Chapter, to enhance its benefits, and to strengthen the Parties' joint and individual capacities to protect the environment, and to promote sustainable development as they strengthen their trade and investment relations.[481]

206. In addition, the Parties emphasize their commitment to expanding their cooperation on environmental matters[482] and to undertaking cooperative activities pursuant to the ECA, these to be implemented by the CEC.[483]

207. Pursuant to USMCA/CUSMA Article 24.28(7), the Environment Committee shall consider the final factual record in light of the objectives of chapter 24 and the ECA and "may provide recommendations to the Council on whether the matter raised in the factual record could benefit from cooperative activities." Where the Council so decides, such cooperation programs can be implemented by the CEC under USMCA/CUSMA Article 24.25 and ECA Article 4(1)(m). In the context of environmental, economic and social linkages between Canada, Mexico and the United States, the CEC facilitates effective cooperation and public participation to conserve, protect and enhance the North American environment in support of sustainable development for the benefit of present and future generations.[484]

208. In addition, pursuant to USMCA/CUSMA Article 24.28(8), Mexico shall provide updates on this factual record to the Council and the Environment Committee, as appropriate, and these updates may form a part of the Public Registry of Submissions.[485]

209. Any Party may give notice of its intention to make public its comments on the draft factual record.

480. USMCA/CUSMA Article 24.28(3), at: <https://bit.ly/420Lb6x> and <https://bit.ly/4itON6R>.
481. Id. at Article 24.25(1).
482. Id. at Article 24.25(2).
483. Id. at Article 24.25(3).
484. CEC (n.d.), "Mission," at: <https://www.cec.org/about/>.
485. CEC (n.d.), "Registry of Submissions," at: <https://www.cec.org/submissions/registry-of-submissions/https://www.cec.org/submissions/registry-of-submissions/>.

APPENDICES

APPENDIX 1

Council Resolution 24-02 (*Vaquita Porpoise*)

Distribution: General
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ORIGINAL: English

26 June 2024

COUNCIL RESOLUTION 24-02

Instructions to the Secretariat of the Commission for Environmental Cooperation (CEC) regarding Submission SEM 21-002 (*Vaquita Porpoise*) which asserts that the Mexican environmental authorities are failing to effectively enforce (1) Article 55 of the General Wildlife Act (*Ley General de Vida Silvestre*) (LGVS); (2) Article 56 of the LGVS Regulations (LGVS Regulation); (3) Order which temporarily suspends commercial fishing by means of gillnets and longlines operated on small vessels, in the Northern Gulf of California (*Acuerdo por el que se suspende temporalmente la pesca comercial mediante el uso de redes de enmalle, cimbras y/o palangres operadas con embarcaciones menores, en el Norte del Golfo de California*) ("2015 Gillnets Order"); (4) Order which prohibits specific fishing gear, systems, methods and techniques, as well as restricts permissible hours, for small vessel fishing activities in marine waters under the Mexican federal government's jurisdiction in the Northern Gulf of California, and which establishes landing sites and mandates the use of monitoring systems by such vessels (*Acuerdo por el que se prohíben artes, sistemas, métodos, técnicas y horarios para la realización de actividades de pesca con embarcaciones menores en aguas marinas de jurisdicción federal de los Estados Unidos Mexicanos en el Norte del Golfo de California, y se establecen sitios de desembarque, así como el uso de sistemas de monitoreo para dichas embarcaciones*) ("2017 Gillnets Order"); (5) Order which establishes a fishing ban on the Totoaba (*Cynoscion macdonaldi*), in the waters of the Gulf of California, from the mouth of the Colorado River to Río Fuerte, Sinaloa, on the east coast, and from the Colorado River to Bahía Concepción, Baja California, on the west coast (*Acuerdo que establece veda para la especie Totoaba,* Cynoscion MacDonaldi*, en aguas del Golfo de California, desde la desembocadura del Río Colorado hasta el* Río Fuerte, Sinaloa *en la costa oriental, y del Río Colorado a Bahía Concepción, Baja California, en la costa occidental*) ("1975 Totoaba Fishing Ban"); and (6) Order which regulates fishing gear, systems, methods and techniques, as well as restricts permissible hours, for small and large vessels in Mexican marine areas in the Northern Gulf of California, and which establishes landing sites and mandates the use of monitoring systems for such vessels (*Acuerdo por el que se regulan artes, sistemas, métodos, técnicas y horarios para la realización de actividades de pesca con embarcaciones menores y mayores en Zonas Marinas Mexicanas en el Norte del Golfo de California y se establecen sitios de desembarque, así como el uso de sistemas de monitoreo para tales embarcaciones*) ("2020 Gillnets Order") to protect the Vaquita Porpoise (*Phocoena sinus*).

THE COUNCIL:

CONSIDERING that the Submissions on Enforcement Matters (SEM) process and the preparation of factual records is governed by Articles 24.27 and 24.28 of the Agreement between the United States of America, the United Mexican States, and Canada (USMCA) and the Agreement on Environmental Cooperation (ECA);

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 laws in Canada, the United Mexican States (Mexico), and the United States of America (United States);
RECOGNIZING that the purpose of a factual record is to provide an objective presentation of the facts relevant to assertion(s) set forth in a submission, and that a factual record will generally outline the history of the environmental enforcement issue raised in the submission, the relevant national environmental laws, and the actions of the relevant Party to effectively enforce those environmental laws;

HAVING CONSIDERED submission SEM-21-002 dated 11 August 2021, filed by the submitters, and Mexico's response, dated 31 January 2022;

HAVING REVIEWED the Secretariat's Notification, dated 1 April 2022, presenting its reasons to recommend the preparation of a factual record on the effective enforcement of: Article 55 of the LGVS; Article 56 of the LGVS Regulation; the 1975 Totoaba Fishing Ban; the 2015 Gillnets Order; the 2017 Gillnets Order; and the 2020 Gillnets Order;

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 DECIDES, UNANIMOUSLY:

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

A. Article 55 of the LGVS, in relation to measures put into place to effectively enforce this Article in the context of illegal traffic of Totoaba;
B. Article 56 of the LGVS Regulation, in relation to measures put in place to effectively enforce this article in the context of illegal traffic in Totoaba;
C. The 1975 Totoaba Fishing Ban, in relation to measures taken to effectively enforce the ban.
D. The 2020 Gillnets Order, in relation to measures taken to effectively enforce the Order.

TO FURTHER DIRECT the Secretariat to provide the Council with its overall work plan for gathering the relevant facts; to keep the Council informed of any future changes or adjustments to such plan; and to promptly communicate with the Council in connection with any clarification required with respect to the scope of the factual record hereby authorized.

APPROVED BY THE COUNCIL:

_____
Sandra McCardell
Government of Canada

_____
Miguel Ángel Zerón Cid
Government of the United Mexican States

_____
Jane Nishida
Government of the United States of America

Reasons for Council instructions regarding submission SEM-21-002 (*Vaquita Porpoise*)

Consistent with its commitment to transparency and in its capacity as the governing body of the Commission for Environmental Cooperation (CEC), with responsibility for overseeing the processing of submissions on enforcement matters (SEM), taking into account the decision of the CEC Council ("the Council") to present the reasoning behind its decision regarding the preparation of a factual record in relation to submission SEM-21-002 (*Vaquita Porpoise*) and to publish it in the CEC's public registry of submissions, in accordance with the procedures set out in Articles 24.27 and 24.28 of the *United States-Mexico-Canada Agreement* (USMCA) and Article 2.3 of the *Agreement on Environmental Cooperation* (ECA), in force as of 1 July 2020. The Council hereby makes public its reasons for instructing the Secretariat to prepare a factual record in relation to submission SEM-21-002 (*Vaquita Porpoise*).

1. Secretariat notification pursuant to USMCA Article 24.28(1)

In its notification of 1 April 2022 pursuant to USMCA Article 24.28(1), the Secretariat informed the Council that the preparation of a factual record was warranted in regard to the effective enforcement of the following legal provisions:

- Article 55 of the General Wildlife Act (*Ley General de Vida Silvestre*—LGVS) and 56 of the LGVS Regulation;
- the *Order establishing a fishing ban on the totoaba (*Cynoscion MacDonaldi*) in the waters of the Gulf of California, from the mouth of the Colorado River to Río Fuerte, Sinaloa, on the east coast, and from the Colorado River to Bahía Concepción, Baja California, on the west coast* **(1975 Totoaba Fishing Ban)**;
- the *Order temporarily suspending commercial fishing by means of gillnets and longlines operated on small craft in the Northern Gulf of California* **(2015 Gillnets Order)**;
- the *Order prohibiting specific fishing gear, systems, methods and techniques, and restricting permissible hours, for fishing by small craft in marine waters under Mexican federal government jurisdiction in the Northern Gulf of California, establishing landing sites, and mandating the use of monitoring systems by such craft* **(2017 Gillnets Order)**, and
- the *Order regulating fishing gear, systems, methods and techniques, and restricting permissible hours, for small and large craft in Mexican marine areas in the Northern Gulf of California, establishing landing sites, and mandating the use of monitoring systems for such craft* **(2020 Gillnets Order).**

2. Council Instructions to the Secretariat

By means of Council Resolution 24-02, attached hereto, the Council unanimously instructed the Secretariat to prepare a factual record with respect to the following legal provisions:

A. Article 55 of the LGVS, in relation to measures put into place to effectively enforce this Article in the context of illegal traffic of Totoaba;

B. Article 56 of the LGVS Regulation, in relation to measures put in place to effectively enforce this article in the context of illegal traffic in Totoaba;

C. The 1975 Totoaba Fishing Ban, in relation to measures taken to effectively enforce the ban.

D. The 2020 Gillnets Order, in relation to measures taken to effectively enforce the Order.

In accordance with the provisions of ECA article 2.3 and with the intention of contributing to transparency and access to information, the Council sets forth the reasons that motivated the instructions of its members.

3. Explanation of the Council's reasoning

The Council instructed the Secretariat to prepare a factual record through Council Resolution 24-02 based on the analysis in the Secretariat's Notification dated 1 April 2022 and discussions between the Parties.

Additionally, Mexico offers further reasons for the instructions.

A. LGVS Article 55 and Article 56 of the LGVS Regulation

Mexico takes note of the Submitters' assertions of failure to effectively enforce LGVS Article 55 and Article 56 of the LGVS Regulation as well as the Secretariat's recommendation to prepare a factual record in order to provide information to assess the magnitude of the problem of illegal trafficking of totoaba, as well as Mexico's efforts in the implementation of such strategies and the effectiveness of the measures undertaken to effectively control illegal trafficking of totoaba, within the framework of the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) and, taking into account the text of these legal provisions, which are given below.

LGVS Article 55:

> The import, export, or re-export of wildlife specimens, parts, and derivatives included in the Convention on International Trade in Endangered Species of Wild Fauna and Flora shall be conducted in accordance with said Convention, the provisions of this Act, and the provisions flowing from it, it being prohibited to import, export, re-export, and/or market ivory in violation of the international treaties to which Mexico is a party and of the applicable legislation.

Article 56 of the LGVS Regulation:

> The import, export, and re-export of biological materials of species included in the appendices to CITES shall be subject to the provisions of said Convention.

In this regard, Mexico notes that in relation to the above provisions, the totoaba is listed in Appendix I of CITES and that trade in such species is governed by CITES Article III, paragraph 2 which stipulates that the export of any specimen of a species included in Appendix I requires the prior grant and presentation of an export permit, which may only be granted when the scientific and management authorities of the state have advised that this will not be detrimental to the species, that it was not obtained in contravention of the applicable laws, and that the existence of the import permit has been verified. Where live specimens are exported, it must be verified that these have been prepared and shipped so as to minimize the risk of injury or damage to the health of the specimen.

The Government of Mexico, acting by the General Wildlife Branch (*Dirección General de Vida Silvestre*—DGVS) as the administrative authority for CITES, for compliance with the obligations set out in LGVS Article 55 and Article 56 of the LGVS Regulation, and in accordance with the stipulations of CITES III, has implemented the administrative procedure titled "Approval, permit, or certificate for import, export, or re-export of specimens, parts, and derivatives of wildlife."

In relation to this procedure, Mexico notes that it is authorized for species raised in captivity through management units (*unidad de manejo*—UMA) or premises or facilities managing wildlife (*predio o instalación que maneja vida silvestre*—PIMVS) in confinement, outside of their natural habitat, in accordance with NOM-169-SEMARNAT-2018, which establishes the specifications for the marking of specimens, parts, and derivatives of totoaba derived from sustainable production in an UMA or a PIMVS. With this procedure, it is possible to trace these products from the UMA or PIMVS to the final vendor, in conformity with CITES Resolution Conf. 12.10 (Rev. CoP15).

Likewise, Mexico notes its statements referring to the absence or lack of complaints filed by any supervisory body, ministerial authority, or the CITES Secretariat or Conference of the Parties against the procedure to import, export, or re-export procedure involving totoaba and it further takes into consideration that the matters relating to control of trafficking in totoaba are regulated by Article 420 paragraph IV of the Federal Criminal Code (*Código Penal Federal*), these being illicit activities whose perpetrators are liable to imprisonment, and that this legal provision was not mentioned by the Submitters.

B. 1975 Totoaba Fishing Ban

Mexico takes into consideration the Submitters' assertions with respect to the effective enforcement of the 1975 Totoaba Fishing Ban, as well as the Secretariat's recommendation to prepare a factual record in order to document the information relevant to Mexico's efforts to ensure the effective compliance with said Ban, the control of illegal trafficking in totoaba in the Upper Gulf of California, compensation mechanisms for fishermen, and the raising of totoaba in captivity, in addition to providing information regarding other legal and environmental policy instruments to prevent and penalize illegal fishing of totoaba.

In this regard, in relation to the lack of information on the efforts made by Mexico to ensure effective compliance with the 1975 Totoaba Fishing Ban, Mexico has informed that, in order to comply with the obligation to ensure the maximum security in the reproduction and growth of the fishing generations, it has issued several legal instruments complementary to said Ban, fully evidencing its effort and commitment, through the implementation of multiple actions, both legal and technical, to protect the totoaba, among other species in the region, also complying with the Guidelines agreed at COP19, the SC75 Recommendations and with the Determinations of the Report of the Visit-Mission, as well as the indications specified by CITES.

Regarding these aspects, Mexico states that upon reviewing the 1975 Totoaba Fishing Ban, issues related to the matter of illegal trafficking are not governed by this instrument but by Article 420 paragraph IV of the Federal Criminal Code; along similar lines, it notes that the compensation mechanisms for fishermen and the raising of totoaba in captivity are also not governed by the abovementioned Ban.

Likewise, Mexico states that the contents of the citizen complaint filed by the Submitters as a means of demonstrating that they pursued the legal remedies available to them under Mexican law, as required by USMCA Article 24.27(3)(c), bears no relationship to the purposes of the 1975 Totoaba Fishing Ban.

C. 2020 Gillnets Order

Mexico took into account the Submitters' assertions concerning failure to effectively enforce the 2020 Gillnets Order, as well as the Secretariat's recommendation to prepare a factual record, in order to consider the effectiveness of the measures taken, the progress of pending measures and the respective assessments.

Regarding the issues pointed out by the Secretariat, Mexico has specified that both the **2015 Gillnets Order** and the **2017 Gillnets Order** are not enforceable, since they were abrogated at the time the Submission SEM-21-002 was filed, in addition to reporting on the effectiveness of the measures of the **2020 Gillnets Order** that have a positive effect on the reduction of illegal totoaba fishing activities, given the decrease of illegal vessels in the Zero Tolerance Zone.

As evidence of the above, the following are the letters to Semar from the non-governmental organization Sea Shepherd Conservation Society giving evidence of its considerable work in the Upper Gulf of California to reduce the number of boats in the Zero Tolerance Area and, in contrast, Mexico observes that the Secretariat, in its notification reasoning, presents no evidence whatsoever in regard to mortality of vaquita specimens during the period of implementation of the 2020 Gillnets Order.

Likewise, the Government of Mexico submitted information in its Party Response through annexes MX-008, MX-009, MX-010, MX-011, MX-012, MX-017, MX-018, MX-019, MX-020 and MX-021, which provide an exhaustive account of the actions in terms of inspection, monitoring, removal of gillnets and filing of criminal actions, implemented by the Secretariat of Agriculture and Rural Development (*Secretaría de Agricultura y Desarrollo Rural*, Sader), the Secretariat of the Environment and Natural Resources (*Secretaría de Medio Ambiente y Recursos Naturales,* Semarnat) and the Navy (*Secretaría de Marina*, Semar) in order to protect the Vaquita marina and totoaba species.

Mexico notes that for the protection of the vaquita porpoise and the totoaba required by the Secretariat, the authority and coordination actions between Semarnat, Sader, Semar, the Federal Attorney's Office for Environmental Protection (*Procuraduría Federal de Protección al Ambiente,* Profepa), as well as other public and private agencies involved in the effective enforcement of the environmental law in question, are detailed in the 2020 Gillnets Order, as well as in the Zero Tolerance Zone Enforcement Plan, the Triggering Factors Agreement, the Guidelines of the Intragovernmental Group on Sustainability in the Upper Gulf of California and the Collaborative Group on the Enforcement of the 2020 Gillnets Order, which are available to the Submitters and the general public through the Official Gazette of the Federation (*Diario Oficial de la Federación*).

Moreover, Mexico notes that there has been a failure during this process to effectively apply the criteria of USMCA Article 24.27(3)(a) and (c), which stipulate that prior to requesting a response from a Party, the Secretariat must determine whether the submission alleges harm to the person making the submission and whether the private remedies available to the Submitters under Mexican law have been pursued.

Likewise, Mexico considers USMCA Article 24.4(2), which stipulates that the Parties recognize that as regards the enforcement of environmental law, a Party is compliant with Article 24.4(1) where a course of action reflects a reasonable exercise of its discretion in regard to investigatory, prosecutorial, regulatory, and compliance matters, among other measures adopted with a view to administrative efficiency, which give evidence of the efforts of the Mexican authorities to protect the vaquita and the totoaba.

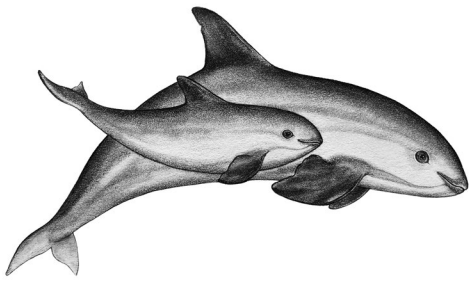
However, Mexico agrees with the Secretariat's recommendation that a factual record would provide information related to the role played by the various government agencies and the development of governance frameworks to eradicate the illegal trade of totoaba and promote the effective protection of the vaquita porpoise.

APPENDIX 2

Submission SEM-21-002 (*Vaquita Porpoise*)

Submission on Enforcement Matters presented to the Commission on Environmental Cooperation pursuant to Article 24.27 of the United States-Mexico-Canada Agreement

Mexico's failure to enforce its environmental laws for the critically endangered Vaquita Porpoise



Center for Biological Diversity
Animal Welfare Institute
Natural Resources Defense Council
Environmental Investigation Agency

August 11, 2021

Executive Summary

Pursuant to Article 24.27 of the United States-Mexico-Canada Agreement ("USMCA"), the Center for Biological Diversity, Animal Welfare Institute, Natural Resources Defense Council, and Environmental Investigation Agency ("Submitters") provide the following Submission on Enforcement Matters ("Submission" or "SEM") to the Secretariat of the Commission for Environmental Cooperation ("CEC").

As detailed herein, the Mexican government is failing to effectively enforce several environmental laws and as a result has caused the near-extinction of the vaquita porpoise. Only approximately 10 vaquita remain. The vaquita population has been declining precipitously for decades due to bycatch in gillnets set to catch shrimp and fish, including totoaba, a large, endangered fish that is threatened by illegal fishing for international markets.

In an effort to address the vaquita's decline, Mexican law generally prohibits the use of gillnets within the vaquita's Upper Gulf of California habitat and bans the catch and commercial export of totoaba. Totoaba is also protected under Appendix I of the Convention on International Trade in Endangered Species of Wild Fauna and Flora ("CITES"), which bans the commercial, international trade in the species. The USMCA Parties have already recognized the vaquita is a "species of common conservation concern," and in 2008, the CEC developed a Conservation Action Plan for the species, which recommended the complete removal of gillnets from vaquita habitat.[1]

Yet despite these bans, plans, and decades of promises by the Mexican government to reduce vaquita bycatch, Mexico has failed to fully implement and enforce its laws banning deadly gillnets and otherwise regulating fishing to protect the vaquita. Indeed, the most recent data reveal massive violations of these laws: the International Union for Conservation of Nature ("IUCN") Cetacean Specialist Group ("IUCN CSG") reported that in November 2020, 1,185 boats were documented in the vaquita's habitat, nearly all gillnetting illegally.[2] IUCN CSG noted that "illegal fishing remains at high levels and takes place day and night."[3] If the Mexican government does not immediately rectify its enforcement failures, the vaquita's extinction may be imminent, as its population is dangerously low.

For these reasons, we request the CEC Secretariat develop a factual record on this issue, as contemplated by Article 24.28 of the USMCA, on an expedited basis. A factual record is needed to clarify the issues, as the Mexican government continues to argue that its enforcement is adequate, despite the evidence to the contrary, and to help the Parties and larger international community develop a more effective strategy for saving the vaquita.

I. Procedural Requirements

This Submission meets the procedural requirements of Article 24.27. Specifically:

- Each Submitter is a "person of a Party," as defined by the USMCA. Each is a non-profit, 501(c)(3) corporation "organized under applicable law" of the United States.[4] Ex. A.
- Submitters assert that Mexico is failing to effectively enforce its "environmental laws," as defined by the USMCA ("a statute or regulation of a Party…including any that implements the Party's obligations under a multilateral environmental agreement").[5] Specifically:

1. CEC (2008). *Phocoena sinus* – North American Conservation Action Plan. <http://www3.cec.org/islandora/en/item/1136-vaquita-north-american-conservation-action-plan>.
2. IUCN Cetacean Specialist Group (Jan. 26, 2021). Vaquita update October through December 2020. <https://iucn- csg.org/vaquita-update-october-through-december-2020/>.
3. *Id.*
4. USMCA Art. 24.271; 1.513.
5. *Id.*, Art. 24.1.

- Mexico is failing to enforce its federal regulations governing fishing within vaquita habitat, including several *Acuerdos* published in Mexico's Official Gazette of the Federation ("DOF") that prohibit gillnet use and capture of totoaba.[6] The purpose of these regulations is to protect and conserve wildlife, including the endangered vaquita and totoaba.
- Mexico is failing to enforce its domestic legislation that implements CITES, a treaty aimed at protecting endangered species. Specifically, Mexico's General Wildlife Law requires that the import and export of species included under CITES "will be carried out in accordance with the Convention."[7]

— The Mexican government's long-standing enforcement failures have been communicated by Submitters in writing on numerous occasions, as documented in Exhibit B.

— Submitters are harmed by Mexico's failures to enforce its laws and the consequent decline of the vaquita. Submitters are non-profit organizations whose missions include protecting wildlife. *See* Ex. A.

— Submitters have pursued private remedies under Mexican law. For example, in 2017, the Center for Biological Diversity filed a formal administrative complaint ("denuncia popular"), documenting the failure of the Procuraduría Federal de Protección al Ambiente ("PROFEPA"), Mexico's environmental enforcement agency, to enforce laws prohibiting fishing within the vaquita's habitat without an Environmental Impact Authorization. The Center received no substantive response. *See* Ex. C.

— Further study of this issue will advance the USMCA. As noted above, the Parties have recognized the vaquita is a "species of common conservation concern," and the CEC prepared a North American Conservation Action Plan ("NACAP") for the vaquita in 2008. Yet Mexico has failed to meet the recommendations of this Plan, including ensuring the "[i]mmediate removal of all gill nets … from areas where vaquitas are known to occur."[8] The Parties and the CEC have demonstrated long-standing concern, involvement, and expertise in this matter, and the development of a factual record will both clarify issues and help formulate recommendations to save this species.

