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OF WILD FAUNA AND FLORA



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REPORT ON THE JOINT UNESCO WORLD HERITAGE CENTRE – IUCN
REACTIVE MONITORING MISSION TO ISLANDS AND PROTECTED AREAS
OF THE GULF OF CALIFORNIA (MEXICO) – 12-16 FEBRUARY 2018

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**REPORT ON THE JOINT UNESCO WORLD HERITAGE CENTRE – IUCN
REACTIVE MONITORING MISSION TO
ISLANDS AND PROTECTED AREAS OF THE GULF OF CALIFORNIA (MEXICO)
From 12th to 16th FEBRUARY 2018**



The El Nido Sea-Pen Facility, Upper Gulf of California, February 2018

May 2018

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EXECUTIVE SUMMARY AND LIST OF RECOMMENDATIONS

In 2017, following concerns that the vaquita porpoise (*Phocaena sinus*) population was nearing extinction, an assessment was conducted of the state of conservation of the UNESCO World Heritage property “Islands and Protected Areas of the Gulf of California”. The joint World Heritage Centre-IUCN reactive monitoring mission which visited the property in April 2017 made a recommendation that the property be inscribed on the List of World Heritage in Danger. Taking into account the new measures implemented by the State Party after the visit of the mission, the World Heritage Committee at its 41st Session decided to defer inscription of the property on the List of World Heritage in Danger until a second assessment was made in early 2018, including by means of another mission. This is the report of the assessment, which was conducted between 12-16th February 2018, by the joint World Heritage Centre-IUCN reactive monitoring mission.

The property Islands and Protected Areas of the Gulf of California was inscribed on UNESCO’s World Heritage List in 2005. Several endangered species reside within the property, including the vaquita porpoise (*Phocaena sinus*) and the totoaba fish (*Totoaba macdonaldi*). The vaquita is bycaught in the illegal gillnet fishery for the totoaba, targeted for its swim bladder which is traded illegally, in particular in China. Bycatch is the only significant pressure on the vaquita population and has caused the population to plummet to less than 30 individuals in the last decade. Measures and actions to enforce the Upper Gulf of California gillnet moratorium and to switch to alternative ‘vaquita safe’ fishing gears are essential components of the vaquita recovery plan. In October-November 2017, the VaquitaCPR was conducted, an initiative that aimed to capture vaquita and keep them under human care until such a time that the Upper Gulf environment no longer posed a bycatch threat. This initiative was halted after both vaquita caught showed signs of stress, from which one died, when placed into the holding pens. As *ex situ* conservation is no longer a viable option, it is imperative that the vaquita’s habitat is safeguarded. As the illegal fishery for totoaba is extremely lucrative and controlled by organised crime syndicates, radical measures are required to halt the illegal fishery.

The 2018 assessment focused on progress made in the four key recommendations made by the 2017 reactive monitoring mission:

R1. Establish, with immediate effect, a permanent ban on the use of gillnets (including the sale, manufacturing, possession and use of all gillnets on land and at sea) for the Vaquita Refuge and the Gillnet and Longline Suspension Zone, and significantly strengthen the associated surveillance, monitoring and prosecution measures currently in place in order to ensure effective law enforcement

The mission concluded that law enforcement procedures have been significantly strengthened by the enactment of the permanent gillnet ban, the allocation of greater resources within San Felipe and the Upper Gulf and improvements to legal procedures associated with gathering data and investigating illegal activities. However, new nets are still being retrieved, confirming that illegal fishing still occurs. Therefore, the mission urges the State Party to ensure that all offices and security forces of the Mexican Government maintain high levels of surveillance and monitoring in the Upper Gulf and surroundings and to continue their strong support of the net retrieval programme.

R2. Establish, within one year, a viable alternative fishing program that develops alternative fishing gear that does not cause entanglement of marine mammals, sharks or turtles and trains and equips local fishing communities affected by the ban to develop meaningful alternative livelihoods with vaquita-safe fishing gear, ensuring effective involvement of all key federal agencies, in particular CONAPESCA and INAPESCA;

The mission concluded that there has been insufficient progress in implementing this recommendation and that alternative gear development remains of the highest priority which must be supported by the full cooperation of CONAPESCA and INAPESCA.

R3. Streamline and simplify procedures for the enforcement of the regulations established for the Vaquita Refuge and Gillnet and Longline Suspension Zone, in particular concerning the official registration of illegal activities and their prosecution through the entire compliance and enforcement chain.

The mission concluded that important progress has been made in streamlining and simplifying procedures for the enforcement of the regulations established for the Vaquita Refuge and Gillnet and Longline Suspension Zone.

R4. Pursue, at the highest level of government, the necessary and urgent cooperation with the State Party of China to halt the consumption and demand for totoaba swim bladders and with the United States of America to halt transit of totoaba swim bladders through its ports, and also with all other identified destination and transit countries involved in this trade, in particular through the implementation of the recommendations that have been made by the Convention on International Trade of Endangered Species of Wild Fauna and Flora (CITES);

The mission concluded that the State Party has undertaken significant efforts, at the highest level and through CITES, to address the issue of the illegal trade in totoaba swim bladders with transit and destination countries, in particular the United States and China.

The mission considers that the results of the study requested at CITES COP17, on the current status of totoaba and vaquita, and in particular, information on illegal trade and markets (CITES Decision 17.149), will be key in mapping trafficking routes and in identifying appropriate strategies to combat illegal trade.

The mission supported the conclusion of the 2017 mission that the property continues to demonstrate its OUV and is satisfactorily managed, with the exception of the illegal, unsustainable fishing, in particular in the Upper Gulf.

The mission was requested to make a recommendation on the issue of inscription on the List of World Heritage in Danger.

The mission concluded that, at this time, it is not possible to determine how effectively the significant efforts undertaken by the State Party to implement the 2017 recommendations have averted the risk of extinction of the vaquita. Therefore, **the mission recommends that the World Heritage Committee defers a decision on the possible inscription of the property on the List of World Heritage in Danger to its 43rd session in 2019**, when more data from the 2018-2019 season when illegal totoaba fishing occurs is available and the CITES study on the current status of totoaba and vaquita, and information on illegal trade and markets (COP17: Decision 17.149) has been completed.

In order to prevent the extinction of the vaquita and thus **prevent iconic attributes of the OUV from becoming irreversibly lost**, the State Party should be requested to **urgently** address the following five key recommendations:

Recommendation 1: Surveillance and Monitoring

The mission recommends that the State Party maintain a high level of surveillance and monitoring activities, particularly during the totoaba illegal fishing season, in the Upper Gulf of California. In addition, as the practises of the groups involved in illegal fishing evolve to avoid detection and apprehension, the State Party should increase resources, either by area or by type of personnel, to better pursue and subsequently prosecute the most determined fishermen who continue to evade the law.

Recommendation 2: Viable Alternative Fishing Gears

The mission reiterates previous recommendations that urge the development of multiple alternative gears, designed with the help of experts and local fishermen. The mission endorses the recommendations made by the expert committee on fishing technologies (ECOFT) and urges the State Party to expediently incorporate these into fisheries management plans and actions.

The mission recommends that integral to this transition in fisheries practices, the State Party should review the current economic compensation programme for fishermen and transform it into an initiative to incentivize fishermen to develop and use alternative fishing gear. The mission further highlights the urgent need for a transparent, multi-year work plan that clearly shows activities and timelines for developing a gillnet-free fishery for the Upper Gulf of California.

Recommendation 3: Strengthening the Legal Status of the Permanent Gillnet Ban

The mission recommends that the Decree that bans all commercial fishing using gillnet and/or longline in the northern Gulf of California, decided between the Secretary of Environment and Natural Resources and the Secretary of Agriculture, Livestock, Rural Development, Fisheries and Food, be formalised via a legislative branch of government, by a Presidential Decree or by jurisprudence created by the federal court.

Recommendation 4: Trafficking of Totoaba Products

The mission recommends that the State Party strengthen its efforts to investigate the national and international networks involved in the illegal fishing operations and the illegal trafficking of totoaba bladders, and that the new provisions made for wildlife trafficking under Mexican Federal Law be used to actively pursue collaborations with global organisations dedicated to the monitoring and prosecution of international criminal syndicates.

Recommendation 5: Implement the Recommendations of the CITES Study

The mission considers that the results of the study requested at CITES COP17, on the current status of totoaba and vaquita, and in particular, information on illegal trade and markets (CITES Standing Committee Decision 17.149), will be key in mapping trafficking routes and in identifying appropriate strategies to combat illegal trade. The mission therefore recommends that the States Parties of Mexico, China and the United States of America immediately review and act upon the recommendations of this study, as soon as they are available (mid 2019).

In order to guarantee the **long-term protection of the OUV of the property, further improve its conservation and strengthen its management** the mission further considers that the following long term recommendations be addressed by the State Party:

Recommendation 6: Sustainable Fisheries

The mission recommends that the State Party continue to develop a programme of transition from unregulated fisheries into regulated practices, that adhere to clear guidelines for sustainable catch in the entire World Heritage property, with defined timelines and regular assessment of programme targets.

Recommendations 7: Community Programmes

The mission recommends that the State Party continue to support the highly successful community programmes, both government and non-government initiatives, that aim to strengthen the involvement of local communities into the protection of the property and their transition into sustainable livelihoods, as well as climate change adaptation programmes;

Recommendation 8: Management Frameworks

The mission reiterates the statements made during the 2017 mission and recommends that an integrated management framework for the property "Islands and Protected Areas of the Gulf of California" in its entirety be developed, and that this includes a formal coordination structure.

The mission further proposes the following recommendations as additional measures which can support the implementation of the key recommendations stated above:

Recommendation 9: Enforcement Outcomes

The mission recommends that the State Party consider developing a publicly available system that reports enforcement procedures, including regular updates of seizures, prosecution and penalty statistics, for all wildlife trafficking incidents, particularly those that involve illegal totoaba fishing, transport and trade. Outcomes from the 2018 enhanced enforcement operation should be publicly available by before the commencement of the 2019 totoaba spawning season.

Recommendation 10: Assessment of the Totoaba Population

The mission recommends that the "Report on the Status of the Gulf of California Totoaba (*Totoaba macdonaldi*)" (Cisneros Meta, 2017) be peer-reviewed and published, ideally by mid-2019, with a view to continuing the assessment of the totoaba in the long term and acting on the outcomes of the assessment.

Recommendation 11: General Law on Biodiversity

The mission understands that a new biodiversity law (Ley General de Biodiversidad) is under review and this law may have implications for long term protection of the property. The mission recommends that the State Party provide clarification on the standing of the new Law and its potential impact on the protection status of this, and other, natural World Heritage properties in Mexico.