II. Background and History

A. Endangered Vaquita and Totoaba

The vaquita (*Phocoena sinus) is the world's smallest and most endangered cetacean.*[9] With a rounded head and black patches around its eyes and mouth, the vaquita measures just five

feet in length. The porpoise occurs in only one place on Earth, a small, 1,500-square-mile area in Mexico's Upper Gulf of California near the town of San Felipe.[10]

6. DOF (Apr. 10, 2015). Agreement that suspends commercial fishing through the use of gillnets, Northern Gulf of California. http://www.dof.gob.mx/nota_detalle.php?codigo=5388486&fecha=10/04/2015 ("2015 Gillnet Acuerdo"); DOF (June 30, 2017). Agreement prohibits the use of ground networks for commercial fishing in waters for federal jurisdiction of the north of the Gulf of California. http://dof.gob.mx/nota_detalle.php?codigo=5488674&fecha=30/06/2017 ("2017 Gillnet Ban"); DOF (Sept. 20, 2021). Acuerdo por el que se regulan artes, sistemas, métodos, técnicas y horarios para la realización de actividades de pesca con embarcaciones menores y mayores en Zonas Marinas Mexicanas en el Norte del Golfo de California y se establecen sitios de desembarque, así como el uso de sistemas de monitoreo para tales embarcaciones. http://www.dof.gob.mx/nota_detalle.php?codigo=5601153&fecha=24/09/2020 ("Sept. 2020 Vaquita Regulations"); DOF (Jan. 8, 1975). Acuerdo que establece veda para la especie Totoaba, Cynoscion MacDonaldi, en aguas del Golfo de California, desde la desembocadura del Río Colorado hasta el Río Fuerte, Sinaloa en la costa oriental, y del Río Colorado a Bahía Concepción, Baja California, en la costa occidental. http://www.dof.gob.mx/nota_detalle.php?codigo=4786520&fecha=01/08/1975 ("1975 Totoaba Ban").
7. *Ley General de Vida Silvestre*, Art. 55; *see also id.* Arts. 65–66 (CITES permit requirements).
8. CEC (2008).
9. Rojas-Bracho, L., Reeves, R. R., & Jaramillo-Legorreta, A. (2006). Conservation of the vaquita Phocoena sinus. *Mammal Review*, *36*(3), 179-216.
10. *Id.*

The vaquita has likely been in decline since its identification by scientists in the 1950s, and that decline has only one cause: entanglement in gillnets set for shrimp, curvina, sierra, and totoaba.[11] The vaquita's more recent decline has been precipitous from around 570 animals in 1999 to likely 10 animals today,[12] a 98% decline in over 20 years. IUCN considers the vaquita "critically endangered."[13]

The totoaba (*Totoaba macdonaldi) is a large, schooling marine fish in the croaker family (Sciaenidae) that exclusively inhabits Mexico's northern and central Gulf of California,*[14] overlapping with the vaquita's habitat. The fish can grow up to two meters in length and live up to 25 years with late sexual maturity, a life history that makes it vulnerable to exploitation.[15] Totoaba migrate to the vaquita's Upper Gulf of California habitat to spawn between January and April each year.[16] IUCN considers the totoaba "critically endangered."[17]

Despite the species' conservation status, totoaba are fished illegally for their swim bladders, which are dried and smuggled abroad, primarily to China, where the product is sought for its supposed health benefits and investment value.[18] The dried bladder, referred to as "maw" or "buche," can be sold on the black market for extraordinary prices, reaching $46,000 per kg[19] to even $100,000 per kg by some reports.[20] Totoaba are caught using illegal gillnets, which entangle and kill vaquita.

To save the vaquita from extinction, numerous scientists and international bodies have urged Mexico to remove *all gillnets from vaquita habitat. The international scientific advisory group on vaquita, the Comité Internacional para la Recuperación de la Vaquita ("CIRVA"), has on numerous occasions called on Mexico to "eliminate all gillnet fishing" in the vaquita's habitat.*[21] The UNESCO World Heritage Committee has urged Mexico to ensure vaquita habitat "remains completely gillnet-free."[22] The Parties to CITES have urged Mexico to "maintain the Vaquita Refuge area as a net-free zone."[23] This June, the International Whaling Commission's ("IWC") Scientific Committee "urgent[ly]" recommended that Mexico "remove gillnets from the species' range immediately."[24] And the CEC itself recommended the "immediate removal of all gill nets" in its 2008 vaquita NACAP.[25]

11. Rojas-Bracho, L., & Reeves, R. R. (2013). Vaquitas and gillnets: Mexico's ultimate cetacean conservation challenge. *Endangered Species Research*, *21*(1), 77-87; Rojas-Bracho, L., Reeves, R.R., Jaramillo-Legorreta, A. & Taylor, B.L. 2008. *Phocoena sinus*. The IUCN Red List of Threatened Species. Version 2014.2. <www.iucnredlist.org>; Letter from IUCN to Almirante Ojeda Durán (March 21, 2021). https://iucn-csg.org/wp- content/uploads/2021/03/2021-03-26-SSC-vaquita-English.pdf; D'agrosa, C., Lennert- Cody, C. E., & Vidal, O. (2000). Vaquita bycatch in Mexico's artisanal gillnet fisheries: driving a small population to extinction. *Conservation Biology*, *14*(4), 1110-1119; CIRVA (2019). *Report of the Eleventh Meeting of CIRVA*. La Jolla, CA, Feb. 19–21, 2019 ("CIRVA-11 (2019)").
12. CIRVA (2004). *Report of the Third Meeting of CIRVA*, Ensenada, Baja California, México, Jan. 18–24, 2004; Rojas-Bracho, L., et al. (2021). *Report on using expert elicitation to estimate total unique vaquitas and calves in the Zero Tolerance Area with recommendations for future research efforts*. https://iucn-csg.org/wp- content/uploads/2021/04/Vaquita-Report-on-Using-Expert-Elicitation-Final.pdf.
13. Rojas-Bracho, L. & Taylor, B.L. (2017). *Phocoena sinus. The IUCN Red List of Threatened Species* 2017: e.T17028A50370296. https://dx.doi.org/10.2305/IUCN.UK.2017-2.RLTS.T17028A50370296.en.
14. Cisneros-Mata, M.A., Montemayor-López, G., & Román-Rodríguez, M.J. (1995). Life history and conservation of *Totoaba macdonaldi*, *Conserv. Biol.* *9*(4):806-814.
15. *Id.*
16. *Id.*
17. Findley, L. (2010). *Totoaba macdonaldi. The IUCN Red List of Threatened Species* 2010: e.T22003A9346099. https://dx.doi.org/10.2305/IUCN.UK.2010-3.RLTS.T22003A9346099.en.
18. CIRVA-11 (2019); EIA (2017). Facing Extinction: Survival of the vaquita depends on eliminating the illegal trade in totoaba. https://eia-international.org/report/facing-extinction-survival-of-the-vaquita-depends-on-eliminating-the- illegal-trade-in-totoaba/.
19. *Id.*
20. De Mitcheson, Y., et al. (2019). Emerging from the murk: threats, challenges and opportunities for the global swim bladder trade. *Reviews in Fish Biology and Fisheries*, *29*(4), 809-835.
21. CIRVA-11 (2019); CIRVA (2017). *Report of the Tenth Meeting of CIRVA*, La Jolla, CA, Dec. 11–12, 2017 ("CIRVA-10 (2017)") (recommending "eliminate all setting of gillnets" in vaquita's range); *see also* Taylor, B. L., Wells, R. S., Olson, P. A., Brownell Jr, R. L., Gulland, F. M., Read, A. J., ... & Rojas- Bracho, L. (2019). Likely annual calving in the vaquita, Phocoena sinus: A new hope?. *Marine Mammal Science*, *35*(4), 1603-1612.
22. UNESCO World Heritage Committee (July 23, 2019). 43rd Session, Decisions adopted Dec. 43 COM 7B.26, Baku, Azerbaijan (June 3–July 10, 2019). https://whc.unesco.org/archive/2019/whc19-43com-18-en.pdf.
23. CITES, Dec. 18.294: Totoaba (*Totoaba macdonaldi*). https://cites.org/eng/taxonomy/term/42103.
24. International Whaling Commission (2021). *Report of the Scientific Committee* (Virtual Meetings, 27 April–14 May 2021), at 143. https://archive.iwc.int/pages/view.php?ref=19276&k=.
25. CEC (2008).

B. The Vaquita and Totoaba's Decline and Mexico's History of Enforcement Failures

The Mexican government has a long and troubling history of failing to enforce vaquita and totoaba protections. Totoaba, once abundant, were overfished throughout the 1900s, and following drastic population decline, Mexico banned the capture of totoaba in 1975.[26] In 1976, the totoaba was included in Appendix I of CITES, banning international, commercial trade in the species.[27]

Despite Mexico's ban on totoaba fishing and CITES' ban on totoaba trade, both activities have continued. Due to "the geographic isolation" of the area, "[p]oaching of adult totoaba in the upper Gulf [remained] a common practice," and in 1979, an estimated 70 metric tons of totoaba were poached from just one fishing port.[28] There were reportedly 30 fishermen poaching totoaba in 1985, taking an estimated 161.7 metric tons each year.[29]

By the 1990s, scientists began raising concerns regarding the vaquita's decline due to entanglement. In 1990, the IWC Scientific Committee specifically recommended that "further action be taken to stop of the major cause of [vaquita] entanglement by fully enforcing the closure of the totoaba fishery."[30]

In response, in 1993, Mexico declared the Upper Gulf a Biosphere Reserve and claimed the government was "enforcing the closure of all commercial fisheries in the reserve."[31] Yet vaquita scientists concluded these efforts were "ineffectual" and "half-hearted, at best,"[32] and "[c]ommercial fishing with a variety of gill nets … continued without interruption both inside and outside the Biosphere Reserve."[33]

In 2005, Mexico established a refuge area for the vaquita and attempted to ban certain gillnets.[34] But again, enforcement was lax, as the new "Refuge Area remained essentially unmanaged until 2008," when a new program was instituted officially banning all gillnets in the area.[35] Initially, Mexican authorities made a "strong effort" to enforce the new ban, but "that effort … waned," and illegal fishing continued.[36]

In 2013, in yet another effort to restrict gillnet fishing, Mexico formally banned the use of the *chinchorro gillnet used to catch shrimp in the Upper Gulf*.[37] By 2014, CIRVA reported that only 97 vaquita remained, despite Mexico's two decades of regulation, numerous bans, and multiple protective areas.[38] CIRVA stated that Mexico's "at-sea enforcement efforts ha[d] failed, and illegal fishing ha[d] increased … throughout the range of the vaquita."[39]

In 2015, Mexico instituted a temporary, two-year ban on most gillnets within vaquita habitat.[40] Almost immediately, it became clear the ban and its enforcement were ineffective, as the vaquita population plummeted to only around 30 animals by November 2016.[41] CIRVA concluded that "illegal fishing [wa]s still common" and that "enforcement efforts to date have been insufficient."[42]

26. Cisneros-Mata, et al. (1995); 1975 Totoaba ban.
27. CITES, Appendix I.
28. Cisneros-Mata, et al. (1995).
29. *Id.*
30. International Whaling Commission Scientific Committee, Rep. Intl. Whal. Commn., 42, at 79 (June 10, 1990).
31. Rojas-Bracho et al. (2006).
32. Rojas-Bracho & Reeves (2013).
33. Rojas-Bracho, et al. (2006).
34. Rojas-Bracho & Reeves (2013).
35. *Id.*
36. *Id.*
37. Letter from R. Garcia Soto, Attorney, SAGARPA, to John Hendershedt, NMFS (Dec. 6, 2017). According to the terms of the Official Mexican Standard NOM-002-SAG / PESC-2013 on shrimp, the ban was to be phased in over a three-year period, with zero usage of the *chinchorro* by 2016.
38. CIRVA (2014). *Report of the Fifth Meeting of CIRVA*. Ensenada, Baja California, July 8–10, 2014.
39. *Id.*
40. 2015 Gillnet Acuerdo.
41. CIRVA (2016). *Report of the Eighth Meeting of CIRVA*. La Jolla, CA, Nov. 29–30, 2016.
42. *Id.*

In July 2017, under immense international pressure, Mexico finally made its gillnet ban in the Upper Gulf permanent.[43] However, "[h]igh levels of illegal fishing continue[d]" in 2018,[44] and by early 2019, CIRVA concluded that "only about 10 vaquitas remained alive."[45]

In March 2020, after years of working with and urging Mexico to reduce vaquita bycatch, the U.S. government banned import of seafood products from Mexican fisheries operating in the vaquita's Upper Gulf habitat.[46] Specifically, the U.S. Marine Mammal Protection Act requires the U.S. government to ban import of any fish caught with gear that "incidental[ly] kill[s]" marine mammals "in excess of U.S. standards."[47] The United States concluded that, among other failures, the Government of Mexico "failed to fully implement and enforce its existing laws and regulatory regime including the … gillnet ban, the provisions which prohibit fishing in the vaquita refuge, and inspection of fishing vessels leaving and arriving to port."[48]

C. Mexico's 2020 Vaquita Regulations and Totoaba Bans

In response to the U.S. ban, in September 2020, Mexico issued new regulations governing fishing in vaquita habitat.[49] The 2020 regulations have the potential to offer totoaba and vaquita important protections from fishing activities; however as detailed below, the Mexican government has failed to fully implement and enforce the new rules or its long-standing ban on totoaba fishing and trade.

Among the provisions, the regulations prohibit the use and possession of gillnets in the designated marine area, demarcated by the dashed line in Figure 1 below.[50] The regulations also prohibit the transport of gillnets within 10 kilometers of the marine area; prohibit manufacturing, owning, and sales of gillnets in towns around the marine area; and require fishermen to surrender gillnets to authorities within 60 days.[51] The regulations further require vessel monitoring systems and inspections upon departure and arrival.[52]

The regulations also designate a small "Zero Tolerance Area" – an area in which "[f]ishing activities of any kind, with any type of vessel … are permanently and totally prohibited" and transit of any unauthorized vessels is also prohibited.[53] The regulations commit authorities to surveillance in the area "24-hours a day surveillance throughout the year … to provide real-time response capabilities to avoid any case of violation." Lastly, the regulations promise an "Application Plan" to address inspection and surveillance and "triggers" to address non-compliance.[54]

In addition to the fishing regulations described above, Mexican law continues to ban both the capture and international trade of totoaba. The Mexican government's 1975 general ban on totoaba fishing remains in place.[55] Totoaba also remains listed on CITES Appendix I,[56] and the treaty strictly bans all international, commercial trade (including export) in Appendix-I species.[57] Moreover, Mexican domestic law requires compliance with CITES. Article 55 of the General Wildlife Law states that "[t]he …export… of specimens, parts and derivatives of wild species included in the Convention on International Trade in Endangered Species of Wild Fauna and Flora, will be carried out in accordance with that Convention, as provided in the present Law and the provisions derived from them." Article 56 further affirms that "the import, export and re-export of biological material of species included in the appendices of CITES will be subject to the provisions of said Convention."[58] Accordingly, the trade and export of totoaba is banned both under CITES and Mexican domestic law.

43. 2017 Gillnet Ban.
44. CIRVA-10 (2017).
45. CIRVA-11 (2019) (emphasis added).
46. 85 Fed. Reg. 13,626 (Mar. 9, 2020).
47. 16 U.S.C. § 1372(a).
48. 85 Fed. Reg. at 13,626.
49. Sept. 2020 Vaquita Regulations.
50. *Id.*, Art. 2(I).
51. *Id.*, Art. 2(II), (III); 10.
52. *Id.*, Art. 6–9.
53. *Id.*, Art. 13.
54. *Id.*, 5th and 7th Transitory Articles.
55 1975 Totoaba Ban.
56. Convention on International Trade in Endangered Species of Fauna and Flora, March 3, 1973, 27 U.S.T. 1087, 993 U.N.T.S. 243 (entered into force July 1, 1975); *see also* CITES, Appendices. https://cites.org/eng/app/appendices.php (listing totoaba on Appendix I).
57. CITES, Art. III(1), (2)(d), (3)(c); *see also id.* Art. I(c) (defining "trade" to include "export).
58. *Ley General de Vida Silvestre*, Art. 55, 56; *see also id.* Arts. 65–66 (CITES permit requirements).

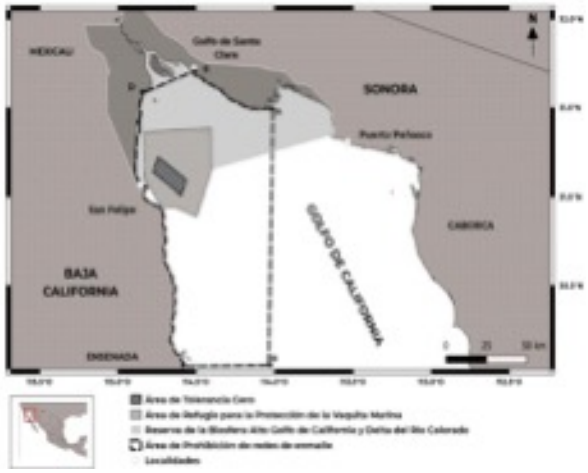


Figure 1. Management areas in the Upper Gulf of California.

II. Argument: The Mexican Government Has Failed to Implement and Enforce its Fishery Regulations in the Upper Gulf.

The Mexican government failed to both fully implement its new 2020 vaquita regulations and has utterly failed to enforce the gillnet ban, fishing regulations, and totoaba trade prohibitions in recent years. As such, the Mexican government is "failing to effectively enforce its environmental laws" under the USMCA and is driving the vaquita extinct. This grave situation warrants the development of a factual record by the CEC to clarify the issues so that Mexico and the international community can develop a new, ambitious strategy to finally save the vaquita.

A. Failure to Fully Implement Its 2020 Regulations

The Mexican government has failed to implement key provisions of its 2020 vaquita protection regulation and is therefore failing to enforce its environmental laws governing fishing in the vaquita habitat.

1. Insufficient Application Plan

As noted above, the Mexican government's September 2020 regulations required agencies to issue an "Application Plan" within 30 days of the regulation's publication, i.e., by October 24, 2020.[59] The Application Plan must specify "inspection and surveillance actions" and "actions for the recovery, disposal and recycling … of illegal" or lost gear.

To date, the Mexican government has not issued a plan that meets these requirements. The plan issued by the government in January 2021, nearly three months late, is vague and primarily delineates which agencies are charged with which functions related to the vaquita.[60] While such clarification was needed, many of the duties are vague and lack timeframes (e.g., directing agencies to "hold … meetings" and "participate … in inspection and monitoring").

59. Sept. 2020 Vaquita Regulations, 5th Transitory Article.
60. Diario Oficial de la Federación (Jan. 20, 2021). *Application Plan in the Zero Tolerance Zone and the Refuge Area for the Protection of the Vaquita*. http://dof.gob.mx/nota_detalle.php?codigo=5610105&fecha=20/01/2021.

Moreover, the plan entirely fails to address "actions for the recovery, disposal and recycling … of illegal" or lost gear, as required by the 2020 regulations.[61] This is a critical failure: from January to August 2021, net removal was not occurring in the vaquita habitat because required contracts had not been signed by the government.[62] Numerous entities have recognized the importance of continued net removal: CIRVA has requested that the government "[f]ully fund and expand net removal efforts to maintain the area as a net-free zone;"[63] the World Heritage Committee has urged Mexico "to ensure that illegal net retrieval programmes are continued;"[64] and CITES urged Mexico to "intensify efforts and to secure resources to expand gillnet removal efforts."[65] Mexico has failed to effectively implement and thus enforce this key regulatory requirement.

2. New "Trigger" Plan Demonstrates Lack of Enforcement and Violates the 2020 Regulations

To incentivize compliance with fishing closures and the gillnet ban, the September 2020 regulations also require that relevant agencies "develop … triggering factors" or "quantitative measures … which if exceeded will result in predetermined actions by authorities, such as prohibitions on fishing, closures of areas or similar responses" by October 24, 2020.[66] However, Mexico's "trigger" plan – issued in July 2021, eight months late – blatantly fails to comport with the 2020 regulations' requirement that authorities ensure full and adequate enforcement in the Zero Tolerance Area.[67]

Under the plan, unless authorities observe 20 unauthorized vessels operating within the Zero Tolerance Area ("ZTA") in a day, the government *will apply only 60% of the human and material enforcement resources available in the area.*[68] If 20 to 49 unauthorized vessels are observed, authorities will apply 80% of resources; 100% of available enforcement resources will not be applied until over 50 illegal vessels are observed. If more than 65 boats are observed (or if 60-65 boats are observed more than 3 days within a month), a week-long closure applies to an area 3nm around the ZTA. If more than 65 boats are observed on multiple days in a month, the resulting closure expands in both width and duration.[69] Similarly, the regulations specify lengths of gillnets, which, if found, would trigger enforcement resources and closures.[70]

The trigger plan violates the 2020 regulations. Article 13 of the regulation states that the Zero Tolerance Area will be patrolled and surveilled "in a way as to provide real-time response capabilities to avoid *any case of violation" of the regulation.*[71] Thus the regulations clearly require the government to commit sufficient enforcement resources to ensure *zero violations, i.e., show "zero" tolerance for illegal activity in the area. In contrast, the trigger plan blatantly acknowledges that Mexican authorities will not commit all available enforcement resources until 50 illegal vessels are observed in the Zero Tolerance* Area.

61. *Id.*
62. *See* Gobierno de México (Aug. 7, 2021). *Gobierno de México fortalece acuerdos con la sociedad civil para la conservación de la vaquita marina en el Alto Golfo de California* [press release]. https://www.gob.mx/semarnat/prensa/gobierno-de-mexico-fortalece-acuerdos-con-la-sociedad-civil-para-la- conservacion-de-la-vaquita-marina-en-el-alto-golfo-de-california (announcing permission for one organization to conduct net removal in August 20210); Letter from IUCN to Durán, A., Arámbula, V., & Gonzáles, M. (Mar. 26, 2021). https://iucn-csg.org/wp-content/uploads/2021/03/2021-03-26-SSC-vaquita-English.pdf.
63. CIRVA-11 (2019).
64. World Heritage Committee (2019).
65. CITES, Dec. 18.294: Totoaba (*Totoaba macdonaldi*).
66. Sept. 2020 Vaquita Regulations, Art. 17.
67. DOF (July 9, 2021). *Acuerdo por el que se establecen los indicadores, factores detonantes y acciones predeterminadas, de conformidad con el artículo décimo séptimo del Acuerdo por el que se regulan artes, sistemas, métodos, técnicas y horarios para la realización de actividades de pesca con embarcaciones menores y mayores en zonas marinas mexicanas en el norte del Golfo de California y se establecen sitios de desembarque, así como el uso de sistemas de monitoreo para tales embarcaciones, publicado el 24 de septiembre de 2020*. http://www.dof.gob.mx/nota_detalle.php?codigo=5623442&fecha=09/07/2021. ("Trigger Agreement").
68. *Id.* (Art. 6).
69. *Id*.
70. *Id*.
71. Sept. 2020 Vaquita Regulations (Art. 13).

Scientists have repeatedly stated that, for the vaquita to survive, Mexico must "*eliminate all gillnet fishing*" *in the vaquita's remaining habitat, particularly in the ZTA*.[72] According to CIRVA, the scientific expert group who originally recommended the ZTA, the Area is intended to be one in which:

> the Government of Mexico … [will] fully mobilize its enforcement assets to *eliminate illegal fishing in the area where the last few vaquita remain … In this Zero Tolerance Area, … the goal is to remove any illegal net within hours of its deployment*.[73]

The Mexican government itself has recognized the Zero Tolerance Area is one in which fishing and vessel transit "are permanently *and totally prohibited*."[74] Yet the Mexican government's new "trigger" plan clearly contemplates allowing numerous, serious, and substantial violations to occur before applying full enforcement capacity in the small ZTA, instead of eliminating gillnet use (i.e., having "zero tolerance") in the area – dashing the vaquita's last and best hope.

The government also fails to state the total amount of enforcement resources available, so it is unclear how many inspectors, enforcement personnel, boats, and drones would be committed at 100%, much less 60% enforcement. Moreover, as detailed below, because the Mexican government has failed to enforce the ZTA, it is impossible to conclude that authorities will effectively enforce an *expanded closure area, beyond the ZTA, if triggered.*

3. Gillnet surrender

The 2020 regulations also require all permit holders, captains, and fishermen to deliver any gillnets to the Comisión Nacional de Acuacultura y Pesca ("CONAPESCA") office closest to where their vessel is registered by November 2020,[75] as the regulations ban possession of such gillnets near vaquita habitat. In response to a public information request for how many nets it had received, CONAPESCA stated that it had no responsive information as of February 3, 2021,[76] suggesting no nets had been turned in.

B. Failure to Enforce Fishing and Trade Bans

In addition to failing to implement its 2020 regulation and consistent with its pattern over the last 30 years, the Mexican government has failed to enforce its ban on gillnet fishing, as well as the long-standing ban on totoaba fishing and trade. These gross enforcement failures neuter critical conservation protections and are driving the vaquita extinct. Below, we discuss enforcement failures in the last four years, since Mexico issued its permanent ban on gillnets in the vaquita habitat in 2017.

Despite much fanfare over Mexico's announcement that it would permanently ban gillnets in vaquita habitat in 2017, Mexico has failed to enforce that ban. In its December 2017 report, CIRVA concluded once again that "[h]igh levels of illegal fishing continue[d]."[77] Net removal teams retrieved 396 illegal nets in the vaquita's habitat in 2017, the majority set to catch totoaba. CIRVA concluded "new gillnets [were] still routinely set in the vaquita habitat;" that "[e]nforcement thus far ha[d] failed to prevent illegal fishing;" and that "illegal fishing activities, particularly the setting of large-mesh gillnets for totoaba, continue[d] at alarming levels."[78]

72. CIRVA-11 (2019) (emphasis added).
73. *Id.*
74. Sept. 2020 Vaquita Regulations, Art. 13 (emphasis added).
75. *Id.*, Art. 10.
76. Information request number 0819700216820 under the Mexican General Law of Transparency and Access to Public Information.
77. CIRVA-10 (2017).
78. *Id.*

By early 2019, CIRVA concluded that "only about 10 vaquitas remained alive."[79] CIRVA reported that, in 2018, 659 pieces of fishing gear were removed from the vaquita's habitat; 67% of the gear was actively fishing for totoaba. CIRVA concluded that "high levels of illegal fishing for totoaba" had continued and that "illegal fishing is growing" in the area due to "continued failure of enforcement efforts." The group concluded that "[e]nforcement efforts have been *completely ineffective in reducing the illegal totoaba fishery in the Upper Gulf.*"[80]

In April 2019, a Mexican newspaper and television channel, *Excelsior, a respected Mexican media o rganization, produced a three-part exposé on the vaquita and illegal fishing in the Upper Gulf, shown nationally across Mexico and published in a major newspaper.*[81] The *Excelsior team interviewed and documented fishermen setting illegal gillnets for both shrimp and totoaba in broad daylight. The reporting was corroborated by a factual witness, who submitted a declaration describing the illegal activities to a U.S. federal court.*[82]

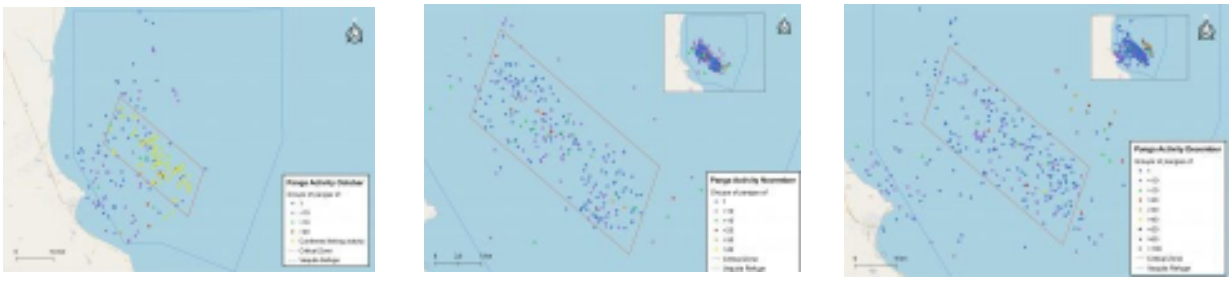
In October 2019, vaquita researchers reported observing 87 boats in a single day within the Zero Tolerance Area, as well as the use of gillnets 1km long.[83] In December 2019, the Sea Shepherd Conservation Society ("SSCS") reported sighting around 80 small boats setting and retrieving illegal gillnets in vaquita habitat in a single day.[84] Yet more illegal gillnets were retrieved in early 2020. IUCN reported 50 active totoaba nets retrieved in January and February alone, many in the Zero Tolerance Area.[85] SSCS provided nearly real-time notification of these illegal activities to Mexican fishery authorities and other government officials in the course of their net retrieval and monitoring efforts.[86]

In September 2020, Mexico issued its new vaquita regulations. Yet immediately, Mexico failed to enforce the restrictions. The head of the fishermen's federation in San Felipe, Lorenzo Garcia, stated that shrimpers used prohibited gillnets the very day after the regulations were announced.[87]

In December 2020, the IUCN CSG published data demonstrating that "illegal fishing remains at high levels and *takes place day and night*."[88] The IUCN CSG provided three maps documenting illegal fishing activities from October to December 2020 (*see Figure 2, also attached as Exhibit D). The maps depict hundreds of pangas—most fishing with gillnets—within the Zero Tolerance Area, where both gillnetting and transit of any vessels are strictly prohibited. A total of 1,185 pangas were counted in November 2020 alone, with nearly all these pangas actively gillnetting.*[89] Based on these data, the IUCN CSG concluded that "[i]llegal fishing remains uncontrolled."[90] In July 2021, the World Heritage Committee agreed with this assessment, expressing its "utmost concern … that illegal fishing of totoaba has continued in the Upper Gulf."[91]

79. CIRVA-11 (2019).
80. *Id.* (emphasis added).
81. *See Excélsior* television report (in Spanish) available here: Part 1: https://www.youtube.com/watch?v=75lyFoMCDyI; Part 2: https://www.youtube.com/watch?v=stxX9CYi0Mw; Part 3: https://www.youtube.com/watch?v=nUzY9-asO78. The newspaper articles (also in Spanish) are available here: Part 1: https://www.excelsior.com.mx/nacional/vaquita-marina-cronica-de-una-extincion-anunciada-1-de- 3/1307832; Part 2: https://www.excelsior.com.mx/nacional/vaquita-marina-cronica-de-una-extincion-anunciada-2- de-3/1307907; Part 3: https://www.excelsior.com.mx/nacional/vaquita-marina-cronica-de-una-extincion-anunciada- 3-de-3/1308023.
82. *See id.*; *Nat. Res. Def. Council v. Ross*, 1:18-cv-00055-GSK, Second Decl. of Alejandro Olivera Bonilla (Apr. 19, 2019) (describing illegal fishing in the open).
83. Rojas-Bracho, L., Taylor, B.L., Jaramillo-Legorreta, A., Olson, P., Ruiz, D., Hidalgo, E., … & Henry, A.. (n.d.) *Survey report for Vaquita Photographic Identification Research 2019*, at Appendix 3; *see also* Sea Shepherd (2019, Oct. 23). Expedition Sights Endangered Vaquita Porpoise and Rampant Fishing Inside Biosphere Reserve (reporting mass violations the same day, including "dozens of skiffs … retrieving prohibited gillnets mainly for shrimp, chano and corvina" within the vaquita Zero Tolerance Zone, including within sight of a vaquita); Garibay, A. (Oct. 25, 2019). Detectan embarcaciones sospechosas en zona de vaquita marina en Baja California, Heraldo de México. https://heraldodemexico.com.mx/nacional/2019/10/25/detectan-embarcaciones-sospechosas-en-zona-de-vaquita- marina-en-baja-california-127846.html (reporting that authorities detected around 35 small vessels fishing for shrimp and using prohibited nets in the vaquita marina protected area).
84. Sea Shepherd (Dec. 9, 2019). *Sea Shepherd Reveals Unbridled Poaching as 80 Skiffs Raid Habitat of Critically Endangered Vaquita Porpoise*. https://seashepherd.org/2019/12/10/sea-shepherd-reveals-unbridled-poaching-as-80- skiffs-raid-habitat-of-critically-endangered-vaquita-porpoise/.
85. IUCN Cetacean Specialist Group (March 3, 2020). December 2019 – February 2020 Vaquita Update. https://iucn- csg.org/december-2019-february-2020-vaquita-update/.
86. *See* Sea Shepherd (n.d.). Operation Milagro: The solution. https://seashepherd.org/milagro/solution/ (describing partnership with Mexican government).
87. Baja shrimp fishermen defy rules designed to save vaquita (Sept. 28, 2020). *Mexico Daily*. https://mexiconewsdaily.com/news/baja-shrimp-fishermen-defy-rules-designed-to-save-vaquita/.
88. IUCN Cetacean Specialist Group (Jan. 26, 20210) Vaquita update October through December 2020. https://iucn- csg.org/vaquita-update-october-through-december-2020/ (emphasis added).
89. *Id.*
90. *Id.*; *see also* Letter from IUCN (2021).
91. UNESCO World Heritage Committee (July 31, 2021). 44th Session, Decisions adopted, Fuzhou, China/Online meeting (July 16–31). http://whc.unesco.org/archive/2021/whc-21-44com-18-en.pdf.

Figure 2. Pangas observed between October and December 2020 inside the ZTC



Panga positions – October 2020 **Panga positions – November 2020** **Panga positions – December 2020**

Each colored dot represents the approximate number of pangas observed. Red line is the Zero Tolerance Area.

Since the beginning of 2021, there has been little information reported about illegal activity because the primary non-profit organizations collecting nets and documenting illegal activity in the vaquita's habitat have been unable to operate. Museo Ballena, a Mexican NGO conducting net removals, only received permission from the Mexican government in August 2021,[92] and as of the date of this petition, we are not aware of permission for SSCS to operate. These entities contributed substantially both to removing deadly nets from the vaquita's habitat but also reporting illegal fishing and net placement. The lack of recent, publicly available information documenting illegal activity does not suggest illegal activity has declined.

Local fishermen acknowledge and are gravely harmed by the lack of enforcement. In a February 2021 meeting with government officials, Mr. Ramón Franco, a San Felipe fishermen representative, noted that "everyone sees how in broad daylight illegals operate in total impunity."[93] Carlos Tirado, a Golfo de Santa Clara fishing cooperative leader, asked, "[w]hen will there be a real strategy from the federal government and industry to find a solution, because as of today, February 26th, it does not exist?"[94] Tirado also noted that, the government had failed to provide alternatives to the communities.[95] On August 9, 2021, a major fishermen cooperative sent a letter to officials, stating that "the surveillance and supervision capacity to bring order to our fisheries is practically nil," resulting in unfair competition to legal fishermen and "multiple social, environmental and economic conflicts."[96]

Lack of enforcement has also led to violence in the area. In December 2020, several fishermen attacked two SSCS vessels patrolling inside the ZTA, launching lead weights and Molotov cocktails at the crew and military officials onboard and colliding with the SSCS vessel.[97] The vessel's bow caught fire. Tragically, one fisherman died from his injuries several days after the incident. Onshore, other assailants set fire to a SSCS truck.[98]

According to *Excélsior, government reports on the 2020 Upper Gulf shrimp season reveal a lack of resources, planning, logistics, and knowledge among senior enforcement officials, leading to "[lo]s nulos resultados" or zero results in vaquita protection or in combatting illegal totoaba trafficking.*[99] Specifically, PROFEPA's low budget is used inappropriately and for improvised actions that yield no results. As an example, *Excélsior reports that in late 2020, despite adding 19 federal inspectors to support local authorities, no small vessels were available for their use "because there was not enough money for fuel." Excélsior further reported that there were no towboats or four-wheeled drive vehicles available to conduct beach patrols, no accommodations for enforcement officials to stay overnight, and no office* space.[100]

92. *See* Gobierno de México (2021).
93. *See* Méndez, E. (Feb. 26, 2021). Gobierno llegó a reunión sin estrategia para hábitat de vaquita marina: pescadores. *Excelsior*. https://www.excelsior.com.mx/nacional/gobierno-llego-a-reunion-sin-estrategia-para-habitat- de-vaquita-marina-pescadores/1435014
94. *Id.*
95. *Id.*
96. Letter from Confederacion Nacional Cooperativa Pesquera to President Lopez Obrador (Aug. 9, 2021).
97. *See* Sea Shepherd (Jan. 1, 2021). Collision at Sea as Sea Shepherd Vessels Attacked in Mexico's Vaquita Refuge. https://seashepherd.org/2021/01/01/collision-at-sea-as-sea-shepherd-vessels-attacked-in-mexicos-vaquita-refuge/.
98. *Id.*
99. *See* Méndez, E. (Feb. 25, 2021). Sin recursos ni estrategia, Profepa enfrenta extinción de vaquita marina. *Excelsior* https://www.excelsior.com.mx/nacional/sin-recursos-ni-estrategia-profepa-enfrenta-extincion-de-vaquita- marina/1434816.
100. *Id.*

In June 2021, *Excélsior reported that videos showed unmarked, illegal fishing pangas departing from a dock in San Felipe, while authorities from a number of Mexican agencies, including CONAPESCA, PROFEPA and the Secretaría de Marina, were aware of their departure but failed to stop them or inspect their catches upon return.*[101] The budgets for wildlife and natural area protection agencies have been slashed by President Obrador's government, with the overall budget for Secretaría del Medio Ambiente y Recursos Naturales dropping by 28% from 2018 to 2021.[102]

Moreover, in addition to the documented use of totoaba gillnets, authorities in Mexico and China continue to discover illegal, international trade in totoaba bladders. For example, in 2018, Chinese authorities "confiscated 444 kg of swim bladders harvested from totoaba."[103] The Environmental Investigation Agency ("EIA") tracked reported seizures in Mexico from January 2018 to July 2019, and documented 2,000 bladders seized, plus 100kg of bladders for which the number of bladders were not specified.[104] During a five-month period between 2019 and 2020, 18 authorities opened investigations involving the seizure of 797 totoaba bladders.[105] In July 2021 – just last month – authorities in Hong Kong seized 39 totoaba bladders, with an estimated value over US$423,000. While seizures by Mexican authorities demonstrate some enforcement effort, they also demonstrate continued illegal trade in violation of both CITES and Mexican domestic law, particularly as the busts likely represent a small part of the total trade.

III. Conclusion

As described above, the Mexican government is failing to fully implement and enforce its fisheries regulations and its ban on totoaba export. As result, only approximately 10 vaquita remain, and the species could become extinct soon if Mexican authorities do not finally stop illegal activity and setting of gillnets in the vaquita habitat, as the CEC itself recommended in 2008.[106]

Accordingly, Mexico is "failing to effectively enforce its environmental laws," as defined by Article 24.27 of the USMCA. We request the CEC Secretariat develop a factual record on this issue, as contemplated by Article 24.28, on an expedited basis. A factual record is needed to clarify the issues, as the Mexican government continues to argue in several international fora and to the U.S. government that it is engaging in adequate enforcement, despite overwhelming evidence to the contrary. A factual record will also assist the Parties and potentially the CEC to develop a strong vaquita conservation strategy, to support Mexico in improving enforcement and complying with its own laws.

We urge the CEC to act with urgency: the spring totoaba season has ended but the fall shrimp season will begin in late August or early September. If the CEC takes the full time allowed under the SEM process to determine whether a response from Mexico and a factual record are warranted, the vaquita could be driven to extinction before those decisions are made.

Finally, we thank you for your time, effort, and interest in this important conservation issue. Following this submission, we will send a thumb drive containing electronic copies of all documents cited herein for your convenience. Please contact us anytime if you have any questions.

101. Méndez, E. (June 10, 2021). Embarcaciones illegales operan a pesar de vigilancia en hábitat de vaquita marina. *Excelsior*. https://www.excelsior.com.mx/nacional/embarcaciones-ilegales-operan-a-pesar-de-vigilancia-en-habitat- de-vaquita-marina/1453994.
102. de la Rosa, Y. (Apr. 27, 2021). El medio ambiente no es prioridad para AMLO; organismos tienen recortes de 37%. *Forbes México*. https://www.forbes.com.mx/el-medio-ambiente-no-es-prioridad-para-amlo-organismos- tienen-recortes-de-37/.
103. De Mitcheson, et al. (2019).
104. EIA, et al. (2019). CITES's Last Chance Stop the illegal totoaba trade to save the vaquita (2019). https://eia- international.org/wp-content/uploads/EIA-report-citess-last-chance-spreads.pdf.
105. Daños ambientales en zona de la vaquita marina ascienden a 163 millones de pesos: Semar (Feb. 21, 2021). https://www.infobae.com/america/mexico/2021/02/21/danos-ambientales-en-zona-de-la-vaquita-marina-ascienden- a-163-millones-de-pesos-semar/.
106. CEC (2008).

Sincerely,

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Exhibit A
Organizational Statements

Exhibit A: Organizational Statements Center for Biological Diversity

The Center for Biological Diversity ("the Center") is a 501(c)(3) non-profit organization organized under the laws of the United States. The Center was incorporated in the U.S. State of California on November 3, 2010, and the Center's California State Entity Number is 3331202. With more than 1.7 million members and online activists, the Center is dedicated to the protection of endangered species and wild places. More information on the Center is available at our website: https://www.biologicaldiversity.org/.

The Center and our members are harmed by Mexico's failures to enforce its fishing and trade laws and the vaquita's resulting decline. The Center has members and staff who regularly visit the vaquita's Upper Gulf of California to look for the vaquita, and as the species' population declines, they are less likely to view the species. Members and staff are also deeply saddened by the continued entanglement of vaquitas and the vaquita's impending extinction, if Mexico continues to fail to act.

Animal Welfare Institute

The Animal Welfare Institute ("AWI") is a non-profit organization pursuant to section 501(c)(3) of the Internal Revenue Code devoted to the protection of animals. The organization's FEIN registration is 13-5655952. Founded in 1951, AWI's mission is to alleviate the suffering inflicted on animals by humans. AWI engages policymakers, scientists, industry professionals, non- governmental organizations, farmers, veterinarians, teachers, and the public in its animal protection mission. AWI has more than 240,000 members and constituents worldwide, including members in Mexico and the southwest United States who reside in areas near the Gulf of California and the Colorado River Delta Biosphere Reserve, the principal habitat of the vaquita. More information about AWI is available at our website: https://awionline.org/.

AWI and its members and constituents have been harmed by Mexico's failure to protect the vaquita and its habitat — which is preventing the likelihood of species recovery — because those who regularly travel to the northern Gulf of California and the Colorado River Delta Biosphere Reserve are unable to observe vaquita in their natural habitat. Absent dramatic and urgent action by Mexico to enforce its laws, the harm experienced by AWI members who visit the area will continue into the future.

Natural Resources Defense Council

The Natural Resources Defense Council ("NRDC") is a 501(c)(3) non-profit organization incorporated under the laws of the State of New York in 1970. The organization's Federal Employer Identification Number is 13-2654926. With the support of our more than 3 million members and online activists, NRDC's lawyers, scientists, and other environmental specialists work to safeguard the Earth – its people, its plants and animals, and the natural systems on which all life depends. More information on NRDC is available on its website: https://www.nrdc.org.

NRDC and its members are harmed by Mexico's failure to enforce its fishing and trade laws and the vaquita's resulting decline. NRDC has members who expend resources visiting the Upper Gulf of California and looking for the vaquita during those visits. As the species' population declines, they are harmed by the increased likelihood that they will be unable to see the species. Members and staff are also deeply saddened and outraged by the continued entanglement and drowning of vaquitas, the vaquita's impending extinction if Mexico continues to fail to act, and the knowledge that Mexico is choosing to allow the vaquita's extinction.

Environmental Investigation Agency

The Environmental Investigation Agency ("EIA") is an award-winning 501(c)(3) nonprofit organized under the laws of Washington, DC in 1989, FEIN 52-1654284. EIA is internationally renowned both for its use of innovative investigative techniques and analysis to expose and stop environmental crime and for its achievement of long-lasting tangible changes in the global economy that make local and sustainable management of the world's natural resources possible. EIA has worked for more than thirty years to increase protections for the world's whales, dolphins and porpoises on behalf of our donors, staff and the public. EIA has led investigations into the criminal networks and illegal markets that have fueled the trade in totoaba swim bladders and the consequent demise of the vaquita. EIA has expended significant resources on our investigations into the illegal totoaba trade and has been harmed by the Mexican government's failure to meaningfully crack down on the syndicates and criminal actors behind this trade and the continued decline of the vaquita.

Exhibit B:
Communication of Matter to Mexican Authorities

As required by USMCA 24.27(2)(e), Submitters have communicated this matter to the relevant Mexican authorities on numerous occasions:

- In April 2021, Submitters sent a letter to the CITES Secretariat detailing Mexico's failure to implement and enforce fishing and trade bans, including Mexico's September 2020 vaquita regulation. In May 2021, Submitters provided that letter to Mexican authorities, including the Secretaries of SEMARNAT and Semar, the head of CONAPESCA, the Federal Attorney for Environmental Protection, and CITES authorities. Submitters received no response. The email and letter are attached to this exhibit.
- In May 2019, Submitters the Center, AWI, and NRDC participated in an official fact- finding "mission" conducted by the CITES Secretariat in La Paz, Mexico regarding vaquita and totoaba. Submitters commented orally regarding enforcement failures and met with representatives from Semar, Sader, CONAPESCA, INAPESCA, SEMARNAT and PROFEPA during the meeting.
- In November 2018 and following the election of President Lopez Obrador, Submitters and other non-profits sent a letter to the new Secretary of SEMARNAT, raising concerns regarding the vaquita and needed conservation and enforcement actions. Submitters received no response. If needed, we can provide this letter to the CEC Secretariat.
- In April 2018, EIA sent an email with confidential information regarding the results of their investigation into the totoaba trade within Mexico to then-Counselor to the Legal and International Affairs Attorney's General Office. That document describes the details of an undercover investigation and cannot be made public.
- In May 2017, the Center for Biological Diversity filed a formal administrative complaint, documenting the failure of PROFEPA, Mexico's environmental enforcement agency, to enforce laws prohibiting fishing within the vaquita's habitat without an Environmental Impact Authorization. The Center received no substantive response. Certification of the Center's filing of this complaint is attached as Exhibit C.
- In August 2017, Submitters and other non-profit signatories sent a letter to the then- Secretary of SEMARNAT regarding public misstatements and enforcement concerns regarding the vaquita. Submitters received no response. If needed, we can provide this letter to the CEC Secretariat.
- In February, AWI and the Center met with Pable Arenas, Director General of INAPESCA, at the INAPESCA offices in Mexico City and raised concerns regarding enforcement and lack of approved alternative gear.
- In July 2016, we requested a meeting and met with the Mexican Ambassador and his staff on July 7 and then had a follow-up meeting with Embassy staff on July 12. At both meetings, we expressed concerns regarding regulatory and enforcement failures and shared our recommendations in writing via subsequent emails. If needed, we can document these communications with the CEC Secretariat.