Glossary

CIRVA	International Committee for the Restoration of the Vaquita
CITES	Convention on International Trade of Endangered Species of Wild Fauna and Flora
COI	Inter-institutional Operations Centre
CONANP	National Commission of Protected Natural Areas
CONAPESCA	National Commission of Aquaculture and Fisheries
CoP	Conference of Parties
ECOFT	Expert Committee on Fishing Technologies
EoH	Enhancing our Heritage Management Effectiveness Tool
INAPESCA	National Fisheries Institute
IUCN	International Union for the Conservation of
METT	Management Effectiveness Tracking Tool
NGO	Non Governmental Organization
OUV	Outstanding Universal Value
PACE Vaquita	Vaquita Conservation Action Plan
PDS	Pelagic Data System
PGR	Office of the General Prosecutor
PROFEPA	Federal Attorney's Office for Environmental Protection
SAGARPA	Ministry of Agriculture, Livestock, Rural Development, Fisheries and Food
SEDENA	Mexican Armed Forces
SEMAR	Mexican Navy
SEMARNAT	Ministry for Environment and Natural Resources
SOUV	Statement of Outstanding Universal Value
SRE	Ministry of Foreign Affairs
SSCS	Sea Sheppard Conservation Society
UNESCO	United Nations Educational, Scientific and Cultural Organization
VaquitaCPR	Vaquita Conservation, Protection and Recovery Plan

1 MISSION BACKGROUND

The property Islands and Protected Areas of the Gulf of California was inscribed on UNESCO's World Heritage List in 2005 under criteria (vii), (ix) and (x) and was further extended in 2007 and again in 2011. . The property is of stunning natural beauty with dramatic contrasts between the rugged and seemingly inhospitable islands, coastal deserts and the brilliant reflection from the surrounding turquoise waters (criterion vii). The Gulf of California has phenomenal marine productivity as a result of nutrient-rich upwelling oceanic currents. These currents support abundant phytoplankton and zooplankton, provide nurseries for larval reef fish and contribute to ongoing evolutionary speciation and a degree of endemism that is of major significance to science and conservation (criterion ix). The property harbours biodiverse land and sea-scapes that are of global priority for conservation. These include critically endangered species such as the vaquita (*Phocaena sinus*), the smallest whale species in the world, in addition to endangered fishes such as black (or giant) sea bass (*Stereolepis gigas*) and totoaba (*Totoaba macdonaldi*). The coral reef systems at Cabo Pulmo are also among the most important in the Eastern Pacific (criterion x). The retrospective Statement of the Outstanding Universal Value (RSOUV) was adopted in 2013 and can be found at <http://whc.unesco.org/en/list/1182>¹.

The property is a serial property and comprises 244 islands, islets and coastal areas, located in the Gulf of California in north-eastern Mexico. The property includes the following 12 component parts (Figure 1):

1. Islands of the Gulf of California
2. Upper Gulf of California – Colorado river Delta (marine portion)
3. Isla San Pedro Martir
4. El Viscaíno (marine and coastal belt in the Gulf of California)
5. Bahía de Loreto
6. Cabo Pulmo
7. Cabo San Lucas
8. Islas Marias
9. Isla Isabel
10. Archipelago of San Lorenzo
11. Islas Marietas
12. Balandra Zone of Ecological Conservation and Community Interest

In 2016, at its 40th session, the World Heritage Committee expressed concern that the status of the vaquita population had become critical and that the species was threatened with extinction. It noted that the critical status of the vaquita population represented an ascertained danger to the Outstanding Universal Value (OUV) of the property, in accordance with Paragraph 180 of the *Operational Guidelines* and therefore, requested the State Party to invite a joint World Heritage Centre/IUCN reactive monitoring mission to the property to assess the state of conservation of the property and to evaluate whether it meets the conditions for inscription on the List of World Heritage Sites in Danger (UNESCO 2017).

¹ The 2017 reactive monitoring mission noted some errors in the RSOUV and proposed an amendment, which can be found in annex to that mission report.

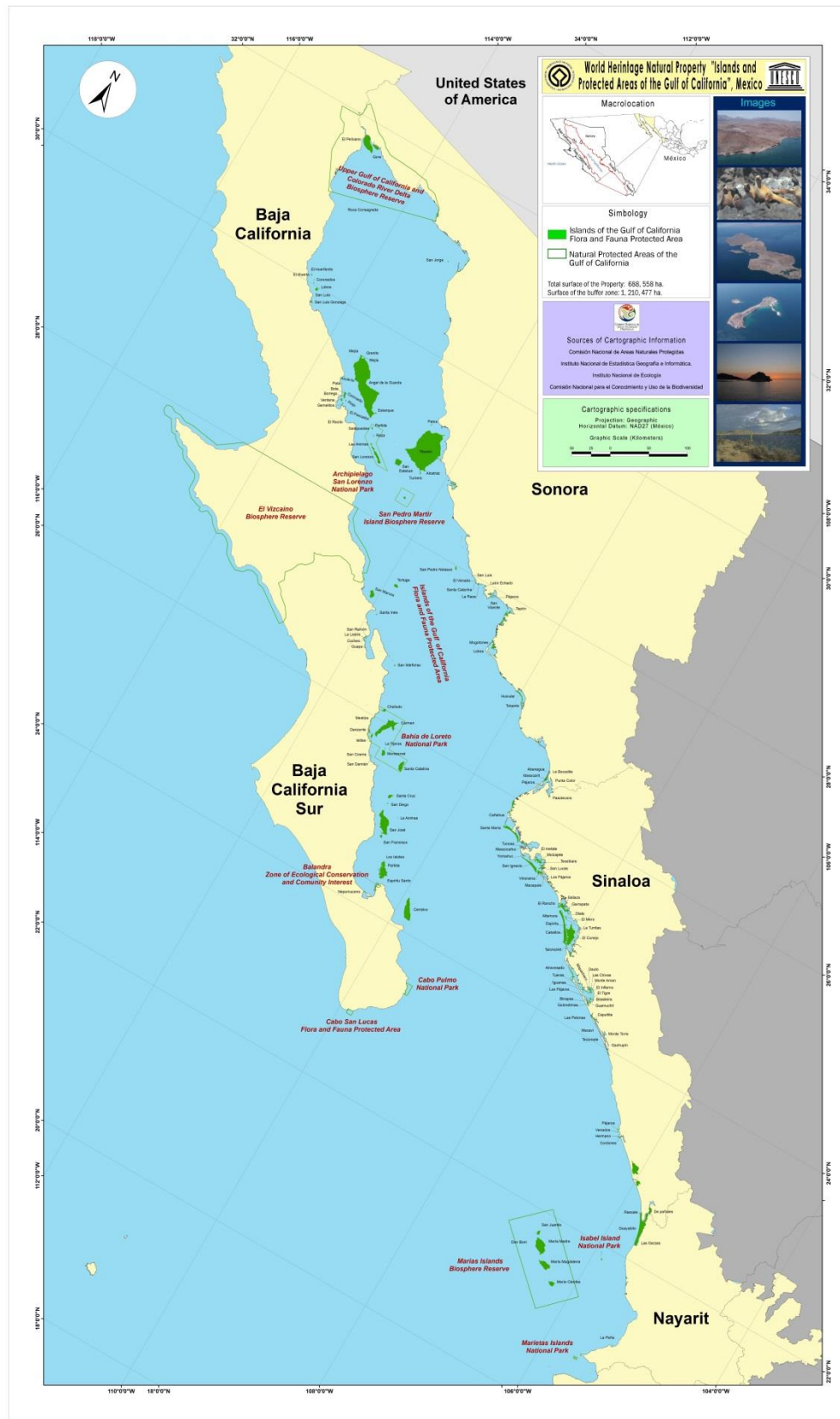


Figure 1. Map of the Islands and Protected Areas of the Gulf of California

The 2017 mission concluded that the property continued to demonstrate its OUV and is managed properly. The 2017 mission, however, was concerned that illegal, unsustainable and unregulated fisheries were negatively impacting the OUV of the property. In particular, it considered that the dramatic decline noted for the vaquita population, from approximately 300 at the time of the inscription of the property to an estimated 30 individuals in 2016, presented a risk of imminent extinction of this species. The 2017 mission recalled that this species was specifically recognised as part of the property's OUV and endemic to the Gulf of California and therefore, concluded that the risk of extinction represented a clear danger to the OUV of the property, in line with paragraph 180 c) i) of the *Operational Guidelines*. The 2017 mission therefore, recommended that the Committee inscribe the property on the List of World Heritage in Danger at its 41st session.

The mission further recommended 4 urgent measures, related to the illegal fishing of totoaba, in order to prevent the iconic attributes of the OUV of the property from becoming irreversibly lost:

R1. Establish, with immediate effect, a permanent ban on the use of gillnets (including the sale, manufacturing, possession and use of all gillnets on land and at sea) for the Vaquita Refuge and the Gillnet and Longline Suspension Zone, and significantly strengthen the associated surveillance, monitoring and prosecution measures currently in place, in order to ensure effective law enforcement;

R2. Establish, within one year, a viable alternative fishing program that develops alternative fishing gear that does not cause entanglement of marine mammals, sharks or turtles and trains and equips local fishing communities affected by the ban to develop meaningful alternative livelihoods with vaquita-safe fishing gear, ensuring effective involvement of all key federal agencies, in particular, CONAPESCA and INAPESCA.

R3. Streamline and simplify procedures for the enforcement of the regulations established for the Vaquita Refuge and Gillnet and Longline Suspension Zone, in particular concerning the official registration of illegal activities and their prosecution through the entire compliance and enforcement chain.

R4. Pursue, at the highest level of government, the necessary and urgent cooperation with the State Party of China to halt the consumption and demand for totoaba swim bladders and with the United States of America to halt transit of totoaba swim bladders through its ports, and also with all other identified destination and transit countries involved in this trade, in particular, through the implementation of the recommendations that have been made by the Convention on International Trade of Endangered Species of Wild Fauna and Flora (CITES);

During the 41st session of the Committee, the State Party presented information on the ongoing efforts it was undertaking to implement these recommendations. The Committee in its Decision 41 COM 7B.15 noted with appreciation the State Party's ongoing commitment and efforts aimed at the preservation of the critically endangered vaquita and totoaba. The Committee highlighted that the mission had confirmed that other attributes of the property's OUV remained in good condition and that the State Party had started to implement the most urgent recommendations made by the mission. The Committee also requested the State Party to again invite a joint World Heritage Centre/IUCN Reactive Monitoring mission to the property to assess the effectiveness of the implementation of the recently adopted measures for the

protection of the vaquita and decided it would consider the inscription of the property on the List of World Heritage in Danger at its 42nd session. The full decision can be found in Annex I.