From:	Sarah Uhlemann
To:	secretaria@semarnat.gob.mx; octavio.almada@conapesca.gob.mx; blanca.mendoz@profepa.gob.mx; srio@semar.gob.mx; maria.palma@semarnat.gob.mx
Cc:	Alex Olivera; Kate O"Connell (kate.oconnell@balaena.org); DJ Schubert; "ClarePerry@eia-international.org"; Smith, Zak; Tanya Sanerib; Dianne DuBois
Subject:	Vaquita y CITES
Date:	Tuesday, May 18, 2021 12:53:00 PM
Attachments:	Letter to CITES re Vaquita Update for Jan 2021 Regs FINAL 4 1 21.pdf

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Estimadas Sra. María Luisa Albores González, Sr. Octavio Almada Palafox, Sra. Blanca Mendoza Vera, Sr. José Rafael Ojeda Durán, y Sra. María de los Ángeles Palma Irizarry -

En nombre del Centro para la Diversidad Biológica, el Instituto de Bienestar Animal, el Consejo de Defensa de los Recursos Naturales y la Agencia de Investigación Ambiental, escribimos para expresar una vez más nuestra preocupación constante con respecto al destino de la vaquita. Como saben, es probable que solo queden alrededor de 10 vaquitas debido a que el gobierno mexicano no ha hecho cumplir sus propias leyes, incluida la prohibición de la pesca con redes de enmalle en el hábitat de la vaquita, y los requisitos de la Convención sobre el Comercio Internacional de Especies en Peligro de Extinción (CITES).

Les escribimos para informarles que enviamos la carta adjunta a la Secretaría de la CITES el mes pasado, documentando la inacción del gobierno mexicano. Agradecemos su respuesta a esta carta. Creemos que la comunidad internacional debe hacer todo lo posible para alentar a su gobierno a que finalmente tome medidas y salve esta marsopa, antes de que sea demasiado tarde.

Sarah Uhlemann

Dear Ms. Maria Luisa Albores Gonzalez, Mr. Octavio Almada Palafox, Ms. Blanca Mendoza Vera, Mr. José Rafael Ojeda Durán, and Ms. María de los Ángeles Palma Irizarry –

On behalf of the Center for Biological Diversity, Animal Welfare Institute, Natural Resources Defense Council, and Environmental Investigation Agency, we write to once again express our ongoing concern regarding the fate of the vaquita. As you know, only around 10 vaquita likely remain because the Mexican government has failed to enforce its own laws, including the ban on gillnet fishing in the vaquita habitat and requirements under the Convention on International Trade in Endangered Species (CITES).

We write to inform you that we submitted the attached letter to the CITES Secretariat last month, documenting the Mexican government's inaction in this regard. We welcome your response to this letter. We believe the international community must do everything it can to encourage your government to finally take action and save this porpoise, before it's too late.

Sarah Uhlemann

Sarah Uhlemann

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Via Electronic Mail

April 1, 2021

Re: Mexico's New Fishing Regulations Applicable to CITES Totoaba and Vaquita Decisions 18.292-18.295

Dear Secretary-General Higuero,

On behalf of the Animal Welfare Institute, Center for Biological Diversity, the Natural Resources Defense Council, and the Environmental Investigation Agency, we write to provide information regarding new fishing regulations issued by Mexico to protect vaquita and totoaba in Mexico's northern Gulf of California and Mexico's continued enforcement failures.

As detailed below, Mexico's new regulations, published on September 24, 2020[1] and supplemented in January 2021, potentially offer the vaquita and totoaba important, new protections and are a substantial improvement from previous regulations. However, key components of the regulations remain unimplemented, and illegal fishing continues—a familiar pattern, as the Mexican government has a long history of issuing but not enforcing regulations. The IUCN recently described illegal fishing as "uncontrolled," and the Mexican government is considering shrinking the area in which gillnets are currently banned.

The Mexican government has not yet demonstrated that the vaquita and totoaba are effectively protected. Mexico's continued failure to address the ongoing fishing and trade of totoaba and ongoing critical endangerment of the vaquita violates the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES).

Accordingly, we urge the Secretariat and Standing Committee to formally initiate compliance procedures under Resolution Conf. 14.3 and recommend sanctions against Mexico for its continued violation of CITES, to be discussed at the 73rd Standing Committee virtual meeting this spring, or no later than the Standing Committee meeting scheduled for September 2021.

At its 18th meeting, the CITES Conference of the Parties adopted Decisions 18.292 to1.295 on totoaba (*Totoaba macdonaldi*). Among other things, those Decisions urged Mexico to do the following:

a) take immediate and effective actions by 1 November 2019 in response to the threats to totoaba and vaquita posed by illegal trade;
b) intensify and secure resources for expanding gillnet removal efforts to maintain the Vaquita Refuge area as a net-free zone, and take all necessary measures to protect net removal teams and destroy confiscated nets;
c) adhere to the implementation of Decision 43 COM 7B.26, adopted at the 43rd session of the World Heritage Committee;[2] and
d) submit a comprehensive report.

1. Diario Oficial de la Federación. *Acuerdo por el que se regulan artes, sistemas, métodos, técnicas y horarios para la realización de actividades de pesca con embarcaciones menores y mayores en Zonas Marinas Mexicanas en el Norte del Golfo de California y se establecen sitios de desembarque, así como el uso de sistemas de monitoreo para tales embarcaciones* (Sept. 24, 2020), available at <http://www.dof.gob.mx/nota_detalle.php?codigo=5601153&fecha=24/09/2020>; *see also* Ex. A: Legal Fishing Guide for The Upper Gulf of California.
2. https://whc.unesco.org/en/news/2010.

Decision 18.294 further directs the Secretariat to report on information submitted by the Parties and Mexico with any recommendations the Secretariat may have. Decision 18.295 then directs the Standing Committee, at its 73rd meeting, to review and assess relevant information and "make any appropriate recommendations within the mandate of the Standing Committee in accordance with Resolution Conf. 14.3 (Rev. CoP18) on CITES compliance procedures."

We emphasize that nearly all of the actions recommended under Resolution Conf. 14.3 to foster compliance have already been completed: Mexico has been notified of its compliance issue, Mexico has provided numerous responses, and the Secretariat has conducted a fact-finding mission in Mexico. The Mexican government has had ample notice and time to remedy its CITES violations regarding totoaba and vaquita.

The vaquita, however, is running out of time, as only around nine individuals likely remain.[3] We urge the Secretariat and the Standing Committee to recommend the "suspension of commercial … trade in specimens of … CITES-listed species," as contemplated by Resolution Conf. 14.3. The vaquita will not survive continued delay, and the Mexican government has failed to heed CITES's warnings and recommendations. In fact, the Mexican government only issued its September 2020 regulations in response to the U.S. government's ban on seafood from the vaquita's habitat.[4] The Mexican government has demonstrated there is only one way to make it act: economic sanctions. Without the ultimate pressure from the CITES Parties, the vaquita will go extinct on your watch.

A. Mexico's September 2020 Regulations

As with other regulatory and policy initiatives Mexico has taken, its 2020 regulations have the potential to offer totoaba and vaquita important protections from illegal fishing activities. The regulations prohibit the use and possession of gillnets, including gillnets made of monofilament or multifilament nylon, whether used actively or passively in the designated marine area (Art. 2(I)). The regulations also prohibit the transport of gillnets in and within 10 kilometers of the marine area (Art. 2(II)); prohibit manufacturing, owning, and sales of gillnets in towns around the marine area (Art. 2(III)); and require fishermen to surrender gillnets to authorities within 60 days (Art. 10).

The regulations further specify the types of gear that small vessels are permitted to use within the marine area (Art. 2). They prohibit night fishing (Art. 4) and require the installation and operation of vessel monitoring systems (Art. 6, 7). The regulations require all small vessels to be inspected before departure and upon arrival at one of eight designated sites (Art. 8, 9). They also prohibit transshipment in the marine area (Art. 11). We are encouraged that Mexico has adopted these provisions.

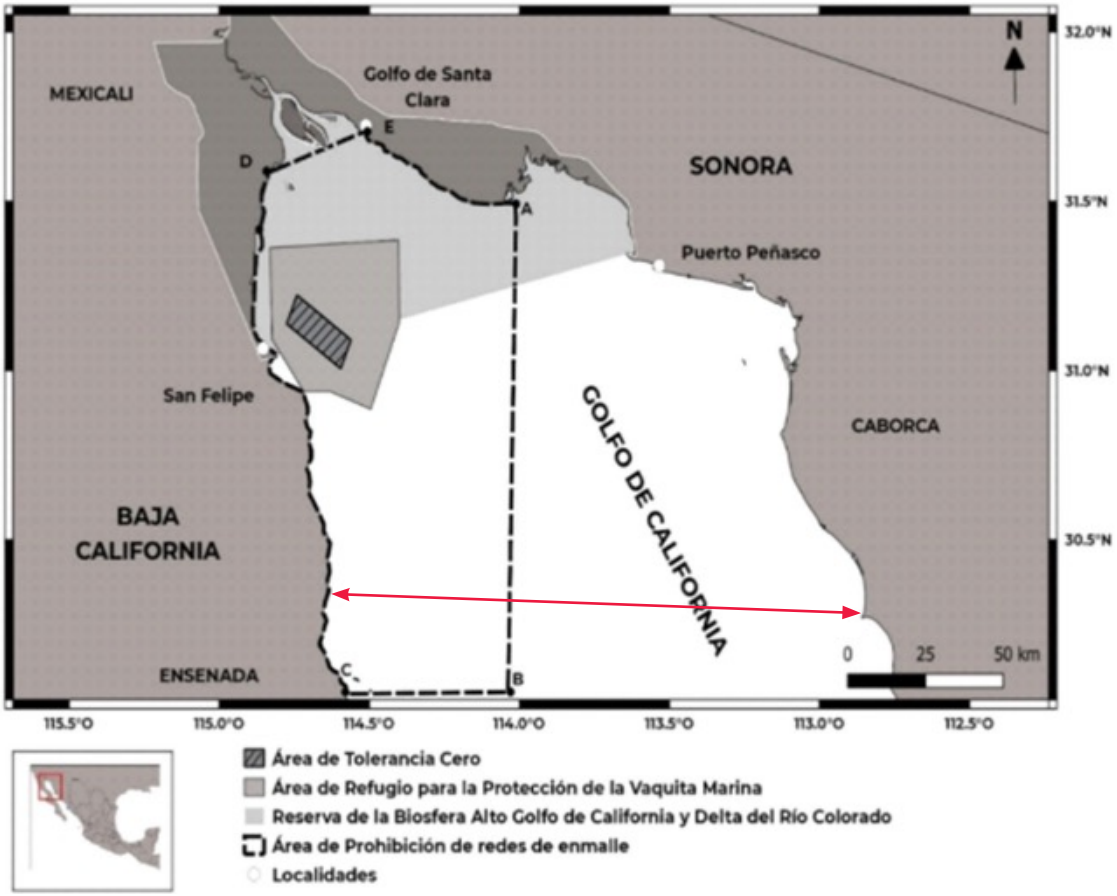
However, the adoption of these regulations is insufficient if they are not fully implemented and enforced. In that regard, we highlight several key concerns below.

3. Rojas-Bracho, L., B.L. Taylor, A. Jaramillo-Legorreta, P. Olson, D. Ruiz, E. Hidalgo, T. Gerrodette, and A. Henry. Survey report for Vaquita Photographic Identification Research 2019. Vaquita were detected acoustically in September 2020, confirming their continued presence. *Esfuerzo de Monitorizacion Acustica de Pequeña Escala para Identificar la Presencia de Vaquitas en el Alto Golfo de California* (Sept. 23, 2020).
4. U.S. National Oceanic and Atmospheric Administration, *Implementation of Fish and Fish Product Import Provisions of the Marine Mammal Protection Act—Notification of Revocation of Comparability Findings and Implementation of Import Restrictions; Certification of Admissibility for Certain Fish Products From Mexico*, 85 Fed. Reg. 13,626 (Mar. 9, 2020).
5. Numerous studies document vaquita sightings south to Puertocitos and on the Sonoran coast south of Puerto Peñasco. Gerrodette, T., Fleischer, L.A., Perez-Cortes, H. and Villa-Ramírez, B., 1995. Distribution of the vaquita, Phocoena sinus, based on sightings from systematic surveys. *R Int Whal Com (Spec Issue)*, *16*, pp.273-281; Gerrodette, T., Taylor, B.L., Swift, R., Rankin, S., Jaramillo-Legorreta, A.M. and Rojas-Bracho, L., 2011. A combined visual and acoustic estimate of 2008 abundance, and change in abundance since 1997, for the vaquita, *Phocoena sinus*. *Marine Mammal Science*, 27(2), pp. E79-E100; Brownell Jr, R.L., 1986. Distribution of the vaquita, Phocoena sinus, in Mexican waters. *Marine Mammal Science*, 2(4), pp.299-305; Silber, G.K., 1990. Occurrence and distribution of the vaquita Phocoena sinus in the northern Gulf of California. *Fishery Bulletin*, *88*(2), pp.339-346; Silber, G.K., Newcomer, M.W., Silber, P.C., Pérez-Cortés M, H. and Ellis, G.M., 1994. Cetaceans of the northern Gulf of California: distribution, occurrence, and relative abundance. *Marine Mammal Science*, 10(3), pp. 283-298.
6. Grupo Intragubernamental sobre la Sustentabilidad en el Alto Golfo de California, Instalación de la mesa técnica de medio ambiente (March 12, 2021) (meeting agenda with "Reduction of the Prohibition Area for all gillnets including 'gillnets' as the first point of discussion).

1. The "Marine Area" Does Not Cover the Full Vaquita Habitat

Most of the provisions in Mexico's new regulations apply within or immediately surrounding a designated marine area (Art. 1). However, this area does not cover the vaquita's full range, which includes waters of the Upper Gulf north of a line running from Puertectitos (90 km south of San Felipe) to Puerto Lobos (94 km southwest of Caborca), thus, from the coast of Baja California to the Sonoran Coast (see Figure 1).[5] Moreover, and of great concern, the Mexican government is now discussing a proposal to reduce the size of the area in which gillnets are prohibited.[6]

Figure 1. Marine Area within the Islands and Protected Areas of the Gulf of California World Heritage Site



The red line marks the gillnet embargo area.

2. Mexico Has Failed to Fully Implement its 2020 Regulations

Mexico has a history of promising but failing to adopt or implement regulatory programs to protect the vaquita and its habitat.[7] In issuing its September 2020 regulations, the Mexican government committed to take a series of further actions to conserve the vaquita. But for each of these promises, the government either failed to meet its own regulatory deadline or entirely failed to follow-through on the commitment, as of the date of this submission.

a. Insufficient Application Plan

The Mexican government's 2020 regulations required an "Application Plan" to be issued in coordination with several Mexican agencies within 30 days of the regulation's publication, i.e. by October 24, 2020 (5th Transitory Article). The Application Plan is supposed to address inspection and surveillance, recovery and disposal of illegal and lost gear, and additional conservation measures. The Mexican government has not yet issued a plan that meets these requirements. While it did issue a plan on January 20, 2021, nearly three months late, the proposal is vague and primarily delineates which agencies are charged with particular functions related to the vaquita.[8] While there has long been a need to clarify the various Mexican agencies' functions, the agencies' duties identified in the Plan overlap, and many of the duties are vague and lack timeframes (e.g., directing agencies to "hold … meetings" and "participate … in inspection and monitoring"). Moreover, the plan entirely fails to address "actions for the recovery, disposal and recycling … of illegal" or lost gear, as required by the 2020 regulations.[9]

b. Lack of triggers

Critically, to ensure compliance with the fishing closures and gillnet ban, the September regulations also require that relevant agencies "develop … triggering factors, defined as "those situations identified by means of quantitative measures … which if exceeded will result in predetermined actions by authorities, such as prohibitions on fishing, closures of areas or similar responses" (Art. 17). The regulations require the agencies to publish the triggering factors, their duration, scope, and a mechanism for implementing the triggers by October 24, 2020. The Mexican government has failed to meet this directive, as to date, no triggers have been published.[10]

c. Vague compliance working groups

The regulations further promise the creation of two compliance working groups. The "Intragovernmental Group on Sustainability" (GIS) is directed to analyze, coordinate, and evaluate the agreement and was to be established simultaneously with the September regulations (6th Transitory Article). A separate "Collaboration Group on Application" (GCAL) is directed to facilitate the exchange of information on illegal fishing, totoaba trafficking, and prosecutions and was to be established within 30 days (7th Transitory Article). It is unclear when the GIS was established, but Mexican agencies published "Guidelines for the organization and function" of the GIS on January 20, 2021.[11] It also is unclear whether the Collaboration Group has been established or is intended to meet with or within the GIS.

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7. *See* Cantú-Guzmán, J.C., Olivera-Bonilla, A., and Sánchez-Saldaña, M.E. 2015. A history (1990-2015) of mismanaging the vaquita into extinction – a Mexican NGO's perspective. Journal of Marine Animals and Their Ecology; 8(1): 15-25.
8. Diario Oficial de la Federación. *Application Plan in the Zero Tolerance Zone and the Refuge Area for the Protection of the Vaquita* (Jan. 20, 2021), available at <http://dof.gob.mx/nota_detalle.php?codigo=5610105&fecha=20/01/2021>.
9. *Id.*
10. Freedom of Information Request number 0819800027220. Letter RJL/INAPESCA/DG/DJ/UT/046/2021, dated in Mexico City, January 20, 2021.
11. Diario Oficial de la Federación. *LINEAMIENTOS para la organización y funciones del Grupo Intragubernamental sobre la sustentabilidad en el Alto Golfo de California*. (Jan. 15, 2021), available at <http://dof.gob.mx/nota_detalle.php?codigo=5609927&fecha=15/01/2021>.

The first GIS meeting was initially planned to take place in January but was then postponed to February 26, 2021,[12] five months after the regulation's publication. In its press release regarding the first GIS meeting, SEMAR acknowledged that a much-anticipated reform of the Federal Penal Code to make environmental crimes a serious violation—and thereby allow preventative detention and increase both prison time and penalties—has not yet passed and is under review by the Senate.[13]

d. Marine mammal interaction reporting

The regulations further direct the Comisión Nacional de Acuacultura y Pesca ("Conapesca") to publish a form and mechanism so fishermen can report marine mammal interactions (Art. 5). Conapesca has failed to publish any form or mechanism. Without instructions on how or where to report entanglements and bycatch, it is unlikely fishermen are reporting these events—information that is critical to knowing how much vaquita bycatch continues.

e. Gillnet surrender

The regulations required all permit holders, captains, and fishermen to deliver any gillnets to the Conapesca office closest to where their vessel is registered by November 23, 2020 (Art. 10), as the regulations ban possession of such gillnets near vaquita habitat. In response to a public information request for how many nets it had received, Conapesca stated that it had no responsive information as of February 3, 2021, suggesting it had no nets had been turned over.

f. Gear marking

The regulations also direct Conapesca to develop and implement a gear marking scheme within 18 months of the regulation's publication (2nd Transitory Article). Given the delay of all other actions the regulations require, we are concerned the Mexican government will similarly fail to meet this commitment.

In sum, while we welcomed Mexico's publication of its September regulations and appreciate that the Mexican government now has taken some steps to meet the regulations' requirements, these actions were quite delayed, and the government has failed to follow through on essential commitments. We are very concerned that the current plans and promised future actions lack the detail necessary to ensure fisheries' vaquita bycatch and illegal totoaba poaching will be halted, and thus will fail to save the vaquita and totoaba from extinction.

3. Mexico's Vessel Monitoring System Is Not Currently Operative

The regulations require that all vessels install and operate vessel monitoring systems (Art. 6, 7); however, Mexico's system for monitoring the resulting data is not currently operative. According to an article published by *Excelsior, Mexico missed several years of payments to Pelagic Data Systems ("PDS"), a vessel tracking company, and consequently, Mexico does not have access to the monitoring data.*[14] Indeed, the minutes from a recent meeting between fishermen and Mexican authorities confirm "the satellite monitoring system that the registered small vessels have … is not currently in service."[15] The lack of vessel monitoring undermines the efficacy of the new regulations because Mexico cannot track compliance.

12. Secretariat of the Navy. Press release. Actions of the Government of Mexico in the Upper Gulf of California. February 20, 2021, available at <https://www.gob.mx/semar/prensa/acciones-del-gobierno-de- mexico-en-el-alto-golfo-de-california-264317>.
13. *Id.*
14. Ernesto Méndez, *Gobierno prohíbe uso de redes de pesca tradicionales en hábitat de vaquita marina*, EXCELSIOR, Sept. 23, 2020, available at <https://www.excelsior.com.mx/nacional/gobierno-prohibe-uso- de-redes-de-pesca-tradicionales-en-habitat-de-vaquita- marina/1407345.According%20to%20a%20March%2017>, 2021 Excelsior interview with Alejandro Castillo of ProNatura that small vessel monitoring still needed to be reactivated. Ernesto Méndez, *Sin condiciones para reducir polígono de protección de vaquita marina*, EXCELSIOR, Mar. 17, 2021, available at <https://www.excelsior.com.mx/nacional/sin-condiciones-para-reducir-poligono-de- proteccion-de-vaquita-marina/1438204>.
15. Meeting between fishermen representatives and government officials, Minuta de Trabajo (Sept. 30, 2020), available at <shorturl.at/uAM28>.

Even if Mexico had access to the vessel-tracking data, that information is not reliable. In 2019, PDS had installed 937 monitoring devices on vessels in Upper Gulf.[16] However, by November 2019, 189 of these registered PDS devices—approximately 20 percent—provided data indicating they had been removed from the vessel.[17] Further, between November 2019 and June 2020, another 22 devices showed similar signs of having been removed.[18] It is unknown how many devices are currently fully operational.

Despite this, the Mexican government has not taken enforcement action; instead it only "established communication with the cooperatives and/or licensees, to notify them first as a good faith gesture, about the anomalies recorded in the Pelagic Data Systems regarding their vessels, so that they will take corrective actions necessary, in order for the fishermen operating these vessels to avoid any irregularity."[19] Mexico's new regulations cannot succeed if the government does not monitor compliance and ensure that monitoring devices are both present and operational. Mexico must pay for and use monitoring data to ensure that vessels comply with time and area management requirements.

B. Mexico's Enforcement Failures

While we welcome the issuance of Mexico's new regulations, the government has not demonstrated that its new regulations have or will effectively reduce vaquita bycatch or totoaba poaching. In fact, evidence shows Mexico has entirely failed to enforce its new regulations since they were issued in September 2020. We strongly urge the Parties to look beyond the text of Mexico's new regulations and continue to press Mexico to do more to save the vaquita. There is no evidence enforcement has improved since the Parties began reviewing Mexico's compliance with CITES.