The joint World Heritage Centre/IUCN reactive monitoring mission requested in Decision 41 COM 7B.15 was conducted from 12 to 16 February 2018. As outlined in the Terms of Reference for the mission, the main objectives of the mission were to assess:

1. the status of implementation of the recommendations of the 2017 monitoring mission and the effectiveness of the measures undertaken by the State Party for the protection of the threatened vaquita, including:
 - a. implementation and enforcement of the recently established permanent ban on gillnets use within the Vaquita Refuge and the current gillnet and longline suspension zone and in the adjacent land areas;
 - b. the effectiveness of programmes aimed at promoting sustainable fishing practices and development and introduction of alternative fishing gear which does not cause bycatch of vaquita, other marine mammal species, sharks or turtles;
 - c. measures undertaken to improve the effectiveness of law enforcement;
 - d. efforts aimed at strengthening cooperation with State Parties that are transit and destination countries for the illegal trade of totoaba swim bladder, in particular through the Convention on International Trade of Endangered Species of Wild Fauna and Flora (CITES);
2. based on the review of progress made in the implementation of the above measures to avoid the extinction of the vaquita, and based on Decision 41 COM 7B.15, make a recommendation whether or not the property meets the conditions for inscription on the List of World Heritage in Danger. If the mission considers that the property meets these conditions, and recommends Danger Listing, (and only in that case) it should develop, in close cooperation with the State Party, a set of corrective measures as well as a Desired state of conservation for the removal of the property from the List of World Heritage in Danger (DSOCR);
3. any other relevant issues that may negatively impact the OUV of the property, including its conditions of integrity and protection and management, in line with paragraph 173 of the Operational Guidelines.

The mission team was composed of Guy Debonnet, representing the World Heritage Centre and Lindsay Porter, representing IUCN. The mission terms of reference, the participants list and the itinerary are annexed (Annex II, III and IV).

2 NATIONAL POLICY FOR THE PRESERVATION AND MANAGEMENT OF THE WORLD HERITAGE PROPERTY

2.1 Summary of Relevant National Legislation

The 2017 reactive monitoring mission report provided a detailed overview of the national legislation that applies to the property and the conservation of the vaquita and the totoaba. A summary of the overview is provided here.

The General Law of Ecological Equilibrium and Environmental Protection (La Ley General del Equilibrio Ecológico y la Protección al Ambiente (LGEEPA)) provides the overarching legislative framework for the establishment and management of protected areas in Mexico. Fisheries and aquaculture are governed by the General Law on Sustainable Fisheries and Aquaculture (Ley General de Pesca y Acuicultura Sustentables (LGPAS)).

In 1978, all islands within the Gulf of California were declared a Wildlife and Migratory Birds Reserve and Refuge and in 2000 this protected area was transformed into a new category of Flora and Fauna Protected Area (Área de Protección de Flora y Fauna). Consequently, marine areas around some of the islands were also declared protected areas. In 2005, a decree established the Marine Zone of San Lorenzo Archipiélago National Park and, in 2007, the Bahía de los Ángeles, Canales de Ballenas y Salsipuedes Biosphere Reserve² and the Marine Zone of the Archipiélago Espíritu Santo National Park were created. An overview of all protected areas which compose the property is provided in section 2.3 of this report.

Most of the islands are the property of the Federal Government. One of the exceptions is Tiburon Island whose ownership by the indigenous people Comcáac was officially recognized by a Presidential Decree in 1975.

In addition to protected area laws, a number of legislative instruments provide a framework for protection for certain species of flora and fauna. The Official Standard (Norma Oficial Mexicana) NOM-059-SEMARNAT-2010 defines categories of endangered species and outlines regulations for their protection. It includes the vaquita and the totoaba in the “endangered species” category.

A new General Law on Biodiversity (Ley General de Biodiversidad) is currently being considered for approval. This new law is apparently being developed in order to integrate the Nagoya Protocol into Mexican Law, integrate all legislation relevant to biodiversity in one law and clarify the responsibilities between the three levels of Government, strengthen the provisions of the General Wildlife Law (Ley General de Vida Silvestre) and better conserve biodiversity in Mexico. At this stage, it is understood that the proposed text has already undergone approval at Senate level, but it is still to be considered by Congress and must also be opened for public consultation. There was a suggestion, expressed to the mission by some stakeholders consulted, that the proposed text could open the door to allow fracking and mining inside protected areas. Given the concerns raised during the mission, more information on the proposed law is required before any further comment can be made.

The mission recommends that the State Party provide clarification on the new General Law on Biodiversity (Ley General de Biodiversidad) and its potential impact on the protection status of this, and other, natural World Heritage properties in Mexico.

² In Mexico, Biosphere Reserves are a category of national protected areas which may or may not be recognised as *Biosphere Reserves* under the UNESCO “Man and the Biosphere Programme”.

2.2 Institutional framework

The complex institutional framework was also described in detail in the 2017 mission report. While the National Commission of Protected Natural Areas (CONANP) is responsible for the management of the property, many other Government institutions play an important role in management and protection of the vaquita and totoaba populations (Box 1).

Box 1 Government Institutions Involved in the Management and Protection of the Totoaba and the Vaquita

CONANP

Federal protected areas in Mexico are managed by the National Commission of Protected Natural Areas (CONANP, Comisión Nacional de Áreas Naturales Protegidas) which was created in 2000 as a decentralized agency of the Mexico's Environment Ministry (SEMARNAT, Secretaría del Medio Ambiente y Recursos Naturales).

PROFEPA

The Federal Attorney's Office for Environmental Protection (PROFEPA, Procuraduría Federal de Protección al Ambiente) is a decentralised agency of SEMARNAT responsible for law enforcement related to the protection of the environment.

CONAPESCA

The National Commission of Aquacultura and Fisheries (CONAPESCA, Comisión Nacional de Acuacultura y Pesca) is a decentralized agency under the Ministry of Agriculture, Livestock, Rural Development, Fisheries and Food (SAGARPA) responsible for the development and implementation of policies and programmes for the fisheries and aquaculture sectors in Mexico.

INAPESCA

Another decentralized agency of SAGARPA, National Fisheries Institute (INAPESCA), is responsible for supporting the fisheries sector through research in relevant fields, including fishing technology and gear, and through provision of scientific basis for fishing regulations.

SEMAR

The Secretaría de Marina Armada de México (SEMAR) includes the Mexican naval forces and its ministerial sector. SEMAR is currently involved in the surveillance and law enforcement operation undertaken in the Gulf of California.

Gendarmeria Mission Ambiental

The Environmental Gendarmerie was created in April 2016 as a specialized group of the National Gendarmerie, a militarized and federal police force created in August 2014 in response to the nationwide demand to solve the problem of the infiltration by crime groups in state and municipal police forces.

PGR

Office of the General Prosecutor (Procuraduría General de la República, PGR) is part of the Federal Public Ministry (Ministerio Público de la Federación) and an institution under the Federal Government's Executive branch. It is responsible for the investigation and prosecution of federal crimes.

2.3 Management structure

This serial property consists of several protected areas of different categories which all have their own management agencies. CONANP operates through Regional Directorates, who are responsible for all federal protected areas in their regions therefore, the property falls under the management of three different Regional Directorates (Table 1).

Table 1 Management Structure of the Property

Name of the component of the property	Name of the protected area under Mexican legislation	Management	Regional Directorate
Islands of the Gulf of California	Islands of the Gulf of California Flora and Fauna Protected Area	Director of the Islands of the Gulf of California Flora and Fauna Protected Area in the State of Baja California	Regional Director of the Peninsula de Baja California y Pacífico Norte
		Director of the Islands of the Gulf of California Flora and Fauna Protected Area in the State of Baja California Sur	
		Director of the Islands of the Gulf of California Flora and Fauna Protected Area in the State of Sonora	Regional Director of the Noroeste y Alto Golfo de California
		Director of the Islands of the Gulf of California Flora and Fauna Protected Area in the State of Sinaloa	
Upper Gulf of California - Colorado River Delta (marine portion)	Upper Gulf of California and Colorado River Delta Biosphere Reserve	Director of the Upper Gulf of California and Colorado River Delta Biosphere Reserve	Regional Director of the Peninsula de Baja California y Pacífico Norte
Isla San Pedro Martir	Isla San Pedro Mártir Biosphere Reserve	Director of the Islands of the Gulf of California Flora and Fauna Protected Area in the State of Sonora	
Bahía de Loreto	Bahía de Loreto National Park	Director of the Bahía de Loreto NP	
Cabo Pulmo	Cabo Pulmo National Park	Director of the Cabo Pulmo NP	Regional Director of the Peninsula de Baja California y Pacífico Norte
Cabo San Lucas	Cabo San Lucas Flora and Fauna Protected Area	Subdirector of the Cabo San Lucas Flora and Fauna Protected Area	
Archipelago of San Lorenzo	Archipiélago de San Lorenzo National Park	Director of the Islands of the Gulf of California Flora and Fauna Protected Area in the State of Baja California	
Balandra Zone of Ecological Conservation and Community Interest	Balandra Flora and Fauna Protected Area	Director of the Balandra Flora and Fauna Protected Area	
El Vizcaíno (marine and coastal belt in the Gulf of California)	El Vizcaíno Biosphere Reserve	Director of the El Vizcaíno Biosphere Reserve	
Islas Marias	Islas Marias Biosphere Reserve	Director of the Isla Isabel National Park, Islas Marias Biosphere Reserve and the Islas Marietas Flora and Fauna Protected Area	Regional Director of the Occidente y Pacífico Norte
Isla Isabel	Isla Isabel National Park		
Islas Marietas	Islas Marietas Flora and Fauna Protected Area		

All individual protected areas that are part of the property have well established management programmes and the mission was provided with an overview of these management plans (Table 2) and had access to review documents. As discussed in the 2017 report, although the overall coordination between different protected areas and management units is ensured by CONANP, no integrated management structure exists for the entire property.

Table 2 Overview of Property Management Plans

ID No	Name of the area (Component of the Property)	Year of decree	Year of Publication Management Program
1182-001	Islands of the Gulf of California Flora and Fauna Protected Area	1978	2001 revised in 2016
1182-002	Upper Gulf of California and Colorado River Delta Biosphere Reserve (marine portion)	1993	2009 revised in 2014
1182-003	Isla San Pedro Mártir Biosphere Reserve	2002	2011 revised in 2016
1182-004	El Vizcaíno Biosphere Reserve (marine and coastal belt in the Gulf of California)	1988	2000 revised in 2010
1182-005	Bahía de Loreto National Park	1996	2003 revised in 2008 and 2010
1182-006	Cabo Pulmo National Park	1995	2009 revised in 2014
1182-007	Cabo San Lucas Flora and Fauna Protected Area	1973	In preparation
1182-008	Islas Mariás Biosphere Reserve	2000	2011 revised in 2016
1182-009	Isla Isabel National Park	1980	2006, revised in 2011 and 2017
1182bis-10	Zona Marina del Archipiélago de San Lorenzo National Park	2005	2015
1182bis-11	Islas Marietas National Park	2005	2011 revised in 2016
1182bis-12	Balandra Zone of Ecological Conservation and Community Interest (Municipal)*	2008	2015

CONANP has been using several techniques to track management effectiveness across the protected area system. CONANP is currently developing a new permanent system to evaluate management effectiveness, based on the combination of four different assessments methods. 1) the State of Parks System (NSW, Australia), 2) the Management Effectiveness Tracking Tool (METT), 3) the Enhancing Our Heritage Toolkit (EoH) and, 4) the IUCN Green List of Protected and Conserved Areas Generic Indicators. Two components of the property are included in the current pilot phase, Isla San Pedro Martir and Zona Marina Espiritu Santo. The State Party also intends to work towards IUCN Green List certification for all protected areas that are included in Mexico's different natural World Heritage properties. Furthermore, long term biological monitoring projects are being conducted in several parts of the property, focussing on fishes, birds, terrestrial mammals, marine mammals, reptiles and marine invertebrates.

The mission acknowledges that CONANP is implementing a robust management system for the different components of the property, based on management planning, the monitoring of management effectiveness and biological indicators. The mission reiterates the recommendation made previously, that an integrated management framework for the property in its entirety be developed, that includes a formal coordination structure.

3 ASSESSMENT OF ISSUES AND THREATS

The 2017 reactive monitoring mission concluded that illegal, unreported and unsustainable fisheries were, overall, the most important threat to the conservation of the OUV of the property. The most devastating effects of illegal fisheries are visible in the upper part of the Gulf of California where the illegal fishing of totoaba has resulted in the near extinction of the critically endangered vaquita. The 2017 mission identified and assessed various threats that could negatively impact the vaquita population (Table 3).

Table 3. Assessment of Threats in the Upper Gulf of California and Impact on the Vaquita (*Phocaena sinus*)

Threat	Outcome	Impact to Vaquita
Bycatch and entanglements	Injury and mortality	HIGH
Noise pollution, e.g., seismic surveys, shipping, etc.	Injury (reduced ability to communicate, forage and navigate) and mortality	LIKELY LOW
Contaminants, e.g., organochlorines, etc.	Health issues, e.g., toxicity, reduction in vital life parameters, immuno-suppression.	LOW
Tourism, e.g., whale watching	Injury (increased underwater noise levels, see above), stress and mortality (direct interaction)	NONE
Ship Strike	Injury and mortality	NONE

The current mission reaffirms that entanglement in gillnets remains the greatest threat to the vaquita, as has been previously, and repeatedly, documented. In the upper section of the Gulf of California, both the vaquita and the totoaba are negatively impacted by illegal fisheries. The totoaba is targeted by an illegal fishery and the vaquita is incidentally caught in the nets deployed for this illegal fishery. Both species were listed on the IUCN Red List as critically endangered in 1996, a decade prior to the properties inscription on UNESCO's World Heritage List, due to bycatch in fisheries and unsustainable fishing practices.

Gillnet fisheries have the greatest impact on the vaquita population and have been responsible for the species dramatic decline in the last few decades. In the Upper Gulf of California, there are three fisheries which have the potential to entangle vaquita; the totoaba fishery (illegal), the curvina golfina (*Cynoscion othonopterus*) fishery (regulated) and the shrimp fishery, for the blue shrimp (*Litopenaeus stylirostris*) and the brown shrimp (*Farfantepenaeus californiensis*). The totoaba fishery uses traditional gillnets which are set, illegally, within the vaquita's core habitat. Curvina nets can be deployed in two ways: 1) as a purse seine, encircling fish visible from the surface and, 2) as a traditional gillnet. There is a risk of vaquita entanglement only if the curvina net is deployed as a traditional gillnet. It has been noted that is it very difficult to monitor how a curvina net is being operated, i.e., purse seine (legal) or as a gillnet (illegal), without at-sea independent monitoring or a high-resolution surveillance system. The shrimp fishery uses a variety of fishing methods, however, in the upper Gulf, artisanal fishermen use a type of gillnet called the 'chinchorro de línea'. Of the techniques used to catch shrimp, only this type of gillnet poses a risk of entanglement to the vaquita. Vaquita, as well as fish species, are also at risk from gillnets that have been lost or abandoned within the environment.

The State Party has employed multiple measures in the past to decrease the risk of vaquita entanglement in both illegal and legal fisheries, including designating an area in which there is a ban on gillnet fishing, implementing a temporary moratorium on the curvina and shrimp fisheries, dramatically increasing resources dedicated to detecting illegal fishing activities and developing alternative, sustainable fishing gear. There has been considerable progress and further enhancement of these measures since the mission in 2017. In particular, following the 2017 mission, the State Party declared a permanent ban on all commercial fishing using gillnet

and/or longline³ in the northern Gulf of California, which was enacted in June 2017. It should be noted that this Decree operates under an agreement between the Secretary of Environment and Natural Resources and the Secretary of Agriculture, Livestock, Rural Development, Fisheries and Food, and as such, could be revoked by either of these Departments in the future. To secure this Decree in perpetuity, the gillnet/longline moratorium should be formally embedded within Mexican Law.

The mission concludes that great advances have been made in coordinating and streamlining administrative and legal procedures, however, it would be beneficial to initiate the appropriate legal procedures to embed the fishing moratorium permanently in law.

The mission recommends that the Decree that bans all commercial fishing using gillnet and/or longline in the northern Gulf of California, decided between the Secretary of Environment and Natural Resources and the Secretary of Agriculture, Livestock, Rural Development, Fisheries and Food, be formalised via a legislative branch of government, by a Presidential Decree or by jurisprudence created by the federal court.

3.1. Status of the Totoaba Stock

The totoaba fishery was closed in 1975, when the species was listed as endangered (List of Mexican Endangered Species: NOM-059-SEMARNAT-2010). When the fishing ban was put in place, it was estimated that the population had declined to less than 5% of its original size. Totoaba are endemic to the Gulf of California and the Upper Gulf is critical to their life cycle. It is only here that the warm, low salinity water conditions occur that are required for spawning. Adult totoaba migrate to the Upper Gulf between March and May, where they stay for only a few weeks, before migrating south again. Although illegal fishing for totoaba has occurred since the 1975 ban, it was only in 2011 that illegal fishing increased to levels much higher than previously known, or presumed, in response to the Asian demand for totoaba swim bladders. It has been estimated that some 3000 individual totoaba are caught in the illegal totoaba fishery annually, in addition to bycatch of juvenile totoaba in shrimp fisheries. Both bycatch and the illegal fishery have hindered the recovery of the totoaba stock.

In 2017, INAPESACA, with partial support from the Under Secretariat of Environmental Protection of SEMARNAT, assessed the current status of the Gulf of California totoaba (Cisneros-Mata, 2017). This was conducted in collaboration with the Centro Reprodutor de Especies Marinas (CREMES) in Bahía de Kino, Comisión de Ecología y Desarrollo Sustentable (CEDES) in San Luis Río Colorado, CEDES in Sonora and the Centro Interdisciplinario de Ciencias Marinas, La Paz. The report comprised four components: 1) the review, analyses and synthesis of existing data, 2) abundance estimation, distribution and population structure of juveniles (0.5 years old), pre-adult (1.5 to 3.5 years) and adult (4.5 to 27 years) totoaba, 3) the development of population models, and 4) a risk analysis of totoaba management and conservation under various scenarios.

Comprehensive analyses of existing data, dating from the 1920's, as well as field surveys conducted in 2016 and 2017, were used to populate models. Exploitation rates were calculated for various time periods: before the fishery closure in 1975, when the exploitation rate was more than 75%; the late 1990's, when exploitation rates had decreased to less than 50% and post 2005, when the exploitation rate increased to over 50% again. By 2017, the population exploitation rate had fallen to below 50%, its lowest ever rate, although the report acknowledges there is some uncertainty inherent to the short period of sampling in the 2016-2017 surveys. During the 2017 field sampling period, January and June 2017, totoaba larvae were found only in San Felipe in March, whereas juveniles concentrated in the Upper Gulf and in coastal areas from Sonora to Guaymas. It was also noted that totoaba biomass is directly

³ with the exception of curvina fisheries which remains allowed in the period between February and April

related to the flow of the Colorado River and that the carrying capacity of the Upper Gulf of California environment was reduced by 40% after the construction of the Hoover Dam. Population model analyses, using the parameters calculated in the data review, from field sampling and from the current exploitation rate, estimated a population decrease of 2.4% in the current decade. Ideally, catch of pre-adults and adults has to be reduced from 1400 tons to 200 tons per year and juvenile bycatch has to be eliminated. The report states that the greatest threat to totoaba is the illegal capture of sexually mature individuals (of length 65cm or more), followed by the bycatch of juvenile totoaba in trawling activities. The report notes that juvenile bycatch can be minimised by installing fish excluder devices on the trawl fleet.

In conclusion, although acknowledging that the calculated 2017 totoaba exploitation rate is the lowest recorded since the 1970's, the report recommends that the totoaba population status of "critically endangered" remains in place.

The mission was also informed that SAGARPA and SEMARNAT plan to establish aquaculture venture, and will invest in six totoaba fish farms, each with the capacity to produce 50,000 individuals. In addition to totoaba, aquaculture models have been developed for shrimp, clams, Japanese oysters and alga. Although in its early phases, aquaculture alternatives would not only provide stock on which to develop a legal supply of totoaba to Asia and elsewhere, it could also provide alternative incomes to the local communities of the Upper Gulf.

The illegal fishery for totoaba remains a challenge to enforcement agencies, due to its highly lucrative nature, its ties with organised crime organisations, in both Mexico and Asia, and the sheer difficulty in monitoring remote sea areas that have numerous access points for small vessels. In recent years, there has been an unprecedented increase in surveillance systems and enforcement activities in the Upper Gulf and the exploitation rate of totoaba is estimated to be at its lowest since the ban was initiated in 1975.

The mission concludes that while acknowledging that the calculated 2017 totoaba exploitation rate is the lowest recorded since the 1970's, available data indicate that the species remains at risk due to 1) reduced river flow from the Colorado River which has impoverished the totoaba habitat and 2) continued, illegal fishing. The population models in the INAPESACA report indicate, however, that the totoaba population is still capable of recovery, particularly if the a totoaba aquaculture is successfully established.