1. Mexico's History of Non-Enforcement

The Mexican government has a long and troubling history of failing to enforce vaquita protections. In 1993, in response to the vaquita's decline, Mexico declared the Upper Gulf a Biosphere Reserve and claimed the government was "enforcing the closure of all commercial fisheries in the reserve."[20] Yet scientists concluded these early efforts were "ineffectual" and "half-hearted, at best,"[21] and "[c]ommercial fishing with a variety of gill nets … continued without interruption both inside and outside the Biosphere Reserve."[22]

In 2005, Mexico established a refuge area for the vaquita and again attempted to ban certain gillnets.[23] But again, enforcement was lax, as the new "Refuge Area remained essentially unmanaged until 2008," when a new program was instituted officially banning all gillnets in the area.[24] Initially, Mexican enforcement authorities made a "strong effort" to enforce the new ban, but "that effort … waned," and illegal fishing continued.[25]

16. There were 454 devises installed in Gulf of Santa Clara in Sonora, and 342 in San Felipe, 47 in Bajo Río, and 94 in the Cucapá Indigenous Community in Baja California
17. The system detects when the devices are damaged or removed because they do not transmit anymore. Report on actions for the protection and conservation of the vaquita porpoise and the totoaba.Government of Mexico. November 2009. Convention on International Trade in Endangered Species of Wild Fauna and Flora CITES. In: STATE OF CONSERVATION REPORT Islands and Protected Areas of the Gulf of California (2005, Ref. 1182ter), available at <https://whc.unesco.org/document/180672>.
18. Conapesca Response to Information Request No. 0819700022020 (June 20, 2020), available at <shorturl.at/mxGQX>.
19. *Id.*
20. Rojas-Bracho, L., Reeves, R.R., & Jaramillo-Legorreta, A. 2006. Conservation of the vaquita *Phocoena sinus*. *Mammal Rev. 36*:179-216.
21. Rojas-Bracho, L. & R.R. Reeves. 2013. Vaquitas and Gillnets: Mexico's ultimate cetacean conservation challenge. *Endang. Species Res. 21*:77-87 (2013).
22. Rojas-Bracho (2006).
23. Rojas-Bracho (2013).
24. *Id.*
25. *Id.*

In 2013, in yet another effort to restrict gillnet fishing, Mexico formally banned the use of the "chinchorro" gillnet used to catch shrimp in the Upper Gulf.[26] By 2014, the Comité Internacional para la Recuperación de la Vaquita ("CIRVA") reported that only 97 vaquita remained, despite Mexico's two decades of regulation, numerous bans, and multiple protective areas.[27] CIRVA stated that Mexico's "at-sea enforcement efforts ha[d] failed, and illegal fishing ha[d] increased … throughout the range of the vaquita."[28]

In 2015, Mexico instituted a temporary, two-year ban on most gillnets within vaquita habitat, although it exempted the curvina gillnet fishery. Almost immediately, it became clear the ban and its enforcement were ineffective, as the vaquita population plummeted to only around 30 animals by November 2016.[29] CIRVA concluded that "illegal fishing [wa]s still common" and that "enforcement efforts to date have been insufficient."[30]

In July 2017, under immense international pressure, Mexico made its gillnet ban in the Upper Gulf permanent but again exempted the curvina and sierra fisheries. In January 2018, CIRVA concluded *once again that "[h]igh levels of illegal fishing continue" based on more net retrieval sweeps that found active totoaba, shrimp, and curvina gillnets in the vaquita refuge.*[31]

By early 2019, CIRVA concluded that "only about 10 vaquitas remained alive" as illegal fishing continued.[32] In April 2019, a Mexican newspaper and television channel, *Excelsior, produced a three-part expose on the vaquita and illegal fishing in the Upper Gulf, shown nationally across Mexico and published in a major Mexican newspaper*[33] The *Excelsior team interviewed and documented fishermen setting illegal gillnets for both shrimp and totoaba in broad daylight. In October 2019, scientists reported observing 87 boats in a single day within the Zero Tolerance Area, as well as the use of gillnets 1-km long.*[34] In December 2019, the Sea Shepherd Conservation Society reported sighting around 80 small boats setting and retrieving illegal gillnets in vaquita habitat in a single day.[35]

26. Letter from R. Garcia Soto, Attorney, SAGARPA, to John Hendershedt, NMFS (Dec. 6, 2017). According to the terms of the Official Mexican Standard NOM-002-SAG / PESC-2013 on shrimp, the ban was to be phased in over a three-year period, with zero usage of the *chinchorro* by 2016. However, it was reported that CONAPESCA continued to issue *chinchorro* permits in 2013 that were valid through 2017. Vaquita Marina: The decline of species due to government neglect. August 2017 report by the Center for Biological Diversity, COMARINO, Defenders of Wildlife, Greenpeace, and Teyeliz, at page 7. Available at <https://www.greenpeace.org/static/planet4-mexico-stateless/2018/11/135a68b1-135a68b1- reporte-vaquita-version_ingles.pdf>.
27. Report of the Fifth Meeting of the International Committee for the Recovery of the Vaquita. Ensenada, Baja California, July 8–10, 2014.
28. *Id.*
29. Eighth Meeting of the Comité Internacional para la Recuperación de la Vaquita, La Jolla, CA, Nov. 29– 30, 2016.
30. *Id.*
31. Report of the Tenth Meeting of the Comité Internacional para la Recuperación de la Vaquita, La Jolla, CA, Dec. 11–12, 2017.
32. Report of the Eleventh Meeting of the Comité Internacional para la Recuperación de la Vaquita. La Jolla, CA, Feb. 19–21, 2019.
33. *See* Excelsior television report (in Spanish) available here: Part 1: <https://www.youtube.com/watch?v=75lyFoMCDyI>; Part 2: <https://www.youtube.com/watch?v=stxX9CYi0Mw>; Part 3: <https://www.youtube.com/watch?v=nUzY9-asO78>. The newspaper articles (also in Spanish) are available here: Part 1: <https://www.excelsior.com.mx/nacional/vaquita-marina-cronica-de-una-extincion-anunciada-1-de- 3/1307832>; Part 2: <https://www.excelsior.com.mx/nacional/vaquita-marina-cronica-de-una-extincion- anunciada-2-de-3/1307907>; Part 3: <https://www.excelsior.com.mx/nacional/vaquita-marina-cronica-de- una-extincion-anunciada-3-de-3/1308023>.
34. Rojas-Bracho, L., B.L. Taylor, A. Jaramillo-Legorreta, P. Olson, D. Ruiz, E. Hidalgo, T. Gerrodette, and A. Henry. Survey report for Vaquita Photographic Identification Research 2019, at Appendix 3; *see also* SSCS, *Expedition Sights Endangered Vaquita Porpoise and Rampant Fishing Inside Biosphere Reserve* (Oct. 23, 2019) (reporting mass violations the same day, including "dozens of skiffs … retrieving prohibited gillnets mainly for shrimp, chano and corvina" within the vaquita Zero Tolerance Zone, including within sight of a vaquita); Atahualpa Garibay, *Detectan embarcaciones sospechosas en zona de vaquita marina en Baja California*, Heraldo de México, (Oct. 25, 2019) (reporting that authorities detected around 35 small vessels fishing for shrimp and using prohibited nets in the vaquita marina protected area), available at <https://heraldodemexico.com.mx/nacional/2019/10/25/detectan- embarcaciones-sospechosas-en-zona-de-vaquita-marina-en-baja-california-127846.html>.
35. SSCS, *Sea Shepherd Reveals Unbridled Poaching as 80 Skiffs Raid Habitat of Critically Endangered Vaquita Porpoise* (Dec. 9, 2019).

2. Mexico's failure to enforce its September 2020 regulations

While Mexico's September 2020 regulations mark an improvement in Mexican regulation of shrimp and other legal fisheries, Mexico has failed to enforce the new regulations. Following the regulations' issuance, the head of the fishermen's federation in San Felipe, Lorenzo Garcia, stated that shrimpers used prohibited gillnets the very next day.[36] While Mr.Garcia noted that Mexican authorities tried to persuade fishermen not to go to sea, authorities did not threaten enforcement action. Indeed, according to local fishermen, they had no notice that these regulations would be published or information on their contents, despite having had meetings with authorities on the issue.[37]

Violations of the gillnet fishing ban have continued at shocking levels since September. In December 2020, the IUCN Cetacean Specialist Group ("IUCN CSG") published data demonstrating that "illegal fishing remains at high levels and takes place day and night."[38] The IUCN CSG included three maps documenting illegal fishing activities in October 2020 at the onset of the shrimp season (Figure 2), November 2020 (Figure 3), and December 2020 (Figure 4). The maps depict hundreds of pangas—most fishing with gillnets—within the Zero Tolerance Area, where both gillnetting and transit of any vessels are strictly prohibited to protect the vaquita.

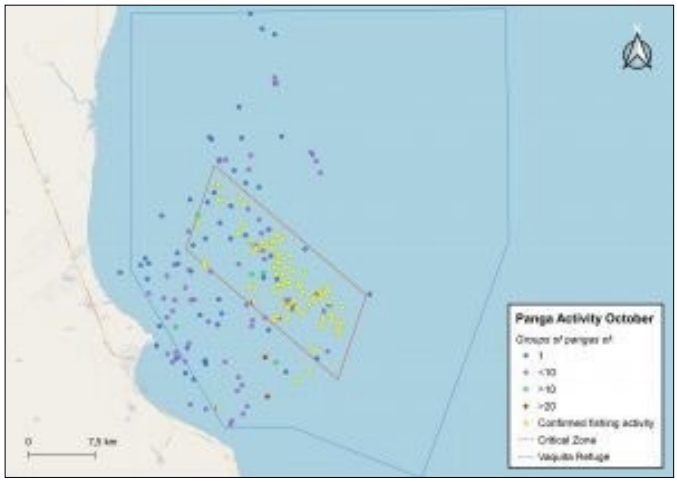
According to the IUCN CSG, a total of 1,185 pangas were counted throughout November 2020, with nearly all these pangas gillnetting for shrimp.[39] Based on these data, the IUCN CSG concluded that "[f]ishermen have no incentives to change their traditional fishing practices— very little alternative fishing gear, and few alternative livelihoods to feed their families" and that "**[i]llegal fishing remains uncontrolled."**[40]

These data demonstrate that, despite Mexico's promises, regulatory improvements, and pages of submissions to the Secretariat, the same fact remains: Mexico has failed to halt gillnet fishing in the vaquita's habitat.

If anything, fishers have become more brazen in their efforts to continue illegal fishing, not only doing so in broad daylight, but also attacking those engaged in patrolling the area and removing illegal fishing nets. On 31 December 2020, fishermen in 5–7 pangas violently attacked two Sea Shepherd Conservation Society vessels, the *Farley Mowat and Sharpie, inside the Zero Tolerance Area, launching lead weights and Molotov cocktails at the crew and military officials on board.*[41] One panga swerved in front of the *Farley Mowat, which was attempting to leave the area, striking the larger ship, destroying the panga, and throwing the fishermen into the sea. The crew of the Sharpie immediately rescued the fishermen, and its medical personnel, along with medics from the Mexican Navy, provided medical care prior to their transport to medical facilities. During the rescue, two fishermen illegally boarded the Sharpie and threatened its crew and Mexican officials while other fishermen in pangas continued to throw projectiles and fuel at the ship, ultimately causing its bow and the recovered illegal fishing gear to catch fire.*[42] Onshore, other assailants set fire to a Sea Shepherd truck.[43] Tragically, one of the rescued fishermen died from his injuries several days after the incident.

36. *Baja shrimp fishermen defy rules designed to save vaquita*. MEXICO DAILY (Sept. 28, 2020), <https://mexiconewsdaily.com/news/baja-shrimp-fishermen-defy-rules-designed-to-save-vaquita/>.
37. Minuta de Trabajo (Sept. 30, 2020). Several fishermen cooperatives have filed a legal challenge to the new regulations. In one case, [Expediente 790/2020-2 Juzgado primero de distrito en el estado de Baja California] the plaintiffs asked the court to invalidate multiple provisions of the regulations. In a preliminary ruling, however, the court only suspended a single provision – the requirement to turn over gillnets to the authorities – but made clear that this decision only applies to plaintiffs and that it does not permit them to use said gillnets to fish. [Expediente 790/2020-2 Juzgado primero de distrito en el estado de Baja California]. This case and others remain pending and, depending on the outcome of each, the regulations could be weakened or entirely invalidated.
38. IUCN Cetacean Specialist Group, Vaquita update October through December 2020. Available at: <https://iucn-csg.org/vaquita-update-october-through-december-2020/>.
39. While gillnetting clearly continues to illegally harvest shrimp, totoaba gillnetting also continues. In January 2021, authorities detected a 350-meter-long illegally set gillnet containing 13 totoaba, seven of which were dead. See <https://www.dossierpolitico.com/vernoticiasanteriores.php?artid=245273&relacion=&tipo=Noticias&cate goria=1>. Such isolated enforcement actions do not address the extent of illegal fishing.
40. IUCN Vaquita Update; *see also* Ex. B: IUCN SSC Letter re Vaquita Threats (Mar. 26, 2021).
41. *See,*< https://seashepherd.org/2021/01/01/collision-at-sea-as-sea-shepherd-vessels-attacked-in-mexicos- vaquita-refuge/>.
42. *Id.*
43. *Id.*

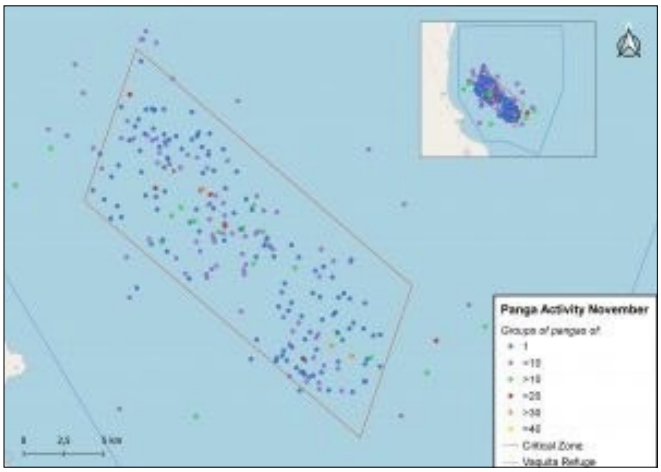
Figure 2. Pangas observed in October 2020 in the ZTA



Panga positions in October 2020, with each color[44] representing the approximate number of pangas observed from the survey vessel at a given time and location. Yellow dots indicate individual pangas that were confirmed to be fishing. The SSCS effort was concentrated in the ZTA (outlined in red but labeled as the 'Critical Zone' in the map legend).

Source: Sea Shepherd Conservation Society Internal Reports, October 2020.

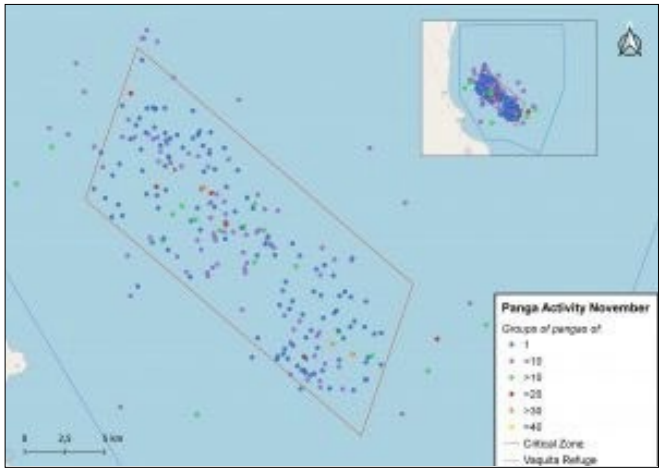
Figure 3. Pangas observed in November 2020 in the ZTA



Panga positions in November 2020, with each color representing the approximate number of pangas observed at a given time. The effort by net-removal vessels that reported panga positions was concentrated in the ZTA (outlined in red but labeled as the 'Critical Zone' in the map legend).

Source: Sea Shepherd Conservation Society Internal Reports, November 2020

Figure 4. Pangas observed in December 2020 in the ZTA



Panga positions in December 2020, with each color representing the approximate number of pangas observed at a given time. The effort was concentrated in the ZTA (outlined in red but labeled as the 'Critical Zone' in the map legend), but fishing was observed widely in the Vaquita Refuge (inset).

Source: Sea Shepherd Conservation Society Internal Reports, December 2020.

44. In each of the figures, blue, purple, green, and red dots correspond to one, less than 10, more than 10, and more than 20 pangas, respectively.

We note that, in November of 2020, Mr. Sunshine Antonio Rodriguez Peña, a well- known fishermen representative from San Felipe, Baja California, and seven others were taken into custody on charges of racketeering and organized crime related to totoaba trafficking.[45] For years, Mr. Rodriguez Peña had posted regularly on Facebook documenting his and others' illegal use of gillnets to catch shrimp, sierra, and curvina near San Felipe, which is prohibited under the new regulations. In December 2020, it was reported that President López Obrador had instructed the Secretary of the Navy, Admiral José Rafael Ojeda Durán, to review Mr. Rodriguez Peña's case.[46] While we applaud this long-overdue enforcement action, high levels of illegal fishing continue, and much more enforcement is needed.

The failure to enforce the gillnet prohibition in the Upper Gulf is indicative of a systemic problem in Mexico to responsibly manage and enforce its fishing regulations, as highlighted in a September 2020 assessment by Vanda Felbab-Brown of the Brookings Institute:

> Fisheries management and enforcement in Mexico involves a complex and mostly ineffective tangle of institutions that tend to be under resourced, susceptible to corruption, and engage in buck-passing… . Well-meaning and dedicated officers get easily disheartened by the rock-bottom slashed budgets the López Obrador administration imposed, hollowing out already critically weak management, inspection, enforcement capacities—an institutional morass.[47]

This institutional morass has contributed to illegal fishing accounting for between 45 and 90 percent of official fish production in Mexico.[48] Moreover, the problem is not limited to illegal fishing as enforcement failures are common throughout the seafood supply chain in Mexico.

Yozell (2020), in a Stimson Center report analyzing the implementation of the US Seafood Import Monitoring Program (SIMP), found as follows:

> According to Stimson interviews with government, NGO, and industry stakeholders in Mexico, there are several steps along the seafood supply chain where information required for SIMP and verified by the Mexican government can be falsified, duplicated, or left unverified. Government capacity, reporting, and documentation have proven to be the main challenges for SIMP implementation in Mexico; and these challenges are clearest in the small-scale fishing sector. These findings stand in contrast to NOAA's initial statements to Stimson that there have been no major issues in Mexico as interviews with stakeholders on the ground revealed that there have been several key gaps for SIMP implementation in the country.[49]

Fundamental solutions to mitigate the scope of illegal fishing, solutions that have been repeatedly suggested (and mirror recommendations made by the CITES Parties) but never substantively implemented by Mexico, include:[50]

- Relentless detection and prosecution of all persons/entities engaged in illegal fishing with escalating fines that are multiples of the value of the illegal catch;
- Acquisition and implementation of better technologies including aerial, land, and marine water drones and other sensors to monitor fishing/fisher activities;

45. *Van a proceso 6 pescadores detenidos en hábitat de vaquita marina*. Excélsior. Nov, 17, 2020. <https://www.excelsior.com.mx/nacional/van-a-proceso-6-pescadores-detenidos-en-habitat-de-vaquita- marina/1417384>. Two suspects were subsequently released due to lack of evidence. To date, Mr. Rodriguez Peña remains in custody.
46. AMLO instruye al titular de Marina revisar caso de Sunshine Rodríguez, presunto líder del Cártel del Mar. EL UNIVERSAL. Dec. 2, 2020. Avaliable at <https://www.eluniversal.com.mx/nacion/amlo-instruye-al-titular-de- marina-revisar-caso-de-sunshine-rodriguez-presunto-lider-del>
47. See <https://www.brookings.edu/blog/order-from-chaos/2020/09/14/illegal-fishing-in-mexico-and- policy-responses/>.
48. *Id.*
49. Yozell. 2020. A Qualitative Assessment of SIMP Implementation in Four Countries. Stimson Centre Report. Available at: <https://www.stimson.org/wp-content/uploads/2020/02/Stimson-Final-Traceability- Report.pdf>.
50. *See,* <https://www.brookings.edu/blog/order-from-chaos/2020/09/14/illegal-fishing-in-mexico-and- policy-responses/>.

- Improve coordination among Mexican agencies (e.g., CONAPESCA, CONANP, PROFEPA, SEMAR, federal/state/municipal police forces, national guards, and customs) to share intelligence and data and to strengthen enforcement investigations and prosecutions;
- Enhance collaboration with counterparts in the United States including with the U.S. Fish and Wildlife Service, US customs agency, and government prosecutors;
- Address the needs of fishers by helping them adopt sustainable fishing practices, use ecologically low-impact fishing gear, and develop alternative livelihoods—none of which has, to date, succeeded in the Upper Gulf.

Felbab-Brown cautions, however, that such improvements will not succeed unless there is "better resourcing of environmental management and protection agencies."[51] She opines that "[a]s long as the López Obrador administration starves them of budgets, better environmental, fishery sustainability, and rule-of-law results won't follow."[52]

A lack of resources is preventing coordinated, meaningful, and sustained efforts to prevent illegal fishing and protect the vaquita and totoaba. *Excélsior, a respected media organization in Mexico City, recently reported, after a review of government reports about the recently-concluded shrimp season in the Upper Gulf, that a lack of resources, planning, logistics, and knowledge among senior officials of PROFEPA has led to "[lo]s nulos resultados" or zero results in the protection of the vaquita and efforts to combat the illegal trafficking of totoaba.*[53] Specifically, PROFEPA's low budget is used inappropriately and for improvised actions which yield no results. In November and December 2020, the 19 federal inspectors brought in to support local authorities in the Upper Gulf were unable to prevent unlawful conduct as no small vessels were available for their use "because there was not enough money for fuel."[54] This prevented efforts to stop illegal fishing on, for example, November 11, 2020, when there were 60 pangas simultaneously engaged in illegal fishing inside the vaquita Zero Tolerance Area.

Furthermore, there are no towboats or four-wheeled drive vehicles available to conduct beach patrols. There are also no accommodations for PROFEPA officials to stay overnight in the area and no office space for PROFEPA since their facilities in San Felipe and Santa Clara were attacked by fishers and set on fire in 2018 and 2019, respectively, and have not been rebuilt.[55] The former PROFEPA coordinator for San Felipe also sent personnel to assist with inspecting vehicles on the road to Mexicali despite the Ministry of National Defense having sufficient personnel to conduct the checks.[56]

The lack of any coherent strategy to address monitor legal fisheries, curtail the extent of illegal fishing, and enforce fishing prohibitions in the Upper Gulf was highlighted in the February 26, 2021 GIS meeting between government officials, fishers, industry representatives, politicians, and others. Mr. Ramón Franco, a representative of the organized fishermen of San Felipe, noted how "everyone sees how in broad daylight illegals operate in total impunity."[57] Carlos Tirado, the leader of the fishing cooperatives in Golfo de Santa Clara and Golfo de Sonora, asked, "[w]hen will there be a real strategy from the federal government and industry to find a solution, because as of today, February 26th, it does not exist?"[58] Tirado also noted that, despite the prohibition on using gear that had been promulgated in September 2020, the government had failed to provide alternatives to the communities.[59] No new meaningful or substantive strategies that were not already underway or that are common sense (e.g., information sharing) came out of the meeting.

51. *Id.*
52. *Id.*
53. *See*, <https://www.excelsior.com.mx/nacional/sin-recursos-ni-estrategia-profepa-enfrenta-extincion-de- vaquita-marina/1434816> (English translation)
54. *Id.*
55. *Id.*
56. *Id.*
57. *See*, https://www.excelsior.com.mx/nacional/gobierno-llego-a-reunion-sin-estrategia-para-habitat-de- vaquita-marina-pescadores/1435014
58. *Id.*
59. *Id.*

Indeed, instead of promising strict enforcement of its fishing laws, the Secretary of Environment and Natural Resources, María Luisa Albores González, indicated that the government was considering modifying the gillnet prohibition area by reducing the size of the vaquita refuge given the reduced distribution of vaquita.[60] This decision, if implemented, effectively rewards poachers for their illegal actions by increasing fishing opportunities (including for those who fish illegally) and dismisses the blatant incompetency of the government agencies that failed to enforce the law.