The mission recommends that the "Report on the Status of the Gulf of California Totoaba (Totoaba macdonaldi)" (2017) be peer-reviewed and published, ideally by mid-2019, with a view to continuing the assessment of the totoaba in the long term and acting on the outcomes of the assessment.

3.2. Status of the Vaquita Population

At the time of inscription of the property on the World Heritage List, the vaquita population numbered approximately 300 individuals and was already in decline. This decline increased sharply in 2011, associated with the surge in demand for totoaba swim bladders from Asia and the subsequent increase in the illegal gillnet fishery to supply this market. In 2017, the population was estimated at 30 individuals (CIRVA, 2017).

There has been a series of actions that aimed to reduce threats to the vaquita. In **1975**, the Ministry of Fisheries banned the totoaba fishery due to pressure from overfishing. This also decreased the risk of vaquita entanglement. In **1993**, additional protection was afforded to vaquita habitat by the establishment of the Upper Gulf of California and Colorado River Delta Biosphere Reserve in which all fishing activities were prohibited. In **1997**, the Mexican government established the Comité Internacional para la Recuperación de la Vaquita (CIRVA), an independent scientific body composed of national and international specialists

dedicated to addressing the conservation of the vaquita. In **2002**, 6 inch mesh gillnets were banned in the Upper Gulf, following CIRVA recommendations to ban gillnets throughout the vaquita's range. In **2005**, the Refuge Area for the Protection of the Vaquita was established, which covers an estimated 60% of the vaquita's range. The area totals 1,263.85 km² (80% is located within the Upper Gulf of California and the Colorado River Delta Biosphere Reserve). In **2007**, the Vaquita Conservation Action Plan (Programa de Acción para la Conservación de la Especie: Vaquita or PACE–Vaquita) was established which included 1) a compensation programme for fishermen who voluntarily stopped fishing within the vaquita refuge area, 2) a buy-out program for gillnet fishing permits and boats and, 3) a plan to develop alternative fishing gear which posed minimal risk of bycatch to vaquita. In **2013**, the Advisory Commission to the President's office was established, the purpose of which was to provide a high level advisory entity dedicated to the vaquita protection. In **2015**, the Integral Strategy to protect the vaquita was put in place which has four main goals: 1) expansion of the protected area, 2) economic compensation, 3) improved law enforcement and 4) the development of alternative fishing gear.

By **2017**, the results of an intensive acoustic monitoring programme estimated that no more than 30 vaquita remained in the Vaquita Refuge (~60% of the vaquita's known habitat). This prompted the Vaquita Conservation, Protection, and Recovery Plan (VaquitaCPR), a bold initiative that aimed to live capture some vaquita individuals and care for them in managed facilities, until such a time as they could be safely returned to their natural environment.

The VaquitaCPR Plan was implemented by a team of 90 experts from nine countries. The first fieldwork was conducted on 12 October 2017 which was for preparation and procedure practise. Field operations were conducted between 13 October and 10 November 2017. In total there were 13 days dedicated to capture operations and three days of image gathering for vaquita identification (photo-identification surveys). A net was deployed three times, with the aim of capturing vaquita, and vaquita were caught on two of the three deployments. In total, two vaquita were caught and identified as V01F (catch date: 18 October 2017) and V02F (catch date: 4 November 2017). The field data which guided the surveys during capture days was obtained from an extension of the existing acoustic monitoring programme. Since 2011, an acoustic monitoring programme, involving the deployment of archival acoustic loggers (CPODS) at over 80 sampling sites, has been conducted within the vaquita refuge. Normally, the devices were deployed for long term data collection. During VaquitaCPR, the devices were retrieved on a daily basis so that hotspots of vaquita activity could be identified and relayed to the capture team. There were 125 acoustic encounters across 21 of the 44 sampling sites, during the field operation period. High levels of vaquita activity were recorded within, and adjacent to, the western portion of the vaquita refuge that had not been detected in previous years. These data not only provided guidance to the capture operations but also led to the designation of an additional area, the 'exclusion zone', in which gillnet fishing and trawling are now restricted (Figure 2). On 20 April 2018, the Secretary for the Environment and Natural Resources officially declared the extension of the vaquita refuge area to include the exclusion zone, thus enlarging the Vaquita Refuge from 1,263.85 km² to 1,841 km² (and thus fulfilling one goal of the 2015 Integral Strategy: to increase the protected area for vaquita).

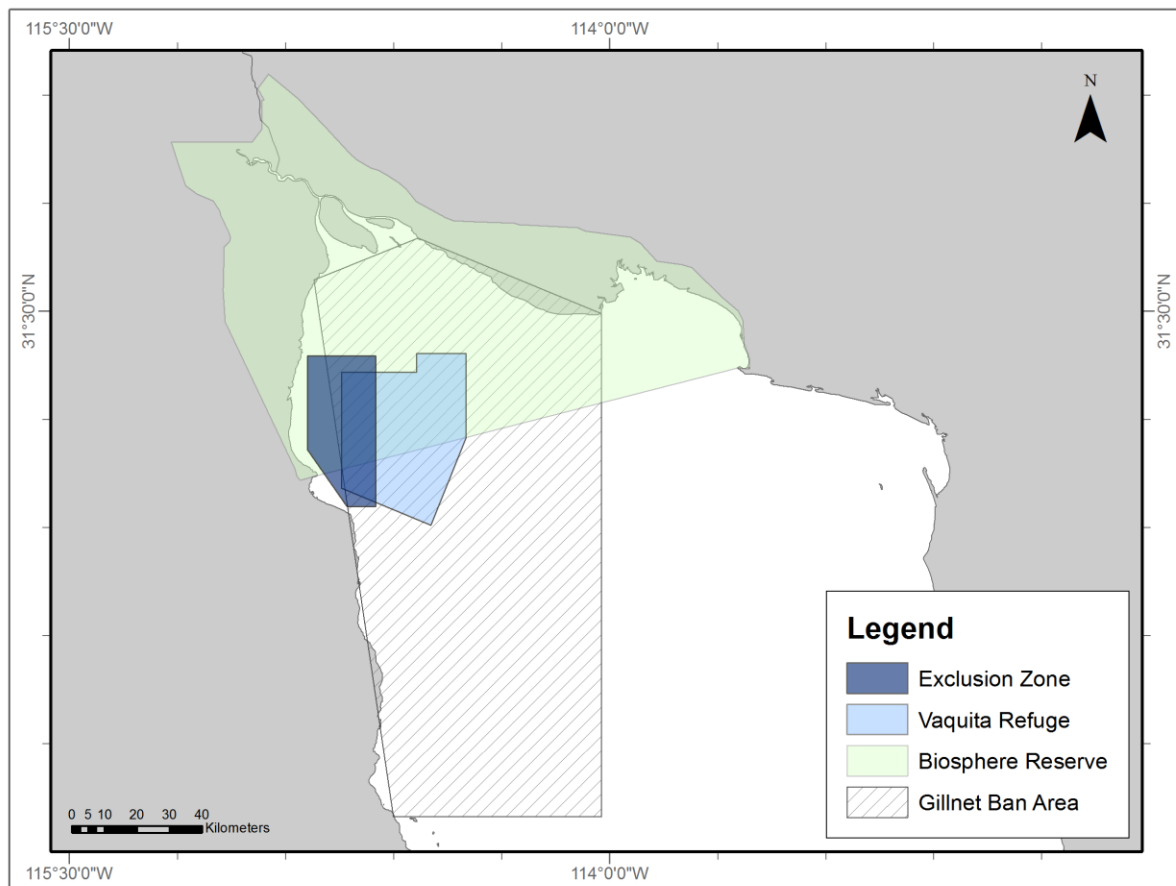


Figure 2. The boundaries of the Upper Gulf of California and Colorado River Delta Biosphere Reserve (green), the demarcation of the permanent gillnet and longline suspension zone (hatched), the Vaquita Refuge (light blue) and the new exclusion zone (dark blue).

For the first time, vaquita were to be captured with the intention of bringing them into human care. As such, there was little known of the vaquita's reaction to any capture procedure or specific husbandry requirements. Experts in harbour porpoise (*Phocoena phocoena*), finless porpoise (*Neophocaena phocaenoides*) and bottlenose dolphin (*Tursiops truncatus*) capture and care advised on the likely needs of housing facilities. Two such facilities were built, prior to the initiation of capture operations. The land-based Centro de Atención a la Vaquita was built in San Felipe and comprised two large pools. In addition, the El Nido Sea-Pen Facility was constructed in the Upper Gulf waters and this comprised two netted areas of 9m and 6m diameter. Both facilities were modified as capture attempts continued so that improvements were incorporated as soon as the specific needs of the vaquita became apparent or were perceived. The first vaquita caught was an immature female that did not acclimate to either the pool or the sea pen and, after advice from the world's foremost authority on marine mammal rescue and care (Marine Mammal Commission, USA), was subsequently released. The second vaquita caught was a mature female that initially appeared to adapt to the sea pen environment, however, there was a sudden deterioration in the vaquita's health status and, after several resuscitation attempts, the vaquita died. VaquitaCPR was immediately suspended and an independent review was conducted and reported on 16 November 2017. The review concluded that live-captures of vaquita should be suspended. It is important to consider the carefully planned, staged attempt by an international team of experts to bring animals into captivity in order to protect them in light of these dire circumstances. Despite a huge investment of resources, time and effort, the attempt sadly failed, but through no fault of the team. SEMARNAT, VaquitaCPR team and its supporters have been lauded internationally, through the International Whaling Commission and other bodies, for their valiant efforts.

During the VaquitaCPR, an extended net retrieval programme was conducted within the vaquita refuge and the exclusion zone. Sea Shepherd Conservation Society (SSCS) initiated this programme in 2011 and, at the time, only one vessel was in operation. In 2016, the programme developed into a joint exercise between the Mexican Navy and SSCS, and was later joined by other groups, including fishermen. The programme now comprises some four to five vessels that belong to civil societies, as well as the availability of naval vessels, which operate 24 hours a day on net retrieval and enforcement patrols. During the mission, 19 naval vessels plus two civil society vessels were actively patrolling the area. The VaquitaCPR review also highlighted that the increased on-water activity of the capture and vaquita spotting vessels, and the enhanced net retrieval patrol programme, was a highly effective deterrent to illegal fishermen.

Although the VaquitaCPR Plan did not fulfil its primary goal, tremendous insights have been made into the behaviour and biology of the vaquita. In particular, preliminary results from mitochondrial genome analyses of 22 samples collected between 1985 and 2017 (including the two vaquita caught during VaquitaCPR) indicate that, in the long term, population size has been small and that there is no indication of loss of genetic diversity (CIRVA, 2017). Further analyses of nuclear DNA will be required to confirm and expand upon this initial indication. VaquitaCPR concluded that it seems probable that vaquita are unlikely to survive in human care, there is now no choice but to protect the vaquita *in situ* if the species is to survive. This will involve maintaining the highest level of habitat surveillance, in addition to continued net retrieval effort, as was established during VaquitaCPR. In addition, the acoustic monitoring conducted during VaquitaCPR highlighted new areas of vaquita activity, which were immediately given protected habitat status. Furthermore, the collaboration of local, national and international participants initiated during this process, raised tremendous global awareness of the plight of the vaquita and highlighted the extreme level of human-intervention required to safeguard this species.

Noting that the species may still have the genetic potential for recovery, the mission concludes that the extinction of the vaquita may still be avoided if in situ protection is ensured by reducing mortality as a result of entanglement. This requires the efficient enforcement, in the long term, of the permanent ban on the use of gillnets in the vaquita refuge and exclusion zone.

3.3. Implementation of Recommendations since the 2017 Mission

Progress on the implementation of the 2017 mission recommendations has been assessed by reviewing: the 2017 CIRVA report; the February 2018 State of Conservation report submitted by the State Party; information presented and observations made during the 2018 mission and; discussions with representatives of the different agencies and institutions of the Mexican Government, scientists and members of civil society, both in Mexico and by teleconference afterwards.

3.3.1. Recommendation 1

Establish, with immediate effect, a permanent ban on the use of gillnets (including the sale, manufacturing, possession and use of all gillnets on land and at sea) for the Vaquita Refuge and the Gillnet and Longline Suspension Zone, and significantly strengthen the associated surveillance, monitoring and prosecution measures currently in place in order to ensure effective law enforcement;

Permanent legal ban

In April 2015, a temporary ban on commercial fishing with gillnets, trawling nets and/or longlines that operated with small speedboats was established up to 31 August 2017. A key part of recommendation 1 was to convert this temporary ban into a permanent ban.

On June 30, 2017 a new decree was issued jointly by the Secretary of Environment and Natural Resources and the Secretary of Agriculture, Livestock, Rural Development, Fisheries and Food, putting in place a permanent ban on the use of gillnets (DOF 06/30/17). This ban, effective immediately on announcement, incorporates the Vaquita Refuge and the Gillnet and Longline Suspension Zone (Figure 2). Further, on 20 April 2018, the Minister for the Environment formalised the extension of the Vaquita Refuge, to cover the 'exclusion zone', which was identified as an area of high vaquita activity during VaquitaCPR (Annex V).

The decree specifically:

- Prohibits the use of gillnets, that operate passively in the area;
- Provides for the mandatory use of monitoring devices for small vessels;
- Determines only 10 legal landing sites for vessels;
- Prohibits nocturnal fishing; and
- Makes it mandatory to declare to the authorities any loss of fishing gear.

Nevertheless, the Decree does not ban the sale, manufacturing or possession of gillnets. It was explained to the mission that PROFEPA and CONAPESCA have the power to prohibit and punish the use and transportation of gillnets under the General Law of Sustainable Fisheries and Aquaculture (LGPAS), however, they cannot prohibit the production, import, sale and distribution of gillnets.

Surveillance and Monitoring Measures

During the mission visit to San Felipe, it was apparent that surveillance, monitoring and prosecution activities have been significantly strengthened. An impressive joint effort to protect the vaquita and combat the illegal totoaba fishing is being implemented under the auspices of the "Comprehensive Attention Program of the Upper Gulf of California" (Operación Control Alto Golfo de California). The operation has 3 objectives: (1) to prevent illegal fishing; (2) to preserve the marine ecosystem and natural protected area; and (3) to avoid illegal trafficking of products and species in danger of extinction or subject to a special protection regime. The program is coordinated through the Interinstitutional Operations Center (COI) in San Felipe and involves a wide range of government agencies and institutions, including the Mexican Navy (SEMAR), the Mexican Army (SEDENA), the Attorney General Office (PGR), PROFEPA, CONANP, CONAPESCA, the Environmental Gendarmeria and the Baja California and Sonora Governments. A permanent naval station, established in 2016, is fully operational at the main dock of San Felipe, which allows for an immediate response to emergencies or illegal activities at sea. Also in 2016, the environmental division of the Gendarmeria was established, whose mission it is to guarantee and safeguard natural areas that fall under federal jurisdiction, as well as to prevent environmental crimes. A decentralised Immediate Attention Unit of the PGR has also been established in San Felipe. In addition, on 1 March 2017, the Marine Infantry Company Number 21 (CIIM 21) was created, the mission of which is to conduct operations in the jurisdiction of the Naval Sector of San Felipe, and thus increases the number of naval personnel actively deployed in the Upper Gulf area. Between April 2015 and December 2017, 2564 naval officers were trained in the identification of marine species, environmental legislation and fishing regulations.

On average, 700 government and military staff are deployed in surveillance and monitoring activities and are supported by two large vessels, numerous small boats (19 were counted during the mission visit to San Felipe), three airplanes, two helicopters and several drones. In

addition, there are 55 vehicles which support terrestrial patrols, that include road check points, custom inspections and boat launching points, as well as foot patrols into the desert to locate campsites, where illegal totoaba fishermen often locate in an attempt to avoid detection. The mission was informed that the total cost of the surveillance operation exceeded MXN 500 million in operational costs (equivalent to USD 27 million), with an additional MXN 300 million (equivalent to USD 16 million) in investment costs.

The mission notes that this is a considerable increase in surveillance and monitoring, and information was provided on the number of inspections and confiscations made. This information has since been presented in the State Party's *State of Conservation Report* (2018) for the property. Thousands of inspections have been made at road checks, on fishing facilities, in storage centres and of vessels, vehicles and members of the public (Table 4). To improve control on the fishing boats at sea, the number of legal boat launch and landing points has been reduced to 10, and these points are regularly patrolled. These actions have resulted in the confiscation of illegal vessel, vehicles and fishing gear, in addition to fish and totoaba bladders (Table 5).

Table 4 Overview of the law enforcement actions implemented in the Upper Gulf of California (April 2015 – December 2017) (Source 2018 SOC report)

Type of check	Number
Road check points	295
Inspection of storage centers	44
Verification of small vessels	4067
Verifications of people	26642
Verification of major vessels	523
Verification of vehicles	8788
Verification of fishing facilities	68

Table 5 Confiscations reported in the Upper Gulf of California (April 2015 – December 2017) (Source 2018 SOC report)

Type of confiscation	Number
Vessels	17 major, 208 small
Vehicles	45
Fishing gear	1142
Fishing products	473493 kg
Totoaba	301 fishes and 704 bladders
Persons arrested	205

In addition, since the enhanced 2018 surveillance and monitoring programme was initiated, press reports state that two seizures have been made at Mexico City International Airport, indicating that there is increased surveillance and enforcement outside of the Upper Gulf area as well (<https://mexiconewsdaily.com/news/2-totoaba-busts-in-one-week-at-aicm/>).

During the visit to the naval patrol vessel, a video was shown to the mission detailing various instances where navy boats and helicopters actively pursued fishermen who were engaged in illegal, or potentially illegal, activities. All crew who were engaged in discussion were well-versed in their mission objectives, understood the importance of Mexico's natural resources, particularly the vaquita, and were clear on what their role was in the enhanced enforcement procedures that were in place, just as the totoaba season was about to begin (February 2017).

The crew also supported the involvement of civil societies in particular, the Sea Shepherd Conservation Society (SSCS) and the Museo de la Ballena were highly spoken of.

The removal of illegal and abandoned fishing gear is a multi-institutional programme that has increased in scope since 2011. Discussion with the teams that remove nets provided useful insights to the status of current fishing activities. With up to multiple vessels now patrolling the vaquita refuge and the exclusion zone, an increased effort has been made to remove both inactive nets and new nets. Of particular note, SSCS, who have conducted the net retrieval for the longest period, stated that they were no longer retrieving any abandoned/old nets and that the nets now being retrieved are new - in fact, so new that manufacturer labels were still clear, indicating that the net had likely been deployed for the first time. Whereas the number of nets retrieved remains high, it is difficult to compare trends between the totoaba fishing seasons. The SSCS and the Museo de la Ballena both acknowledged that net removal techniques have greatly improved and that the patrolling effort of individual boats has increased, in addition to new boats joining the effort. Monthly updates of the number of nets removed count 248 nets removed between December 2017 and March 2018. In the 2017, during the totoaba season, five dead vaquita were recovered from the area. In 2018, up to April in the totoaba season, only one vaquita carcass has been recovered.

The mission notes that the removal of old and abandoned gear plays a significant role in reducing the risk of bycatch, for vaquita and other species. The continued discovery of 'new' totoaba nets, however, is worrying and demonstrates that illegal fishing pressure still exists. While the constant presence of the navy in the Upper Gulf is acting as a deterrent to some of the fishermen, it has not completely stopped illegal fishing activities. The mission received information from civil society organisations that many of the illegal fishermen are now operating at night, when detection is more difficult, and operating from camp sites in the desert rather than from towns.

One of the main measures decreed in the 2017 ban on gillnet fishing was that all small vessels in the Upper Gulf area must have individual monitoring systems installed. CONAPESCA and INAPESCA presented information on the Pelagic Data System (PDS) project which aims to obtain information on the location and routes of small vessels involved in the corvina fishing fleet, as this fishery will be allowed in the Upper Gulf provided that no gillnetting, or setting nets as a traditional gillnet, occurs (see Section 3.2 for net deployment details). To do this, a wireless GPS will be installed on each vessel so that location and movement data can be automatically transmitted to a management facility. The villages involved in this project are San Felipe, Bajo Río and Cucapa Etnic in Baja California and the Gulf of Santa Clara, Sonora. Some 2,330 fishermen will be involved from these areas, incorporating 200 co-operatives and 991 small vessels. The PDS is robust, solar powered, tamper-proof and sends high resolution encrypted data (600 locations per hour) via the cellular phone network (Figure 3).