While the record of Mexican authorities to stop illegal fishing has been abysmal, illegal net-recovery efforts have continued and some totoaba swim bladders have been seized. During a five-month period between 2019 and 2020, 163 and 104 pieces of illegal fishing gear were recovered from the water and on land, respectively, and 18 authorities opened investigations involving the seizure of 797 totoaba buches.[61] Such actions, while welcome, provide further evidence of the failure to stop illegal fishing from occurring and will not produce a behavioral change in a timeframe capable of saving the vaquita. The corresponding economic damage to the environment is estimated to be nearly 164 million pesos (nearly 8 million USD).[62]

CONCLUSION

We recognize the importance of Mexico updating its regulations to align them with the critical status of the vaquita. The new regulations, if enforced, have the potential to reduce totoaba poaching and vaquita bycatch. However, because Mexico has not fully implemented the regulations and has utterly failed to enforce the regulations, Mexico has not made "timely progress in the implementation of Decisions 18.292 and 18.293." Decision 18.295(b). Therefore, the Standing Committee should "make any appropriate recommendations … in accordance with Res. Conf. 14.3 (Rev. CoP18) on CITES compliance procedures." We request that the Secretariat and the Standing Committee consider this information in their ongoing efforts to implement Decisions 18.292-18.295 and recommend, given the perilous status of the vaquita, that Parties suspend commercial trade in specimens of CITES-listed species, as contemplated by Resolution Conf. 14.3.

We welcome the opportunity to discuss this issue with you and would be happy to answer any questions you may have.

Sincerely,

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CC via email:
Ms. Carolina Caceres, Chair, CITES Standing Committee
Mr. Tom De Meulenaer, Chief, Scientific Services, CITES Secretariat
Mr. Ben Janse van Rensburg, Chief, Enforcement Support, CITES Secretariat

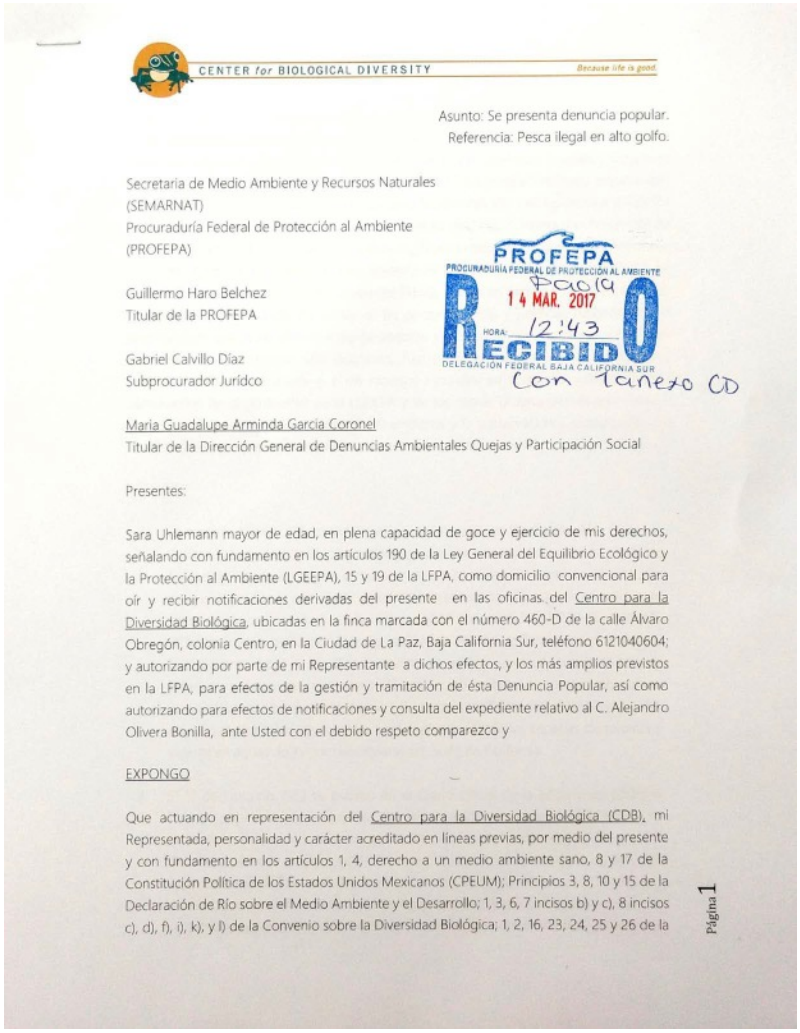
60. See, https://www.gob.mx/conapesca/articulos/gobierno-de-mexico-acuerda-fortalecer-las-acciones-y-el- dialogo-para-lograr-el-desarrollo-del-alto-golfo-de-california-265142?idiom=es
61. See, https://www.infobae.com/america/mexico/2021/02/21/danos-ambientales-en-zona-de-la-vaquita- marina-ascienden-a-163-millones-de-pesos-semar/
62. *Id.*

Exhibit C

Private Remedies Pursued by Submitters

Pursuant to USMCA Article 24.27(3)(c), Submitters have pursued private remedies available under Mexican law.

In May 2017, Submitter Center for Biological Diversity filed a formal administrative complaint, called a "denuncia popular," documenting the failure of PROFEPA, Mexico's environmental enforcement agency, to enforce laws regarding vaquita. Specifically, the complaint documented PROFEPA's failure to enforce against fishing by licensees in the vaquita's habitat in the Upper Gulf of California Biosphere Reserve and Colorado River Delta Natural Protected Area without authorization under an Environmental Impact Assessment. These acts were contrary to management and conservation programs in the area, causing risk of damage or serious deterioration to the vaquita and its habitat. The Center received no substantive response to this complaint. Certification of the Center's filing of this complaint is attached to this Exhibit.



CENTER for BIOLOGICAL DIVERSITY Because life is good.

Asunto: Se presenta denuncia popular.
Referencia: Pesca ilegal en alto golfo.

Secretaria de Medio Ambiente y Recursos Naturales
(SEMARNAT)
Procuraduría Federal de Protección al Ambiente
(PROFEPA)

PROFEPA
PROCURADURÍA FEDERAL DE PROTECCIÓN AL AMBIENTE
RECIBIDO
14 MAR. 2017
HORA: 12:43
DELEGACIÓN FEDERAL BAJA CALIFORNIA SUR

Guillermo Haro Belchez
Titular de la PROFEPA

Gabriel Calvillo Díaz
Subprocurador Jurídco

Con Tanexo CD

Maria Guadalupe Arminda Garcia Coronel
Titular de la Dirección General de Denuncias Ambientales Quejas y Participación Social

Presentes:

Sara Uhlemann mayor de edad, en plena capacidad de goce y ejercicio de mis derechos, señalando con fundamento en los artículos 190 de la Ley General del Equilibrio Ecológico y la Protección al Ambiente (LGEEPA), 15 y 19 de la LFPA, como domicilio convencional para oír y recibir notificaciones derivadas del presente en las oficinas del Centro para la Diversidad Biológica, ubicadas en la finca marcada con el número 460-D de la calle Álvaro Obregón, colonia Centro, en la Ciudad de La Paz, Baja California Sur, teléfono 6121040604; y autorizando por parte de mi Representante a dichos efectos, y los más amplios previstos en la LFPA, para efectos de la gestión y tramitación de ésta Denuncia Popular, así como autorizando para efectos de notificaciones y consulta del expediente relativo al C. Alejandro Olivera Bonilla, ante Usted con el debido respeto comparezco y

EXPONGO

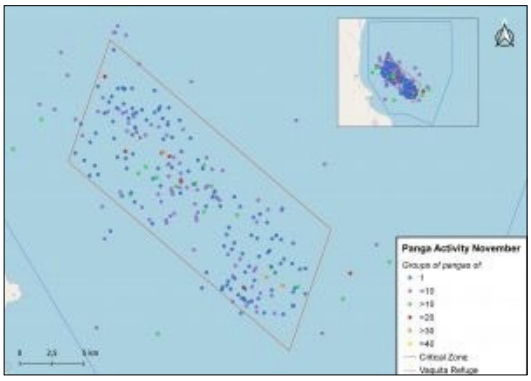
Que actuando en representación del Centro para la Diversidad Biológica (CDB), mi Representada, personalidad y carácter acreditado en líneas previas, por medio del presente y con fundamento en los artículos 1, 4, derecho a un medio ambiente sano, 8 y 17 de la Constitución Política de los Estados Unidos Mexicanos (CPEUM); Principios 3, 8, 10 y 15 de la Declaración de Río sobre el Medio Ambiente y el Desarrollo; 1, 3, 6, 7 incisos b) y c), 8 incisos c), d), f), i), k), y l) de la Convenio sobre la Diversidad Biológica; 1, 2, 16, 23, 24, 25 y 26 de la

Página 1

Exhibit D

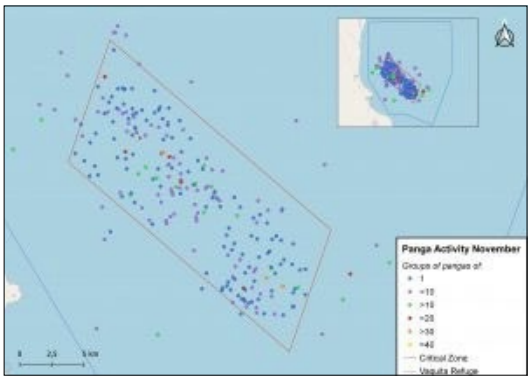
Maps of Illegal Activities in Vaquita Habitat and ZTA, October to December 2020 (IUCN and SSCS)

The following maps document panga activity in the vaquita habitat and Zero Tolerance Area during October, November, and December 2020 and are enlarged versions of the maps included as Figure 2 in the Submission. The maps were provided by IUCN CSG based on data from Sea Shepherd Conservation Society and are available online at: <https://iucn- csg.org/vaquita-update-october-through-december-2020/>.



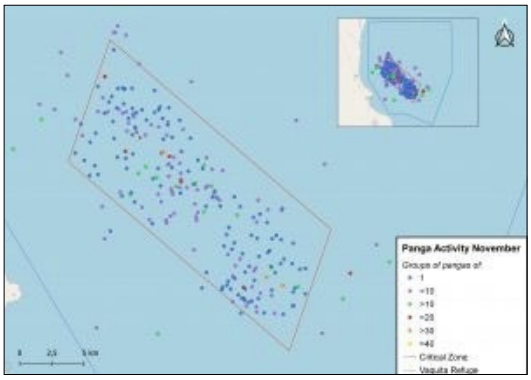
Panga positions in October 2020, with each color[1] representing the approximate number of pangas observed from the survey vessel at a given time and location. Yellow dots indicate individual pangas that were confirmed to be fishing. Observer effort by SSCS was concentrated in the ZTA *(outlined in red but labeled as the 'Critical Zone' in the map legend).*

Source: Sea Shepherd Conservation Society Internal Reports, October 2020.



Panga positions in December 2020, with each color representing the approximate number of pangas observed at a given time. The effort was concentrated in the ZTA but fishing was observed widely in the Vaquita Refuge.

Source: Sea Shepherd Conservation Society Internal Reports, November 2020.



Panga positions in November 2020, with each color representing the approximate number of pangas observed at a given time. The effort by net-removal vessels that reported panga positions was concentrated in the ZTA (outlined in red but labeled as the 'Critical Zone' in the map legend).

Source: Sea Shepherd Conservation Society Internal Reports, November 2020.

1. In each of the figures, blue, purple, green, and red dots correspond to one, less than 10, more than 10, and more than 20 pangas, respectively.

APPENDIX 3

Factual Record on Submission SEM-21-002 (*Vaquita Porpoise*)
Environmental Laws in Question

General Wildlife Act

Article 55. The importing, exporting and re-exporting of specimens, parts and derivatives of wildlife species included in the Convention on International Trade in Endangered Species of Wild Fauna and Flora shall be conducted in accordance with said Convention, the provisions of this Act and of the provisions deriving therefrom, under which it is prohibited to import, export, re-export and trade ivory, when such activities are not in compliance with the international treaties to which Mexico is a party and the applicable laws.

Regulation to the General Wildlife Act

Article 56. The importing, exporting and re-exporting of biological materials from species listed in an appendix to the CITES, shall be subject to the provisions of said Convention.

1975 Totoaba Fishing Ban

The seal in the corner depicts the National Coat of Arms, which reads: United Mexican States.- Ministry of Industry and Trade.

ORDER which establishes a fishing ban on the totoaba (*Cynoscion macdonaldi*), in the waters of the Gulf of California, from the mouth of the Colorado River to Río Fuerte, Sinaloa, on the East Coast, and from the Colorado River to Bahía Concepción, Baja California, on the West Coast.

Based on Article 8 sections XVIII and XX of the Ministries and Departments of State Governments Act (*Ley de Secretarías y Departamentos de Estados*), Articles 1 sections II and III, 12 section II, 13 sections II and VIII, 14 section III, 15 sections I, III, IV and V and other related provisions of the Federal Fisheries Development Act (*Ley Federal para el Fomento de la Pesca*); and

WHEREAS:

ONE. Fish species, as a natural resource, constitute part of the Nation's public wealth, which the State has a duty to conserve so that the exploitation and use thereof may yield the greatest possible benefits to the Nation's economy;

TWO. There is a clear downward trend in totoaba (*Cynoscion macdonaldi*) production statistics, as may be seen in the data obtained in locations which are the traditional fishing grounds for this species, namely in the areas near Santa Clara Peñasco and San Felipe, as well as in the vicinity of the mouth of the Colorado River, Islas Encantadas, Bahía de Santa Inés and Bahía San Rafael;

THREE. According to studies by the National Fisheries Institute (*Instituto Nacional de Pesca*—Inapesca), catches continue to fall despite the adoption of protection measures, such as the creation of a fish refuge in the region, which begins at the mouth of the Colorado River and extends south towards an imaginary line between Bahía Ometepec and the mouth of Río Santa Clara, Sonora, where a year-round ban on totoaba fishing is in effect;

FOUR. In addition to the fact that totoaba (*Cynoscion macdonaldi*) has already been designated a reserved species under the law, the totoaba fishery is a sector of commercial interest, which must be preserved for the benefit of fishing production cooperatives;

FIVE. This species has a restricted distribution range, which makes it highly vulnerable to commercial and sport fishing;

SIX. This species' breeding individuals concentrate in very limited areas with few natural defenses;

SEVEN. In addition to the fact that juvenile totoabas are the accidental by-catch of shrimp trawlers, ecological changes may be occurring, which affect them in their initial development;

EIGHT. The authorities are charged with the responsibility of ensuring maximum security in relation to the reproduction and growth of succeeding generations of fish populations;

NINE. To achieve said objectives it is necessary to establish a total fishing ban on the totoaba (*Cynoscion macdonaldi*), applicable to both commercial and sport fishing, for an indefinite period, in the waters of the Gulf of California, from the mouth of the Colorado River to Río Fuerte, Sinaloa, on the East Coast, and from the Colorado River to Bahía Concepción, Baja California, on the West Coast, until such time as the results of Inapesca studies and research may justify its termination;

TEN. In consequence whereof, and as the provisions hereafter are based on both technical grounds and the public interest, I hereby issue the following:

ORDER

ARTICLE 1. This Order establishes a total fishing ban on the totoaba species (*Cynoscion macdonaldi*), in the waters of the Gulf of California, from the mouth of the Colorado River to Río Fuerte, Sinaloa, on the East Coast, and from the Colorado River to Bahía Concepción, Baja California, on the West Coast, until such time as the results of National Fisheries Institute studies and research may justify its termination.

ARTICLE 2. It is strictly prohibited to fish the totoaba species (*Cynoscion macdonaldi*) in the waters of the Gulf of California, from the mouth of the Colorado River to Río Fuerte, Sinaloa, on the East Coast, and from the Colorado River to Bahía Concepción, Baja California, on the West Coast.

ARTICLE 3. Persons who commit the prohibited acts referred to in the preceding Article shall be subject to the penalties established under the Federal Fisheries Development Act and other applicable legal provisions.

TRANSITORY ARTICLES:

ARTICLE 1. This Order shall be published immediately in Mexico's Official Gazette (*Diario Oficial de la Federación*—DOF).

ARTICLE 2. This Order shall enter into effect on the day following its publication in DOF.

ARTICLE 3. All prior provisions which conflict with the ones established in this Order are abrogated.

2020 Gillnets Order

ORDER which regulates fishing gear, systems, methods, techniques and permissible hours for small and large vessel fishing activities in marine waters under the jurisdiction of the federal government of Mexico in the Northern Gulf of California, and which establishes landing sites and mandates the use of monitoring systems by such vessels.

The seal in the corner depicts the National Coat of Arms and reads: United Mexican States.- Ministry of Agriculture and Rural Development.- Ministry of the Environment and Natural Resources.- Ministry of the Navy.

VÍCTOR MANUEL VILLALOBOS ARÁMBULA, Minister of Agriculture and Rural Development, MARÍA LUISA ALBORES GONZÁLEZ, Minister of the Environment and Natural Resources and ADMIRAL JOSÉ RAFAEL OJEDA DURÁN, Minister of the Navy, based on the provisions of Articles 26, 30 sections IV, V, VII, VII subparagraph c, VII subparagraph d, XXIV, XXV and XXVI, 32 Bis sections I, III, VI, VII and XLII and 35 sections XXI, XXII and XXIV of the Basic Law of the Federal Public Administration; Article 2 section IV Bis of the Basic Law of the Mexican Navy (*Ley Orgánica de la Armada de México*); Article 4 of the Federal Administrative Procedures Act; Articles 1, 3, 8 sections I, II, III, XII, XIV, XXI, XXII, XXIX, XXXVIII, XXXIX and XLII, 9 sections I, II and V, 17 sections I, III, IV, VII and VIII, 19 paragraph 2, 29 section II, 124, 126 and 132 of the General Sustainable Fisheries and Aquaculture Act; Articles 1, 5 sections I, II, VIII, XI, XVIII and XX, 6, 79 sections I, III and VIII, 83, 160, 161 and 162 of the General Ecological Balance and Environmental Protection Act; Articles 1, 5 sections I and II, 9 sections I, IV and XVII and paragraphs 2 and 3, 14 and 122 sections I, II and III of the General Wildlife Act; Articles 8 Bis and 9 of the Maritime Navigation and Trade Act (*Ley de Navegación y Comercio Marítimos*); Articles 1, 2 subparagraph d section III, 3, 5 section XXII, 44, 45 and Transitory Article 8 of the current Internal Regulation of the Ministry of Agriculture, Livestock, Rural Development, Fisheries and Food; in conjunction with Articles 37 and 39 sections III, V and VIII of the version of the Internal Regulation of the Ministry of Agriculture, Livestock, Rural Development, Fisheries and Food published in *Diario Oficial de la Federación* on 10 July 2001; Articles 5 sections I, XXV and XXXV, 41, 42, 45 section I final paragraph and 70 sections I, XIII and XV of the Internal Regulation of the Ministry of the Environment and Natural Resources and; Articles 1, 3 section II, subparagraph c, Bis and section IV Bis, 4 and 6 sections I, X, XIX and XX of the Internal Regulation of the Ministry of the Navy; and

WHEREAS

Acting through the National Aquaculture and Fisheries Commission (Conapesca), the Ministry of Agriculture and Rural Development (Sader) is responsible for managing and regulating the use of fish and aquaculture resources under federal jurisdiction, as well as for promoting the sustainable exploitation thereof, by regulating the activities of the persons active in this area and by establishing the conditions under which fishing activities shall operate. Moreover, Sader is also charged with the following responsibilities: proposing, formulating, coordinating and executing the national sustainable fisheries policy; establishing the administrative and control measures governing the operation of fishing activities; and determining methods and measures to ensure the conservation of fish resources;

Under Article 8 section XXI of the General Sustainable Fisheries and Aquaculture Act, Sader is charged with proposing the establishment and regulation of landing sites and collection points for fishing and aquaculture operations, as well as for proposing the locations of said sites to the competent authorities. In effect, it is necessary to establish such fishing management measures to increase the likelihood of zero interaction with non-target species;

The Ministry of the Environment and Natural Resources is responsible for promoting the protection, restoration and conservation of ecosystems and natural resources, as well as that of environmental goods and services, to foster the sustainable use and development thereof;

The Ministry of the Environment and Natural Resources is vested with the responsibility for conserving and protecting endangered species and populations, including the vaquita porpoise (*Phocoena sinus*), along with its natural environments, and with instituting measures which may contribute to this species' conservation;

As an arm of the Federal Public Administration, the Ministry of the Navy ensures national maritime authority through the exercise of maritime sovereignty, protection and security. In addition, it maintains the rule of law in Mexican marine areas, coasts and port areas by exercising coast guard functions, even as it ensures maritime safety and maritime traffic control, among other functions;

On 10 June 1993, a DECREE was published in *Diario Oficial de la Federación* (DOF) which declared a protected natural area, with the status of a Biosphere Reserve, the region known as the Upper Gulf of California and the Colorado River Delta, located in the waters of the Gulf of California and the municipalities of Mexicali, Baja California, Puerto Peñasco and San Luis Río Colorado, Sonora;

Amongst the different species of cetaceans present in the Gulf of California, the vaquita porpoise (*Phocoena sinus*) is of special interest as one of the world's smallest marine mammals (maximum length: 1.5 meters), as an endemic species, of which the biology and habits are nonetheless little known, as a species listed as in danger of extinction under Official Mexican Standard NOM-059-Semarnat-2010, *Environmental Protection - Native wild flora and fauna species of Mexico - Risk categories and the specifications for the inclusion, exclusion or change in category of species - List of threatened species* and because it is generally found in association with the totoaba (*Totoaba macdonaldi*), which increases its potential for interaction with different types of gillnets, including so-called *agalleras*, which are usually used in illegal totoaba fishing;

The Government of Mexico has contributed to protecting the vaquita (*Phocoena sinus*) and the recovery in its numbers, as well as to lessening the risk factors underlying its endangered status, by instituting measures conducive to the recovery of the vaquita's population in its distribution range, which is located in the Northern Gulf of California. In effect, on 8 September 2005, the *Order which establishes a refuge for the protection of the vaquita* (*Phocoena sinus*) was published in DOF;

On 29 December 2005, the "Program to Protect the Vaquita in the Refuge located in the western part of the Upper Gulf of California" was likewise published in DOF;

On 20 April 2018, an Order was published in DOF which modified various provisions of the *Order which establishes a refuge for the protection of the vaquita* (*Phocoena sinus*);

Accordingly, the Government of Mexico decided to establish a temporary suspension of fishing with gillnets, including longlines, in the distribution area of the vaquita (*Phocoena sinus*), as a measure conducive to said species' conservation. This temporary suspension was enacted via the publication in DOF, on 10 April 2015, of the *Order which temporarily suspends commercial fishing by means of gillnets and longlines operated on small vessels in the Northern Gulf of California*;

On 11 April 2017, DOF published an extension of the *Order which temporarily suspends commercial fishing by means of gillnets and longlines operated on small vessels in the Northern Gulf of California*, originally published on 10 April 2015;

On 1 June 2017, DOF published a second extension of the same Order, originally published on 10 April 2015;

On 30 June 2017, DOF published a third extension of this Order, originally published on 10 April 2015;

In light of the foregoing, the Government of Mexico decided to establish a permanent ban on fishing with gillnets in the *Order which prohibits specified fishing gear, systems, methods, techniques and hours for small vessel fishing activities in marine waters under the jurisdiction of the federal government of Mexico in the Northern Gulf of California, and which establishes landing sites and mandates the use of monitoring systems by such vessels*, published in DOF on 30 June 2017;

In addition to the ban on gillnets, a temporary suspension was instituted on commercial fishing using longlines in the Northern Gulf of California by means of the *Order which temporarily suspends commercial fishing by means of longlines operated on small vessels, in the Northern Gulf of Californi*a, published in DOF on 28 September 2017;

On 14 March 2018, the *Order which temporarily suspends commercial fishing by means of longlines operated on small vessels, in the Northern Gulf of California* was published in DOF;

On 29 May 2018 an Order was published in DOF, which extended the *Order which temporarily suspends commercial fishing by means of longlines operated on small vessels, in the Northern Gulf of California*, originally published on 14 March 2018;

On 18 October 2018 an Order was published in DOF, which extended the *Order which temporarily suspends commercial fishing by means of longlines operated on small vessels, in the Northern Gulf of California*, originally published on 29 May 2018;

There exist fish species of commercial interest, distributed in waters under federal jurisdiction in the Northern Gulf of California, which, due to their availability and abundance, are suitable for exploitation under a fisheries management scheme designed to ensure the maintenance of their populations;

The National Fisheries and Aquaculture Institute (Inapesca) issued a technical opinion via communication no. RJL/INAPESCA/DGAIPP/0716/2020, dated 13 July 2020, in which it indicated that there exist no technical objections to the federal government's decision to reaffirm its commitment to protect the vaquita (*Phocoena sinus*) by totally suspending the use of passively operated *agallera* gillnets in the Northern Gulf of California region;

Inapesca issued a technical opinion via communication no. RJL/INAPESCA/DGAIPP/1030/2017, dated 16 June 2017 that was favorable to a permanent ban on gillnets, including passively operated *agallera* gillnets, in the Upper Gulf of California. Furthermore, it concluded that restricting fishing activities to daylight hours would have no significant effects on the principal commercial fisheries or on the recovery of ghost or abandoned nets. Finally, this technical opinion recommended the installation of monitoring systems on small vessels and the establishment of landing sites for such vessels; and

In consequence whereof, and as the provisions herein are based on both technical grounds and the public interest, we hereby issue the following:

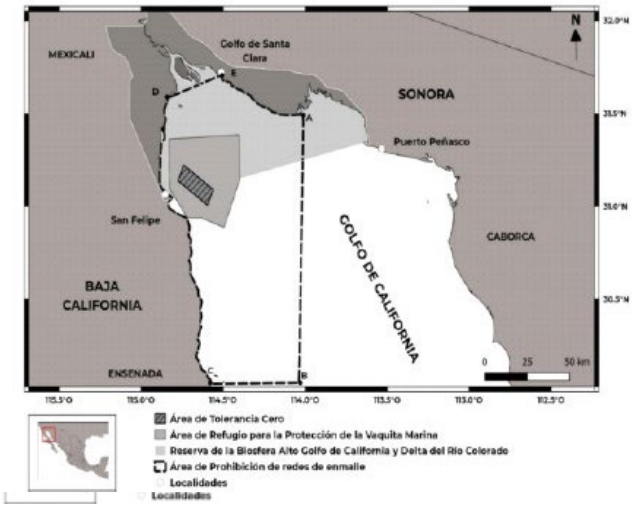
ORDER WHICH REGULATES FISHING GEAR, SYSTEMS, METHODS, TECHNIQUES AND PERMISSIBLE HOURS FOR FISHING ACTIVITIES BY SMALL AND LARGE VESSELS IN MEXICAN MARINE WATERS IN THE NORTHERN GULF OF CALIFORNIA, AND WHICH ESTABLISHES LANDING SITES AND MANDATES THE USE OF MONITORING SYSTEMS BY SUCH VESSELS

ARTICLE 1. SCOPE. This Order is compulsory for all holders of fishing concessions and permits, as well as for fishing boat captains and skippers, motorists, fishers and the crews of both small and large vessels, including sport fishers and providers of sport and recreational fishing services, engaged in fishing activities in Mexican marine waters in the Northern Gulf of California, within the area delimited by the coordinates indicated in Table 1 and illustrated in Figure 1 below. To clearly and permanently indicate this area's boundaries, buoys shall be put in place and maintained.