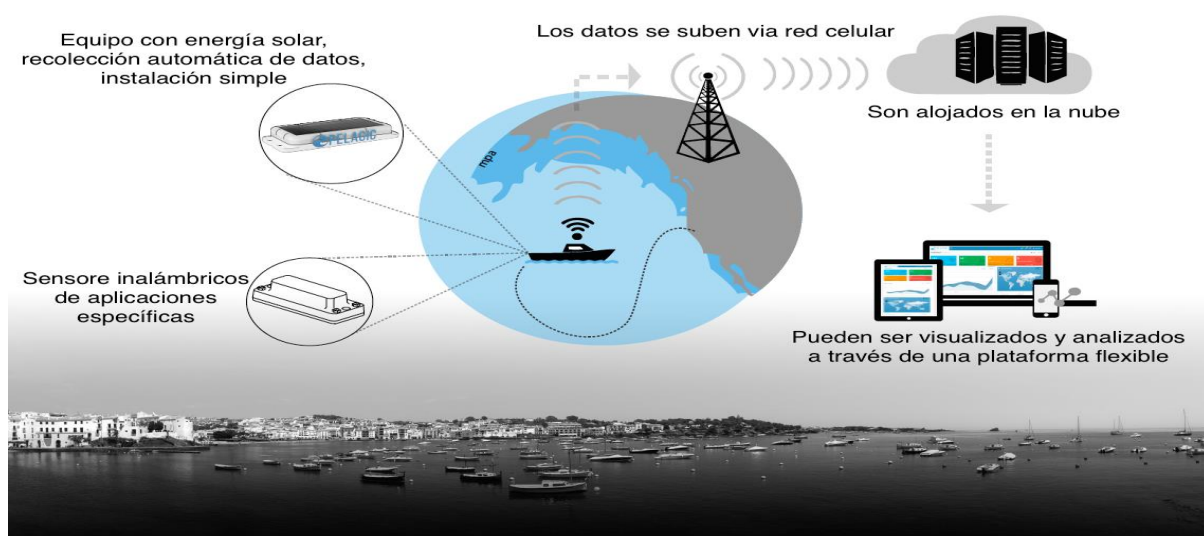


Figure 3. The Pelagic Data System (PDS) to be deployed in the curvina fishery in the Upper Gulf of Californai

At the time of the mission, 772 devices had been installed in San Felipe (285), Santa Clara (440) and Bajo Rio (47). Animations using GPS data obtained from a monitored vessel was presented which demonstrated clearly the fine scale movement of the vessel and, purportedly, the unique movements of fishing vessels conducting different fishing tactics could be discriminated, thus, allowing the detection of illegal fishing.

Prosecution Measures

PROFEPA reported that 113 prosecutions had been made, of which 86 have been resolved and 27 are still being processed. Of those that had been resolved, 41 fines have been made totaling MXN \$2,190,823.88 and seven small vessels have been confiscated. Details were presented for convictions (21) and seizures of totoaba specimens and derivatives, vehicles and vessels. The majority of prosecutions were for illegal fishing activities, which were conducted within the Upper Gulf of California and Colorado River Delta Biosphere Reserve.

The Attorney General Office (PGR) has established an office in San Felipe which is responsible for processing complaints, seizures and arrests. The location of a dedicated office in San Felipe is expected to facilitate the processing of legal matters involving illegal fishing activities.

As of March 2018, officers from INAPESCA, PROFEPA and the Federal Gendarmeria have been placed onboard some vessels that are patrolling the Upper Gulf or are involved in net retrieval operations. By having additional officers at sea, illegal fishing activities can be formally witnessed, evidence can be gathered, and legal procedures can commence. In addition, both crew and government officers are afforded better protection from the attending security officers.

Civil society organisations welcomed the decision by the Government to post law enforcement officers on board their ships. This not only demonstrates to the fishermen that the Government is supporting the net retrieval efforts but also improves security conditions for the net retrieval operations.

The mission was informed that the navy itself can neither apprehend nor use overt force on Mexican citizens and their primary role is therefore, to deter illegal activities by patrolling the protected areas of the Upper Gulf and dissuading vessels from entering the Vaquita Refuge and the exclusion zone, removing gillnets from those areas and supporting the overall joint enforcement initiative. The increased naval presence has proved to be a strong deterrent, as witnessed by this mission and by others, e.g., VaquitaCPR.

The mission was informed that it is difficult to intercept illegal fishermen at-sea, as high-speed pursuits can endanger the lives of both fishermen and the naval staff pursuing them. It appears that the most determined illegal fishermen know that the navy will avoid injury to citizens during at-sea pursuits and will use this to their benefit to avoid capture. In addition, SSCS informed the mission that illegal fishermen carefully observe patrolling activities and set nets in areas that have just been patrolled, in the hope of avoiding immediate detection.

The mission acknowledges that there is no easy way to combat the well-organised activities of the criminals that operate the illegal fishery in the Upper Gulf. The mission advises that the “Comprehensive Attention Program of the Upper Gulf of California” continuously monitor the evolving methods of illegal fishing activities, and the actions of the perpetrators, and increase the presence of appropriate resources as required, e.g., evaluate the benefit of increasing law enforcement personnel on all vessels, in particular the Environmental Gendarmeria, who are the appropriate authority to apprehend and arrest those who break the law.

The Mexican Federal Law against Organised Crime has recently been reformed to include wildlife trafficking and the establishment of the PGR office in San Felipe strengthens the ability to prosecute such crimes. The mission believes it will be necessary to further strengthen the resources allocated to this office in order to develop a proper intelligence network to efficiently investigate and prosecute the syndicates involved in the illegal traffic and trade of totoaba. More importantly, the law reformation opens the door for increased capacity in investigation and prosecution in collaboration with INTERPOL and with global investigative authorities in both the USA and China.

The mission is convinced that to successfully address the issue of the illegal totoaba trafficking, the current perceived impunity of both the organisers and the perpetrators involved in the trade needs to be ended.

The mission concludes that law enforcement procedures have been significantly strengthened by the enactment of the permanent gillnet ban, the allocation of greater resources within San Felipe and the Upper Gulf and improvements to legal procedures associated with gathering data and investigating illegal activities. New nets are still being retrieved, however, confirming that illegal fishing still occurs. Therefore, the mission urges the State Party to ensure that all offices and security forces of the Mexican Government maintain high levels of surveillance and monitoring in the Upper Gulf and surroundings and to continue their strong support of the net retrieval programme.

The mission recommends that the State Party maintain a high level of surveillance and monitoring activities particularly during the totoaba fishing season, in the Upper Gulf of California. In addition, as the practises of the groups involved in illegal fishing evolve to avoid detection and apprehension, the State Party should increase the presence of

appropriate resources as required, either by area or by type of personnel, to better pursue and subsequently prosecute the most determined fishermen who continue to evade the law.

3.3.2. Recommendation 2

Establish, within one year, a viable alternative fishing program that develops alternative fishing gear that does not cause entanglement of marine mammals, sharks or turtles and trains and equips local fishing communities affected by the ban to develop meaningful alternative livelihoods with vaquita-safe fishing gear, ensuring effective involvement of all key federal agencies, in particular CONAPESCA and INAPESCA;

It has been observed for several years that the alternative fishing development goals of all previous strategies, and as detailed in the 2015 Integral Strategy, has persistently lagged behind the progress made in all other aspects of vaquita conservation and livelihood security. In addition, the 2017 mission noted the lack of meaningful involvement of CONAPESCA and INAPESCA, the agencies responsible for fishery regulation and management. This was not the case during the 2018 mission when there was high level representation from both of these agencies. The attending representatives clearly understood the critical nature of implementing the alternative gear programme and detailed current progress and planned actions.

Four alternative fishing systems have been developed, in a trials stage only, for shrimp sierra, chano and fin fish. These are a suripera net, a purse seine net, a trawl net and a trap for each fishery, respectively. Each has its pros and cons, ranging from good selectivity and low fuel consumption to requiring highly skilled deployment methods. The shrimp fishery alternative net, the suripera, has made the most progress. The net had been introduced to fishing communities and 800 fishermen had been trained over 54 courses on net setting practice and deployment strategies (25 July-8 September, 2017). By September 2017, 678 suripera nets had been delivered to 103 co-operatives and it was reported that 300 fishing vessels were trialing the suripera net. It is noted, however, that this was out of season for shrimp, so it may be challenging to gauge any success, for both fishermen and authorities. INAPESCA/CONAPESCA noted that there was resistance from the fishing communities to trial the suripera nets. No other trials were ongoing, although it was planned to introduce fin fish traps in March-June 2018.

The mission was also informed that the Mexican Government will continue the economic compensation program for fishermen in 2018, in recognition of the economic difficulties resulting from the gillnet ban and in order to maintain civic peace in the communities of the Upper Gulf. During 2016 and 2017, this program was operated by CONANP and the compensation was based on the average income for fishing in the area. During 2016-2017, the equivalent of USD 51,990,480 was allocated to this program. In 2016 and 2017, compensation was received by 2,673 and 2,658 fishermen, permit owners and fishing activity workers, respectively. During the mission, some of the fishermen interviewed noted that the current system of compensation is counterproductive and was described as corrupt. As the compensation is paid through the fishing cooperatives, which are generally against the gillnet fishing ban, it was stated that some funds had been diverted and not distributed as intended. In addition, those fishermen who voluntarily stopped gillnetting before the official ban, were not compensated at all. The mission considers that the compensation programme needs to operate in such a manner as to motivate fishermen to embrace new fishing gear and practices and to be dissuaded from illegal fishing activities.

Representatives from the local fishing community reported little progress on the availability or trailing of alternative fishing gear. Some fishermen, funded by WWF, had travelled to Canada to investigate alternative fishing gears with expert collaborators and had developed a test gear which they wished to trial. The commitment of some fishermen to speed up the introduction

of alternative gear was evident and frustration at the slow progress by authorities was voiced. The fishermen participating in the meeting expressed their willingness to change fishing practices and work with new gear, however, they remain a small minority and are under severe pressure from other fishermen to cease any participation in alternative gear use trials. Fishermen involved in the tests of new gear have been threatened and their activities to test new gear have been obstructed.

Although there was a high level of participation of CONAPESCA and INAPESCA during this mission and a commitment to distribute more alternative fishing gear (one type) by April 2018, the mission considers that the pace of gear development remains too slow, and even though an alternative gear is intended to be in place in under a year of this recommendation being made, it will not be possible to show if it is viable within such a short time frame. Efforts under this recommendation must be expedited and be with the collaboration of experts and fishermen. Further, only one gear for one fishery is currently ready to trial. As was highlighted by the NGOs who work extensively with the fishing communities, no one set of alternative gear will provide a sufficient income for the fishermen.