Table 1. Geographical coordinates of the marine area subject to the provisions of this Order

Vertex	Decimal coordinates		Metric Coordinates (UTM) 11R Zone		Coordinates Degrees, minutes, seconds	
	Longitude	Latitude	X	Y	Longitude	Latitude
A	-114.022800	31.493300	782806.16 E	3488114.57 N	114°01´22.09´´W	31°29´35.86´´N
B	-114.022000	30.095000	787011.95 E	3333054.46 N	114°01´19.24´´W	30°05´41.99´´ N
C	-144.600005	30.095000	731287.04 E	3331742.07 N	114°36´0.02´´W	30°05´42.00´´N
D	-144.820300	31.587500	706823.40 E	3496775.96 N	114°49´13.10´´W	31°35´14.97´´N
E	-144.532200	31.703300	733876.99 E	3510197.40 N	114°31´55.96´´W	31°42´11.87´´N

Figure 1. Map of the area where gillnets, including so-called *agalleras*, are banned in the Northern Gulf of California



ARTICLE 2. PROHIBITIONS. All gillnets, including *agalleras*, are permanently banned, whether made with single filament or multifilament nylon or with any modification thereof and whether operated for use in fishing activities in an active or passive manner in the marine area identified in the preceding Article. Said *agallera* nets or gillnets may not be:

I. Utilized in any fishing activity, nor deployed or recovered for this or any other purpose, nor contained on board a vessel or in the possession of any person within the indicated marine area;
II. Transported into this marine area or within a 10-kilometer perimeter around it by any means, including by land or by air, nor transported between any cities, villages, communities or fishing camps;
III. Fabricated, possessed, sold or transported in the marine area delimited in ARTICLE 1 of this Order, nor in any neighboring cities, settlements, *ejidos* (communal lands), communities and/or fishing camps.

The only types of fishing gear that may be authorized in the fishing concessions or permits granted by the competent authority for small vessel fishing in the marine area delimited in ARTICLE 1 of this Order are: shrimp and deep–sea-scale trawl nets, throw nets, hook lines, longlines, traps, snorkeling and scuba diving with hose and compressor, in accordance with the fishing gear requirements stipulated in Article 43 of the General Sustainable Fisheries and Aquaculture Act.

In this coming year, the testing and funding of alternative and technologically improved fishing gear (e.g., the Mozambique net) will commence, thereby enabling the authorization of same in the relevant fishing concessions or permits, subject to Inapesca's prior recommendation. In the interim, the 2020 fishing season will see the continued use of currently authorized fishing gear.

As of 1 January 2021, active purse seine fishing shall be banned in the gulf and sierra corvina fisheries in the Upper Gulf of California, with the exception of the fishing permits granted in the Colorado River Delta to fishers from Cucapá indigenous villages, in accordance with their historic rights, i.e., in islands and channels of the Colorado River Delta that are located far from the Vaquita Protection Refuge.

ARTICLE 3. REQUIREMENTS FOR MAINTAINING A CONCESSION OR PERMIT. As a condition for maintaining a valid concession or permit, all holders of concessions or permits must ensure that neither they nor the fishing boat captains and skippers, motorists or operators, fishers and crew members of the vessels in question, including sport fishers and providers of recreational fishing and other services engaging in fishing activities authorized by said fishing concessions and permits in the marine area delimited in ARTICLE 1 of this Order, shall engage in activities connected with the sale, possession, fabrication or transport of the fishing gear specified in ARTICLE 2, nor with the transportation thereof by any means, be it by land, sea or air, between the cities, settlements, *ejidos* (communal lands), communities and fishing camps indicated in the aforementioned Articles.

Holders of fishing concessions or permits who fail to observe the stipulations of this Order may be subject to the revoking of their permit or concession, in accordance with the provisions of the General Sustainable Fisheries and Aquaculture Act.

ARTICLE 4. NIGHT FISHING. It is prohibited to engage in any fishing activity and to transit within or across the marine area delimited in ARTICLE 1 of this Order at night, between 4 pm and 5 am.

As for vessels engaged in sport and recreational fishing, these latter activities shall be prohibited from 4 pm until 5 am.

Only bearers of a written permit from the competent authority will be permitted to transit within the marine area identified in ARTICLE 1 of this Order, during the hours specified herein, for the purposes of conducting scientific research activities or to remove ghost nets, or in the event an emergency is declared.

ARTICLE 5. INFORMATION REQUIREMENTS. Natural or legal persons who conduct small vessel fishing activities in the marine area delimited in ARTICLE 1 must inform the Conapesca Fisheries Office nearest to the residence where they conduct their fishing activities within 24 hours of their vessel's arrival at its landing site or home base, of any interaction with marine mammals, the measures attempted to free them, as well as the final disposal thereof, i.e., whether these were dead, alive or injured when freed or whether they were retained, in which case, the official or scientific justification for doing so must be given. They must also furnish information on any fishing gear lost or misplaced during fishing activities.

Conapesca shall make a written record of the event's circumstances (time, place, fishing method in question) and it shall inform in writing the National Commission for Protected Natural Areas (Conanp) and the Federal Attorney for Environmental Protection (Profepa), as well as require of said natural or legal persons their participation in the efforts to recover the misplaced fishing gear.

Should a false report be submitted, the natural or legal person responsible for this action shall be fined or penalized in accordance with Article 132 of the General Sustainable Fisheries and Aquaculture Act "Offences, penalties and liabilities."

Conapesca will define, no later than 30 working days following this Order's date of publication, the procedures and mechanisms to be observed when submitting these reports. This information will be formalized in the appropriate legal instrument and published in *Diario Oficial de la Federación*.

ARTICLE 6. MONITORING SYSTEMS FOR SMALL VESSELS. Small vessels with a concession or permit for fishing activities in the marine area delimited in ARTICLE 1 of this Order must have a duly installed and functioning monitoring system, which is tamper-proof and equipped with the technology and characteristics stipulated in the relevant fishing concessions or permits, in accordance with the provisions of Article 125 of the General Sustainable Fisheries and Aquaculture Act. Vessels which are not duly registered, or which lack the required equipment, are subject to precautionary impoundment and may not sail for any reason or purpose whatsoever, in accordance with Articles 132 sections VI and XVII and 133 section VI of the General Sustainable Fisheries and Aquaculture Act; moreover, the Port Captain may suspend a vessel's clearance to leave port to fish, in accordance with Articles 9 section I and 51 of the Maritime Navigation and Trade Act.

ARTICLE 7. MONITORING SYSTEMS FOR LARGE VESSELS. All large vessels operating under a fishing permit or concession applicable to the marine area delimited in ARTICLE 1 of this Order, must have a video monitoring system, which is tamper-proof and equipped with the technology and characteristics stipulated in the relevant fishing concessions or permits, in accordance with the provisions of Articles 46 and 125 of the General Sustainable Fisheries and Aquaculture Act and Official Mexican Standard NOM-062-SAG/PESC-2014 - *On the Utilization of the Fishing Vessels Location System and Satellite Monitoring*. Vessels which are not duly registered, or which lack the required equipment, are subject to precautionary impoundment and may not sail for any reason or purpose whatsoever, in accordance with Articles 132 sections VI and XVII and 133 section VI of the General Sustainable Fisheries and Aquaculture Act; moreover, the Port Captain may suspend a vessel's clearance to leave port to fish, in accordance with Articles 9 section I and 51 of the Maritime Navigation and Trade Act.

ARTICLE 8. DEPARTURE AND ARRIVAL INSPECTIONS. All small vessels holding a concession or permit for fishing activities in the area indicated in ARTICLE 1 of this Order shall be inspected, without exception, when leaving port as well as upon arrival. Inspections of small vessels in the authorized departure and landing sites shall be conducted, interchangeably, by personnel from the Ministry of the Navy (Semar), the National Guard, Conapesca or Profepa, or any other entity authorized to do so by the laws of the United Mexican States for the duration of this Order.

The inspection actions referred to in the preceding paragraph shall be carried out by the authorities, in accordance with their respective jurisdictions, and shall consist of, *inter alia*, verifying whether fishers and vessels are duly authorized by a specific permit and commercial fisheries register; whether they use only authorized fishing gear and do not have prohibited fishing gear on board; whether their catch corresponds to the authorized fishery, minimum permissible catch size and the authorized catch quota; whether they are engaged in night fishing activities; whether they are duly equipped with an operational vessel monitoring system showing no signs of tampering; and finally whether they comply with other applicable regulatory provisions.

No fishing vessel may leave port to engage in fishing activities within the marine area identified in ARTICLE ONE of this Order, unless an inspection has been conducted which confirms that it is in compliance with the conditions established in this Order prior to sailing.

ARTICLE 9. AUTHORIZED DEPARTURE AND LANDING SITES. The table below indicates the authorized departure and landing sites:

I.- Golfo de Santa Clara, Sonora:

Landing sites	Geographic coordinates
El Delfín	31°41´7.75"N -114°30´13.50´´W
Las Cabinas	31°40´35.31´´N -114°29´31.12´´W
Los Pinitos	31°30´52.87´´N -144°12´28.65´´W

II.- San Felipe, Baja California:

Landing sites	Geographic coordinates
Muelle de San Felipe	30°59´31.56´´N -114°49´37.50´´W
Puertecitos	30°21´1.16´´N -114°38´20.32´´W
San Luis Gonzaga	29°47´45.44´´N -144°23´47.52´´W
Lucky Landing	30°4´47.80´´N -114°35´18.52´´W

III.- El Indiviso/Bajo Río, Baja California:

Landing sites	Geographic coordinates
El Zanjón	31°56´50.05´´N -114°57´48.08´´W

ARTICLE 10. OBLIGATIONS. Within 60 calendar days of this Order's date of publication, all holders of small vessel fishing concessions and permits, as well as fishing boat captains and skippers, motorists or operators, fishers and crew members of such vessels, including sport fishers and providers of recreational fishing services in the marine area identified in ARTICLE ONE of this Order, must:

I. Hand over to the Conapesca Fisheries Office, in the location closest to the official vessels register, all *agalleras* or gillnets made with single filament or multifilament nylon or any modification thereof, including the gillnets banned under ARTICLE 2 of this Order; and

II. Hold a valid concession or permit to conduct fishing activities in the marine area delimited in ARTICLE 1 of this Order, in which the fishing gear to be used is duly authorized for the intended target species within said delimited marine area. Failure to comply with the foregoing shall result in violations, penalties, liabilities and requirements, pursuant to the provisions of the General Sustainable Fisheries and Aquaculture Act, the Regulation to the Fisheries Act and the Official Mexican Standards deriving therefrom.

Any vessel operating in the marine area delimited in ARTICLE ONE of this Order without the required vessel identification or monitoring system will be immediately impounded on a precautionary basis and a classification of offenses procedure shall be initiated, pursuant to Articles 132 section XVII and 133 section VI of the General Sustainable Fisheries and Aquaculture Act.

Within 90 calendar days following the publication of this Order, any gillnet, including *agalleras*, found in the possession of any person or on board any vessel will be immediately impounded on a precautionary basis and a classification of offenses procedure shall be initiated, pursuant to Articles 132 section XVII, and 133 section VI of the General Sustainable Fisheries and Aquaculture Act.

ARTICLE 11. TRANSHIPMENT OF FISHERY PRODUCTS. The transshipment of fishery products, shrimp or other marine species, including the parts thereof, between any vessels within the marine area delimited in ARTICLE 1 of this Order is prohibited, except when otherwise provided for under the General Sustainable Fisheries and Aquaculture Act, such as in the event of emergencies, weather events and engine trouble.

Any person or vessel failing to observe this determination or found to be responsible for transshipping or transferring cargo between vessels shall be subject to the penalties provided for under the General Sustainable Fisheries and Aquaculture Act, the General Ecological Balance and Environmental Protection Act, the General Wildlife Act and other applicable legal provisions.

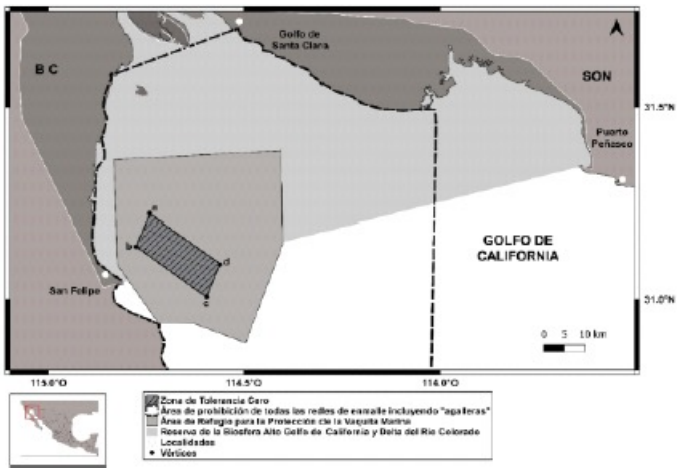
ARTICLE 12. PENALTIES. Persons failing to comply with this Order shall be subject to the penalties established under the General Sustainable Fisheries and Aquaculture Act, the General Ecological Balance and Environmental Protection Act, the General Wildlife Act and other applicable legal provisions.

ARTICLE 13. ZERO TOLERANCE AREA. A "Zero Tolerance Area" is hereby established within the boundaries indicated below. Said boundaries may be updated or amended, based on the best available scientific evidence, in which case an Order to that effect will be published in *Diario Oficial de la Federación*. The boundaries of the Zero Tolerance Area shall be clearly indicated.

Table 3. Geographical Demarcation of the Zero Tolerance Area (225 km$^{2)}$

Vertex	Decimal coordinates		Metric Coordinates (UTM) 11R Zone		Coordinates Degrees, minutes, seconds	
	Longitude	Latitude	X	Y	Longitude	Latitude
A	-114.7409	31.22277	715190.4 E	3456490.7 N	114°44´27.24´´W	31°13´21.97´´N
B	-114.77486	31.13805	712139.9 E	3447032.2 N	114°46´29.64´´W	31°08´16.98´´N
C	-114.59526	31.00626	729584.1 E	3432778.4 N	114°35´43.08´´W	31°00´22.53´´N
D	-114.56131	31.09097	732624.8 E	3442241.2 N	114°33´40.68´´W	31°05´27.49´´N

Figure 2. Location of the "Zero Tolerance Area" within the Vaquita (*Phocoena sinus*) Protection Refuge



Fishing activities of all types, regardless of the type of vessel, including sport fishing, are permanently and totally banned within the "Zero Tolerance Area." No vessel of any type may transit through or navigate in this area unless duly authorized in writing by the competent authority.

Any fishing equipment that is utilized or transported in the Zero Tolerance Area, or any vessel transiting through it, without the required authorization, shall be secured and safeguarded by the competent authority, pursuant to Articles 132 section XVII and 133 section VI of the General Sustainable Fisheries and Aquaculture Act. Persons who fail to comply with, or infringe, this Article and this Order shall be subject to the penalties prescribed by the General Sustainable Fisheries and Aquaculture Act and other applicable legal provisions.

Within the Zero Tolerance Area, the authorities shall, within the scope of their respective powers, carry out coordinated patrols, as well as maritime, air and satellite monitoring or monitoring via any other means or technologies that they may deem necessary, on a 24-hour and year-round basis, to ensure the provision of real time response capacities to avoid any cases of violations of this Order.

ARTICLE 14. FISHING GEAR REMOVAL. Semar, Conapesca and Profepa may exercise their functions and authority to remove illegal, ghost or abandoned fishing gear year-round (in accordance with available budgetary resources). These activities may be conducted in collaboration with other public and private entities, including nongovernmental organizations. These federal agencies will endeavor to expand the efforts to remove illegal, ghost or abandoned fishing gear in the vaquita's distribution range.

ARTICLE 15. SCIENTIFIC RESEARCH. In accordance with the provisions of the Program to Protect the Vaquita within the Refuge located in the western part of the Northern Gulf of California, published in DOF on 29 December 2005, Semarnat will continue to conduct scientific research with the aim of monitoring the population and habitat of the "vaquita porpoise" (*Phocoena sinus*).

ARTICLE 16. INTERINSTITUTIONAL COORDINATION. The responsibility for monitoring compliance with this Order will fall to Semarnat, acting through Profepa, with the collaboration of Conanp, as required, as well as Sader, acting through Conapesca, within the scope of their respective jurisdictions. These agencies will all coordinate with Semar to ensure monitoring in the marine areas delimited and defined in this Order.

ARTICLE 17. INSPECTION AND MONITORING FUNCTIONS. When, in the exercise of their monitoring and inspection functions, Semar, Conapesca and Profepa detect activities in the Zero Tolerance Area and Vaquita Protection Refuge which may constitute criminal offenses, they shall, in keeping with the Enforcement Plan referred

to in Transitory Articles 5 and 6 of this Order, undertake acts and actions within the scope of their respective areas of competence to ensure effective compliance with this Order, including the establishment of triggering factors.

The term triggering factors refers to specific situations identified through quantitative measurements (e.g., limit reference points), which, if exceeded, will trigger predetermined actions by the public authorities, such as a fishing ban, the closure of specific areas or similar actions. Moreover, in establishing whether a given situation constitutes a triggering factor, public authorities must focus on violations directly related to the prohibitions specified in this Order.

Semarnat, Sader and Semar shall carry out the following actions pursuant to the General Sustainable Fisheries and Aquaculture Act, the Maritime Navigation and Trade Act and the General Ecological Balance and Environmental Protection Act:

I. Halt all fishing activity within the marine area delimited in ARTICLE 1 of this Order or in a particular sub-area thereof, in accordance with the abovementioned triggering factors;
II. Detain the persons engaged in such activities; and
III. Put them at the disposal of the competent authority.

Within 30 calendar days of this Order's publication in *Diario Oficial de la Federación* (DOF), Conapesca, Inapesca, Profepa and Conanp will determine the relevant triggering factors, their duration and scope, and the mechanisms for implementing prohibitions or area closures, whereupon said triggering factors and mechanisms will be published in DOF in the form of the appropriate legal instrument. Said triggering factors may be revised by the Intergovernmental Group on Sustainability in the Upper Gulf of California, as indicated in Transitory Article 6 of this Order.

TRANSITORY ARTICLES

ONE. This Order shall enter into effect on the day of its publication in Mexico's Official Gazette (*Diario Oficial de la Federación*—DOF).

TWO. Sader will publish and, acting through Conapesca, implement the "Special Program for Marking Fishing Gear and Equipment Used on Small Vessels," with the collaboration of Semarnat, as appropriate, within 18 months of its publication in DOF. The object of this program, which shall apply to small vessels engaged in fishing activities in the marine area delimited in ARTICLE 1 of this Order, is to clearly identify the origin of such vessels in order to strengthen monitoring in this area and thereby provide the "vaquita porpoise" (*Phocoena sinus*) with effective protection.

THREE. All authorized gillnets or *agalleras* utilized for fishing beyond the marine area delimited in ARTICLE 1 of this Order must be registered with Conapesca's Fisheries Office and marked for identification and measurement purposes, in accordance with the fishing gear marking system established under Transitory Article 2 of this Order, within the term specified therein.

FOUR. Conapesca will implement the measures to simplify procedures indicated in the relevant annex of the Assessment of Regulatory Impact (*Evaluación de Impacto Regulatorio*—AIR) in order to comply with the provisions of Articles 68 and 78 of the General Regulatory Improvement Act (*Ley General de Mejora Regulatoria*), within six months of this Order's publication in DOF.

FIVE. Under the coordination of Semar, Conapesca, Profepa and Conanp will elaborate and implement this Order's Enforcement Plan in the Zero Tolerance Area and the Vaquita Protection Refuge, no later than 30 calendar days following this Order's publication in DOF. This Plan will include: monitoring and inspection actions to guarantee compliance; measures for the recovery, elimination and recycling or destruction of illegal, lost and abandoned fishing gear; and establishing the factors enabling the identification of additional conservation and enforcement measures to ensure the effective implementation of this Order. This Order's Enforcement Plan in the Zero Tolerance Area and the Vaquita Protection Refuge will be assessed every six months. Any proposed modifications to said Plan will be submitted by the competent authorities in the Intergovernmental Group on Sustainability in the Upper Gulf of California.

SIX. Simultaneously with this Order's publication in the DOF, Semar, Semarnat and Sader will—acting through their respective descentralized agencies, Profepa, Conanp, Conapesca and Inapesca—establish the Intergovernmental Group on Sustainability in the Upper Gulf of California, with the collaboration of the Ministries of the Economy, Finance and Public Credit, Work and Social Security, Citizen Safety and Protection, Welfare and Foreign Relations, the Tax Administration Service, among other agencies of the Federal Public Administration, including the Office of the Attorney General of the Republic.

The Intergovernmental Group will analyze, define, coordinate, supervise and assess the actions and strategies related to the enforcement of this Order and it will coordinate the implementation of its Enforcement Plan in the Zero Tolerance Area and the Vaquita Protection Refuge.

SEVEN. The Enforcement Working Group (*Grupo de Colaboración sobre Aplicación*—GCAL) will be established within 30 calendar days of this Order's publication in DOF. The GCAL's functions will include representation and coordination with the Intergovernmental Group on Sustainability in the Upper Gulf of California. The GCAL will function as a centralized conduit to facilitate information sharing on matters related to the enforcement of this Act, including:

a. Identification of third-party actions that are in contravention of the Order;
b. Information on the illicit trade in totoaba parts or swimbladders;
c. Actions taken by the Parties to prohibit and prosecute any action committed by third parties that are in contravention of the Order; and
d. Implementation of efforts to reduce and eliminate the illicit trade in totoaba parts and swimbladders, and to discourage their use.

Accordingly, the authorities mentioned in the preceding paragraph will count among the members of the GCAL.

Other agencies of the Federal Public Administration and of the governments of the states of Sonora and Baja California may attend GCAL meetings as invitees, as may stakeholders of the fisheries sector and relevant entities of both national and international civil society.

This Working Group will function in accordance with the guidelines set by the aforementioned authorities and it will be formed by the deadline specified in the first paragraph of this Article.

EIGHT. The *Order which prohibits specified fishing gear, systems, methods, techniques and hours for small vessel fishing activities in marine waters under the jurisdiction of the federal government of Mexico in the Northern Gulf of California, and which establishes landing sites and mandates the use of monitoring systems by such vessels*, published in the DOF on 30 June 2017, is hereby repealed.

Mexico City, 10 September 2020.- The Minister of Agriculture and Rural Development, Víctor Manuel Villalobos Arámbula.- Initials.- The Minister of the Environment and Natural Resources, María Luisa Albores González. - Initials.- The Minister of the Navy, José Rafael Ojeda Durán.- Initials.

APPENDIX 4

Request for Information from the Party for the preparation of a factual record in regard to submission SEM-21-002 (*Vaquita Porpoise*)

I. Factual record production process

The Commission for Environmental Cooperation (CEC or the "Commission") was established in 1994 under the North American Agreement on Environmental Cooperation (NAAEC), an instrument signed by Canada, Mexico, and the United States (the "Parties"). On 1 July 2020, the United States-Mexico-Canada Agreement (USMCA or the "Agreement") and the Environmental Cooperation Agreement (ECA) entered into force. Since that date, the submissions on enforcement matters (SEM) mechanism, originally established by NAAEC Articles 14 and 15, are governed by USMCA Articles 24.27 and 24.28, while the terms of implementation and operation under the CEC Secretariat are stipulated in the ECA.

USMCA Articles 24.27 and 24.28 provide for a process allowing any person of a Party, or any entity organized under the laws of a Party, to file a submission asserting that a Party is failing to effectively enforce its environmental laws. The CEC Secretariat (the "Secretariat") initially reviews submissions with reference to the criteria and requirements set out in USMCA Article 24.27(1) and (2). Where the Secretariat finds that a submission meets these requirements, it then determines, in accordance with the criteria of Article 24.27(3), whether the submission merits a response from the Party in question. In light of the Party's response, the Secretariat then determines whether the matter warrants the preparation of a factual record and, if so, informs the CEC Council and the Environment Committee thereof, providing its reasons in accordance with USMCA Article 24.28(1); otherwise, it terminates review of the submission.

The purpose of a factual record is to provide an objective presentation of the facts relevant to the assertions made in a submission and to allow readers to draw their own conclusions regarding a Party's environmental law enforcement. A factual record is expected to generally and succinctly present the background to the matter raised in the submission, the applicable legal obligations of the Party in question, and the measures taken by the Party in fulfilling those obligations. As such, the factual record is another valuable outcome of this information-sharing process around effective environmental law enforcement in the territory of the Parties.

On 26 June 2024, the members of the CEC Council issued Council Resolution 24-02, containing the Council's decision pursuant to USMCA Article 24.28(2) and instructing the CEC Secretariat to prepare a factual record in relation to alleged failures by México to effectively enforce the following provisions:

A. Article 55 of the General Wildlife Act (*Ley General de Vida Silvestre*—**LGVS**);
B. Article 56 of the Regulation to the General Wildlife Act (*Reglamento de la Ley General de Vida Silvestre*—**LGVS Regulation**);
C. Order establishing a fishing ban on the totoaba (*Cynoscion macdonaldi*) in the waters of the Gulf of California, from the mouth of the Colorado River to Río Fuerte, Sinaloa on the east coast, and from the Colorado River to Bahía Concepción, Baja California on the West Coast (*Acuerdo que establece veda para la especie totoaba,* Cynoscion macdonaldi*, en aguas del Golfo de California, desde la desembocadura del Río Colorado hasta el Río Fuerte, Sinaloa, en la costa oriental, y del Río Colorado a Bahía Concepción, Baja California, en la costa occidental*—**1975 Totoaba Fishing Ban**);

D. Order regulating fishing gear, systems, methods and techniques and restricting permissible hours for small and large craft in Mexican marine areas in the Northern Gulf of California, and establishing landing sites and mandating the use of monitoring systems for such craft (*Acuerdo por el que se regulan artes, sistemas, métodos, técnicas y horarios para la realización de actividades de pesca con embarcaciones menores y mayores en Zonas Marinas Mexicanas en el Norte del Golfo de California y se establecen sitios de desembarque, así como el uso de sistemas de monitoreo para tales embarcaciones*—**2020 Gillnets Order**).

Therefore, the Secretariat hereby requests factual information pertaining to the matters that will be addressed in the factual record.

Article 24.28(4) stipulates that in preparing a factual record, the Secretariat may consider any information provided by a Party or by interested persons or nongovernmental organizations, or developed under the ECA or by independent experts; as well as any relevant technical, scientific, or other information that is publicly available or submitted by the Joint Public Advisory Committee (JPAC).

II. Request for information

ECA Article 14 stipulates that "[e]ach Party shall cooperate with the Secretariat to provide information relevant for the preparation of a factual record." In furtherance of this stipulation, the Secretariat hereby asks the Legal Affairs Coordinating Unit (*Unidad Coordinadora de Asuntos Jurídicos*) of the Ministry of the Environment and Natural Resources (*Secretaría de Medio Ambiente y Recursos Naturales*—Semarnat) to apply to the following competent authorities for relevant factual information, for the purposes of preparing the factual record:

a. Semarnat;
b. the Ministry of the Navy (*Secretaría de Marina*—Semar);
c. the Office of the Attorney General of the Republic (*Fiscalía General de la República*—FGR);
d. the Office of the Federal Attorney for Environmental Protection (*Procuraduría Federal de Protección al Ambiente*—Profepa);
e. the National Protected Natural Areas Commission (*Comisión Nacional de Áreas Naturales Protegidas*—Conanp);
f. the National Aquaculture and Fisheries Commission (*Comisión Nacional de Acuacultura y Pesca*—Conapesca); and
g. the Mexican Institute for Sustainable Fisheries and Aquaculture Research (*Instituto Mexicano de Investigación en Pesca y Acuacultura Sustentable*—IMIPAS)

(These official bodies, together or separately, as applicable, constitute the "relevant authorities.")

The following sections describe additional information of a technical, scientific, or other nature that is required for the preparation of the factual record. In order to facilitate the handling and compilation of this information, the CEC Secretariat requests that it be sent in electronic form, with the proviso that information sent in this manner not be subject to any form of confidentiality.

1. General information

a) Photographs and images relating to the implementation of actions or measures for the protection of the vaquita and the totoaba.
b) Photographic record and logbooks of vaquita and totoaba specimens seized or found dead.

2. Enforcement measures for LGVS Article 55 and Article 56 of the LGVS Regulation

Inspection and surveillance

a) Historical information on fines or sanctions applied by Profepa during the period from 2005 to 2023 and relating to incidents that occurred in the Upper Gulf of California, in connection with illegal catch of the species *Totoaba macdonaldi* (hereinafter, "totoaba"), or incidents connected to the species *Phocoena sinus* (hereinafter, "vaquita porpoise" or "vaquita").

b) Documentary and statistical information on the number of administrative proceedings opened by Profepa in the Upper Gulf of California during the period from 2005 to 2023 in connection with matters relating to the vaquita and the totoaba, as well as any sanctions applied and any decisions closing such proceedings.
c) Documentary and statistical information on criminal proceedings brought in relation to illegal catch of totoaba and bycatch of vaquita in the Upper Gulf of California during the period from 2005 to 2023, as well as any decisions closing such proceedings and any sanctions applied.
d) Information on interinstitutional communication reflecting coordination among the relevant authorities for the protection of the vaquita in the Upper Gulf of California during the period from 2005 to 2023, such as cooperation agreements, development of surveillance or inspection projects in the Upper Gulf of California, and disposal of assets such as vehicles or vessels.

Protection programs, training initiatives, and monitoring for protection of the vaquita and the totoaba

e) Documentary and statistical information on programs, short- and medium-term objectives, and measures implemented for the protection of the vaquita and the totoaba during the period from 2005 to 2023.
f) Information on training of federal, local, or municipal authorities on how to interact with fishermen engaged in illegal fishing of totoaba in the Upper Gulf of California, as well as information on training of said authorities on how to treat cases of sightings or interactions with vaquita specimens.
g) Documents on acoustic monitoring programs for the vaquita in the Upper Gulf of California during the period from 2005 to 2023, as well as the methodology employed, the equipment used, the location of the equipment, the results obtained, and the measures implemented further to the monitoring results.
h) Information on the annual budget assigned to the implementation of inspection and surveillance measures in the Upper Gulf of California during the period ranging from 2005 to 2023.
i) In relation to the Upper Gulf of California and Colorado River Delta Biosphere Reserve:
    i. Statistical and documentary information reflecting the budget assigned to protection activities in the biosphere reserve during the period from 2005 to 2023.
    ii. Information reflecting workshops or talks with residents of communities neighboring the biosphere reserve, to promote community surveillance.
    iii. Documents reflecting coordination measures between the federal, state, and municipal authorities on the one hand, and Conanp on the other, for protection of the vaquita and the totoaba.
j) Documents concerning the content and results of the program implemented in 2018 by Conapesca and Semar in the Upper Gulf of California with the goal of monitoring and ensuring that small boats do not carry out commercial fishing in the vaquita protection zone, through satellite monitoring of 928 small boats, in collaboration with the company Pelagic Data Systems <https://www.pelagicdata.com/>. This program was presented at the 2018 fisheries and aquaculture economic forum held by Conapesca, and its description may be found on the Semarnat website at <https://bit.ly/3Wd0kir>.
k) Information on participatory environmental surveillance committees formed under the species conservation action plan (PACE) for the vaquita (2008) in communities neighboring the Upper Gulf of California, as well as committees that are currently in operation.

Operation Santa Clara

l) Information on the scope, duration, results, and authorities involved in the development and implementation of Operation Santa Clara, led by Semar and consisting of the placement of concrete blocks in the Zero Tolerance Zone (Z0).

Along these same lines and within the scope of concrete block placement in the Z0, information is requested on: i) the net removal and management program, and ii) the net contingency and recovery program, pursuant to file no. SGPA/DGIRA/DG-03812-22, of 28 June 2022, issued by Semarnat.

Measures within the framework of CITES

m) In relation to the *Compliance action plan of the Government of Mexico to prevent illegal fishing and trade of totoaba, its parts and/or derivatives for the protection of the vaquita,* submitted to the *Convention on International Trade in Endangered Species of Wild Fauna and Flora* (CITES) ("CITES Action Plan"), up-to-date information is requested on the monthly report of boats inspected and corresponding sanctions, for all inspection points, including the additional point on the San Felipe pier (target 1.1, milestone 2).

n) In relation to the content and appendices of the August 2023 report of activities and results under the CITES Action Plan, the following information is requested:

i. the appendix to target 2.1 of the "Report of the supervisory visit to the buoys delimiting the Zero Tolerance Zone of the vaquita refuge area in the Upper Gulf of California," dated 13 March 2023;

ii. the appendix to target 1.4, milestone 2 on awareness-raising workshops held prior to July 2023;

iii. in relation to target 2.3, descriptive information on monitoring of the vaquita refuge area by means of the ground radar system;

iv. the appendix to target 2.7, milestone 1, consisting of documentation or photographs on the destruction of gillnets seized in April 2023;

v. on target 2.12, information on its implementation;

vi. the appendix to target 3.2, documents on courses given at the following institutions;

Institution	Event	Date and time	Status
National Guard (100 troops)	Identification of *Totoaba macdonaldi* Identification of swim bladder Identification of specimen Protocol for detection of illegal use of *Totoaba macdonaldi*	11 August 2023 10:00 AM to 1:00 PM	Pending
National Customs Agency of Mexico (ANAM) 50 inspectors	Identification of *Totoaba macdonaldi* Identification of swim bladder Identification of specimen Protocol for detection of illegal use of *Totoaba macdonaldi*	25 August 2023 10:00 AM to 1:00 PM	Pending
National Guard (100 troops)	Identification of *Totoaba macdonaldi* Identification of swim bladder Identification of specimen Protocol for detection of illegal use of *Totoaba macdonaldi*	8 September 2023 10:00 AM to 1:00 PM	Pending
ANAM 50 inspectors	Identification of *Totoaba macdonaldi* Identification of swim bladder Identification of specimen Protocol for detection of illegal use of *Totoaba macdonaldi*	22 September 2023 10:00 AM to 1:00 PM	Pending
National Guard (100 troops)	Identification of *Totoaba macdonaldi* Identification of swim bladder Identification of specimen Protocol for detection of illegal use of *Totoaba macdonaldi*	13 October 2023 10:00 AM to 1:00 PM	Pending
ANAM 50 inspectors	Identification of *Totoaba macdonaldi* Identification of swim bladder Identification of specimen Protocol for detection of illegal use of *Totoaba macdonaldi*	27 October 2023 10:00 AM to 1:00 PM	Pending

vii. in relation to the appendix to target 3.2, the document containing the presentation produced by Profepa and Semarnat and titled "International trafficking in wildlife whose range includes Mexico," for the course given 20–21 September 2023, to National Guard troops;
viii. the appendix to target 3.3, information for public disclosure concerning Ecomessages relayed by the General Secretariat of Interpol on traffic in totoaba;
ix. the appendix to target 4.3, containing the final version of the "Training program on the use of alternative fishing gear in the Upper Gulf of California"; and
x. concerning the appendix to target 5.1, documents containing the first partial report (scheduled for delivery in August 2023), the second partial report (scheduled for delivery in October 2023), and the final report (scheduled for delivery in November 2023) of the "Work plan for acoustic monitoring of the vaquita."

o) Information concerning commercial fishing permits in effect in the Upper Gulf of California, as well as the species covered by these permits.
p) Information on the status of the Order creating the trilateral contact group between China, the United States, and Mexico for exchange of information on trafficking in totoaba.

3. 1975 Totoaba Fishing Ban

a) Statistical information reflecting the results obtained from the implementation of the ban.
b) Statistical information reflecting the number of specimens seized in the refuge area established by the ban.
c) Information concerning economic, technological, material, and other resources used for the implementation of the ban.
d) Information reflecting which authorities are involved in implementation and compliance with the ban.

4. 2020 Gillnets Order

a) In relation to the third article of this order, information on the number of concessions or permits in effect during the period ranging from 2019 to 2023, and those revoked for failure to comply with the order.
b) In relation to the fifth article of this order, information on the number, date, and report formats generated by interactions with marine mammals obtained during the period ranging from 2019 to 2023, as well as records produced by Conapesca and reporting of the interactions to Conanp and Profepa.
c) In relation to the sixth article of this order, information indicating the authority responsible for compliance with this provision.
d) In relation to the sixth article of this order, information on the number of boats detained for failure to possess a logbook or the monitoring equipment mentioned in the order.
e) In relation to the eighth article of this order, information reflecting the number and date of inspections performed at launch and landing, as well as the results obtained.
f) In relation to the twelfth article of this order, information on sanctions applied for noncompliance with the order.
g) Information on the results obtained from the implementation of the "Enforcement plan for the Zero Tolerance Zone and the Vaquita Refuge Area," published in the Official Gazette of the Federation (*Diario Oficial de la Federación*) on 20 January 2021.
h) Information concerning efforts by the collaborative group to enforce the 2020 Gillnets Order.

III. Other relevant documentation and information for the preparation of the factual record

a) Information on alternative fishing gear, as well as efforts by local actors and organizations to test various fishing technologies in the Upper Gulf of California.
b) Photographs and images relating to the implementation of actions or measures to protect the vaquita and the totoaba;
c) Photographic record and logbooks of vaquita and totoaba specimens seized or found dead.

IV. Deadline for submission of information

Although the USMCA and the ECA do not stipulate a deadline for submission of information to the Secretariat when it is preparing a factual record, it is hereby requested, to ensure compliance with the timelines set out in USMCA Article 24.28(5) and with the "Overall plan to prepare a factual record," that the information be submitted to the Secretariat within the 60 working days following the date of Council Resolution 24-02, or no later than **26 August 2024**.

V. Where to send the information

Relevant information for the preparation of the factual record should preferably be emailed to <sem@cec.org>; alternately, it may be sent using cloud storage platforms such as SkyDrive, Google Drive, or Dropbox.

APPENDIX 5

Overall Plan to prepare a Factual Record

Submitters:	Center for Biological Diversity Animal Welfare Institute Natural Resources Defense Council Environmental Investigation Agency
Party:	United Mexican States
Date:	5 July 2024 (updated on 14 January 2025)

Submission No.: SEM-21-002 (*Vaquita Porpoise*)

On 26 June 2024, the Council members of the Commission for Environmental Cooperation (CEC), 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 55 of the General Wildlife Act (*Ley General de Vida* Silvestre, LGVS);

B. Article 56 of the General Wildlife Act Regulation (*Reglamento de la Ley General de Vida Silvestre*, LGVS Regulation);

C. Order which establishes a fishing ban on the Totoaba (*Cynoscion macdonaldi*), in the waters of the Gulf of California, from the mouth of the Colorado River to Río Fuerte, Sinaloa, on the east coast, and from the Colorado River to Bahía Concepción, Baja California, on the west coast (*Acuerdo que establece veda para la especie Totoaba,* Cynoscion MacDonaldi*, en aguas del Golfo de California, desde la desembocadura del Río Colorado hasta el Río Fuerte, Sinaloa en la costa oriental, y del Río Colorado a Bahía Concepción, Baja California, en la costa occidental*) ("1975 Totoaba Fishing Ban"), and

D. Order which regulates fishing gear, systems, methods and techniques, as well as restricts permissible hours, for small and large vessels in Mexican marine areas in the Northern Gulf of California, and which establishes landing sites and mandates the use of monitoring systems for such vessels (*Acuerdo por el que se regulan artes, sistemas, métodos, técnicas y horarios para la realización de actividades de pesca con embarcaciones menores y mayores en Zonas Marinas Mexicanas en el Norte del Golfo de California y se establecen sitios de desembarque, así como el uso de sistemas de monitoreo para tales embarcaciones*) ("2020 Gillnets Order").

The Council members also instructed:

> TO FURTHER DIRECT the Secretariat to provide the Council with its overall work plan for gathering the relevant facts; to keep the Council informed of any future changes or adjustments to such plan; and to promptly communicate with the Council in connection with any clarification required with respect to the scope of the factual record hereby authorized.

In accordance with Council Resolution 24-02, the Secretariat submits its workplan for the development of the SEM-21-002 (*Vaquita Porpoise*) factual record.

Overall Work Plan

The estimated time to prepare a draft factual record is in line with the timelines set out in the following sections:

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/CUSMA Article 24.28(4).

   Timeline: Within 60 days following the Council members' instructions

2. In accordance with USMCA/CUSMA 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 may coordinate through the Coordinating Unit for International Affairs (*Unidad Coordinadora de Asuntos Internacionales*—UCAI) of the Ministry of the Environment and Natural Resources (*Secretaría de Medio Ambiente y Recursos Naturales*—Semarnat) requests to obtain relevant factual information with the aim of preparing the factual record.

   Timeline: Within 60 days following the Council members' instructions

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 USMCA/CUSMA Article 24.28(4).

   Timeline: Within 60 days following the Council members' instructions

Site visits and meetings

4. The Secretariat plans to conduct a at least one site visit to Ensenada and San Felipe, Baja California between within 90 days after the Council members issue their instructions. To this end, it will arrange, with the support of Environment Canada, the corresponding diplomatic note to be delivered through the Canadian Embassy to the Mexican Ministry of Foreign Affairs and will timely inform UCAI. The Secretariat will meet with relevant authorities, including Semarnat; Secretariat of the Navy (*Secretaría de Marina* "Semar"), Attorney General of the Republic (*Fiscalía General de la República* FGR), Federal Attorney General for Environmental Protection (*Procuraduría Federal de Protección al Ambiente*, "Profepa"), National Commission of Natural Protected Areas (*Comisión Nacional de Áreas Naturales Protegidas* "Conanp"), National Commission of Aquaculture and Fisheries (*Comisión Nacional de Pesca* "Conapesca"), and the Mexican Institute for Research in Fisheries and Sustainable Aquaculture (*Instituto Mexicano de Investigación en Pesca y Acuacultura Sustentable*, IMIPAS). The Secretariat will also consider meetings with organizations, experts and academics.

Additional information and follow-up to meetings

5. The Secretariat shall request —as it deems appropriate— information in addition to that provided by a Party pursuant to USMCA/CUSMA Article 24.28(4) and ECA Article 14, which shall be incorporated into the draft factual record, as appropriate.

   In order to clarify questions about the information received, the Secretariat will —as it deems appropriate— schedule meetings with authorities, organizations, experts and academics.

   Timeline: Within 90 days after the Council members issue their instructions

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

6. 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.

   Revised scheduled date: 10 February 2025.

Translation into the CEC's official languages

7. The Secretariat will be responsible for translation of the factual record the CEC's official languages.

   Timeline: 60 days after delivery of the Draft Factual Record to the Council.

Comments to the Draft Factual Record, incorporation of comments and submission of the Final Factual Record to the Council.

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).

   Timeline: Within 30 days of receipt of the draft factual record in the official language(s) of the Party.

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

   Scheduled date: Within 60 days of receipt of the Parties' comments.

Publication of the factual record

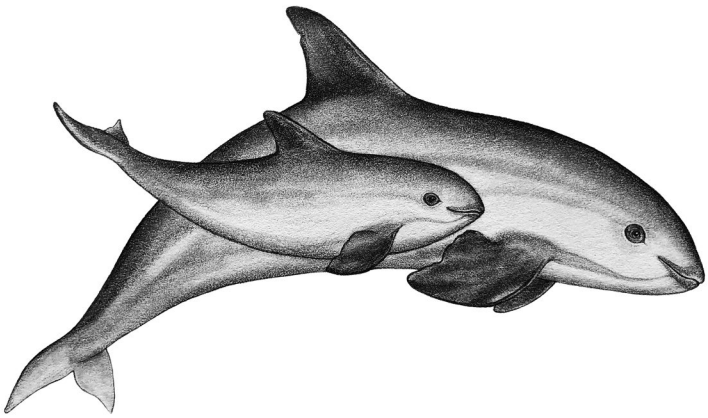
10. The Secretariat shall make the final factual record publicly available within 30 days of its submission to the Parties, unless at least two members of the Council instruct it not to do so, in accordance with USMCA Article 24.28 (6).

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

Additional information

The submission, Mexico's response, the Secretariat's determinations, the Council members 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:

Commission for Environmental Cooperation
Legal Affairs and Submissions on Enforcement Matters
1001 Blvd Robert Bourrassa, bureau 1620
Montreal, QC, H3B 4L4
Canada



Ilustration: mikesalazart/Center for Biological Diversity

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