The Expert Committee on Fishing Technologies (ECOFT) was established to improve existing fishing techniques and to develop new technologies that provide artisanal fishermen sustainable livelihoods and to reduce the risk of bycatch of vaquita and other species. ECOFT comprises a global team of experts dedicated to, and well experienced in, the development of alternative gears. INAPESCA is also a member of ECOFT, however, there appears little co-ordination between INAPESCA and the rest of the group (CIRVA 2017). ECOFT has provided a series of recommendations to CIRVA which are practical, viable and developed in collaboration with fishermen. CIRVA has highlighted that many fishing trials have been and continue to be conducted by INAPESCA, but ECOFT remains concerned that these trials are not conducted in a systematic or transparent manner and robust scientific evaluations are not possible. It is essential that fishermen have confidence in any new fishing gear and currently, this is not the case. The livelihood of fishing communities must be guaranteed and fishermen should be part of the development and testing process of any new gear. Specifically, ECOFT recommends that:

- INAPESCA must have a transparent, multi-year working plan that clearly shows activities and timelines for developing a gillnet-free fishery for the UGC.
- All members of ECOFT including INAPESCA must consult and inform ECOFT before making new tests or proposing new gear. In all cases ECOFT members must follow recommendations of the committee, and work together towards the multi-year working plan.
- The Mexican government must consider gear development as a priority for saving the vaquita and provide adequate funding to support these efforts. Funding and efforts to develop alternative gear continue to be a minimal component of the budget for actions to protect vaquitas.

The mission concludes that there has been insufficient progress in implementing this recommendation and that alternative gear development remains of the highest priority, which must be supported by the full cooperation of CONAPESCA and INAPESCA.

The mission reiterates previous recommendations that urged the development of multiple alternative gears, designed with the help of experts and local fishermen. The mission endorses the recommendations made by the expert committee on fishing technologies (ECOFT) and urges the State Party to expediently incorporate these into fisheries management plans and actions.

The mission recommends that integral to this transition in fisheries practices, the State Party should review the current economic compensation programme for fishermen and transform it into an initiative to incentivize fishermen to develop and use alternative

fishing gear. The mission further highlights the urgent need for a transparent, multi-year working plan that clearly shows activities and timelines for developing a gillnet-free fishery for the Upper Gulf of California.

3.3.3. Recommendation 3

Streamline and simplify procedures for the enforcement of the regulations established for the Vaquita Refuge and Gillnet and Longline Suspension Zone, in particular concerning the official registration of illegal activities and their prosecution through the entire compliance and enforcement chain.

As detailed under the progress of the other over-lapping recommendations made in 2017, some stream-lining and simplification of prosecution procedures have been made:

- The interagency cooperation and coordination through COI is unprecedented. It is especially noteworthy that the efforts of civil societies are fully integrated into the “Comprehensive Attention Program of the Upper Gulf of California”. The organisations involved in the operation informed the mission that the cooperation with Government enforcement services has been greatly strengthened since last year;
- The increased presence of the law enforcement officers and agencies on board vessels involved in the operation, including the net recovery programme, should allow any encountered illegal fishing activities to be documented properly and immediate seizures or arrests to be made, if able to catch the perpetrators;
- The Mexican Federal Law against Organised Crime has been reformed to include wildlife trafficking, thus strengthening capacity and proving links to international entities such as INTERPOL;
- The establishment of a new Attorney General Office (PGR) in San Felipe, should allow allegations and arrests of illegal fishing activities, or any gillnet ban contravention, to be investigated and prosecuted more efficiently than previously and provides a base for the development of a dedicated intelligence network that aims to investigate organised crime.

The mission concludes that exceptional progress has been made in streamlining and simplifying procedures for the enforcement of the regulations established for the Vaquita Refuge and Gillnet and Longline Suspension Zone.

The mission recommends that the State Party strengthen its efforts to investigate the national and international networks involved in illegal fishing operations and the illegal trafficking of totoaba bladders, and that the new provisions made for wildlife trafficking under Mexican Federal Law be used to actively pursue collaborations with global organisations dedicated to the monitoring and prosecution of international criminal syndicates.

The mission further recommends that the State Party consider developing a publicly available system that reports enforcement procedures, including regular updates of seizures, prosecution and penalty statistics, for all wildlife trafficking incidents, particularly those that involve illegal totoaba fishing, transport and trade. Outcomes from the 2018 enhanced enforcement operation should be publicly available by before the commencement of the 2019 totoaba spawning season.

3.3.4. Recommendation 4

Pursue, at the highest level of government, the necessary and urgent cooperation with the State Party of China to halt the consumption and demand for totoaba swim bladders and with the United States of America to halt transit of totoaba swim bladders through its ports, and also with all other identified destination and transit countries involved in this trade, in particular through the implementation of the recommendations that have been made by the Convention on International Trade of Endangered Species of Wild Fauna and Flora (CITES);

It is evident that the Government of Mexico alone cannot combat the lucrative international trade in totoaba fish parts and that the high financial gain of selling totoaba incentivises the continued illegal fishing. It has been noted that the most common totoaba smuggling route is to China via the USA and the Hong Kong Special Administrative Region (SAR) (Greenpeace East Asia, 2015). Some additional concerns were voiced during the course of the mission that new trade routes, exiting Mexico directly, were being established and there have been some incidences of individuals being discovered hand carrying totoaba fish bladders directly into Hong Kong.

In June 2017, a delegation of Mexican government officials and scientists visited Hong Kong to discuss the totoaba issue with Hong Kong law enforcement agencies. Representatives from both the Mexican and American Hong Kong Consulates attended, in addition to the IUCN expert to the present mission. Hong Kong has recently committed to greatly improve surveillance for all wildlife trafficking, as the port is reputedly an important centre for the global trade in wildlife. The recent establishment of forensic testing institutes, in addition to co-operation with shipping and transport companies, is intended to improve detection of wildlife contraband and ultimately deter the trafficking of wildlife through Hong Kong. The delegation was able to engage with a number of enforcement agencies within Hong Kong, and although no formal commitment was made to collaborate with Mexico over this issue, information on the plight of the totoaba and the vaquita was widely disseminated amongst government agencies and NGOs, who had limited knowledge of this issue before. It is worthy to note that after this delegation's visit, local law enforcement made its first seizure of totoaba swim bladders as they were being brought into Hong Kong (February 2018⁴).

Both the vaquita and totoaba are listed under Appendix I of CITES. The 17th Conference of the Parties of CITES (CoP17⁵), Johannesburg, 2017, adopted seven Decisions on the totoaba, which are interlinked with the plight of the vaquita (Box 2). These Decisions were made after discussion by the COP of a working document submitted by Mexico on opportunities to address the illegal totoaba trade through the CITES Convention⁶.

⁴ <http://www.info.gov.hk/gia/general/201802/06/P2018020600868.htm>.

⁵ <https://www.cites.org/eng/dec/valid17/81851>

⁶ <https://cites.org/sites/default/files/eng/cop/17/WorkingDocs/E-CoP17-74.pdf>

Totoaba (*Totoaba macdonaldi*)

17.145 Decision directed to: Parties

Parties acknowledge that Mexico, the United States of America and China are committed to collaborating and contributing towards the conservation of totoaba and urge other parties to join them in this effort.

17.146 Directed to range, transit or consumer States of totoaba

Parties should intercept illegal shipments, and, as appropriate and to the extent possible, share information on such illegal catch and illegal trade, with the Secretariat, as well as CITES authorities of relevant Parties.

17.147 Directed to range, transit or consumer States of totoaba

Parties should engage in awareness raising activities about the endangerment of totoaba and its grave implications for vaquita (*Phocoena sinus*, an endangered species threatened with extinction and listed under Appendix I), eliminate supply of and demand for totoaba, and increase law enforcement measures to prevent and address illegal fishing and trade.

17.148 Directed to range, transit or consumer States of totoaba

Parties shall submit to the Secretariat information to be made available to the 69th and 70th meetings of the Standing Committee on the number and quantity of seizures of illegal totoaba products, arrests of those engaged in the illegal fishing and trade, results of any prosecutions, and actions taken to implement these decisions.

17.149 Decision directed to: Secretariat

Subject to availability of external resources and in consultation with relevant organizations [i.e. the Food and Agriculture Organization of the United Nations (FAO), the International Union for Conservation of Nature (IUCN), etc.] as well as the range State, the Secretariat shall commission a report, to be submitted to the Standing Committee, on the current status of totoaba and vaquita, and ongoing conservation efforts, information on illegal trade and markets, and recommendations to guarantee the recovery of totoaba and vaquita and combat illegal trade.

17.150 Decision directed to: Standing Committee

The Standing Committee shall evaluate the data and information submitted by Parties at its 69th and 70th meetings and make recommendations for any additional actions.

17.151 Directed to Parties and other relevant stakeholders

Parties and other relevant stakeholders are urged to support efforts to stop illegal fishing, trafficking, and support activities benefitting the recovery of wild populations of totoaba.

The mission was informed of discussions initiated by the State Party with the Governments of China and the USA in an effort to establish a tri-national initiative to increase surveillance of potential illegal shipments and to put in place more stringent penalties for offenders. The first trilateral meeting was organised in August 2017 in Ensenada (Mexico) and was attended by representatives of different agencies of the three countries, as well as the World Heritage Centre, the CITES Secretariat and IUCN. At the meeting, the three countries discussed (1) establishing a contact group to combat trafficking of totoaba and strengthening communication; (2) consider formalising international collaboration through the adoption of specific legal instruments and (3) conducting joint operations when required and actively cooperating in the international agreements relevant to totoaba trafficking. However, the meeting did not result in any firm commitments. There was some progress in September 2017, when President Enrique Peña Nieto of Mexico met with the Chinese Premier Xi Jinping, during

the Dialogue Between Emerging Market Economies and Developing Countries (Xiamen, China). President Enrique Peña Nieto thanked Premier Xi Jinping for China's support in tackling the illegal totoaba trade and both Heads of State reportedly reiterated their commitment toward the conservation of endangered species, in particular, the vaquita.

At the request of SEMARNAT, on January 23, 2018, the Ministry of Foreign Affairs arranged a meeting with the Embassies of China and the United States in Mexico. At this meeting, the Ambassador of China, while expressing the interest of his Government in combating the illegal fishing of totoaba, expressed the position of the Chinese Government, which is that the protection of the totoaba must be addressed by applying the law where the problem originates, that is, in Mexico. A second trilateral meeting has been planned for 2018 and the State Party noted their hopes that China will be willing to assist Mexico in its endeavours to curb the ability of traders to import, illegally, totoaba into Hong Kong and China.

In line with the Decisions of the Ensenada meeting, at the 69th meeting of the CITES Standing Committee, which took place in Geneva in November 2017, the States Parties of Mexico, China and the United States presented a document, informing the meeting of the progress achieved in implementing the CITES Decisions⁷. The Secretariat also presented a working document, with information received from China, Mexico and the United States⁸, including seizures, arrests and prosecutions. The document reports that market sweeps were conducted in China in January and February 2017 targeting dried seafood markets, fish markets, retail hotels and restaurants in Guangzhou, Shenzhen and Shantou and that no cases of illegal trade in totoaba were discovered. China informed CITES that these efforts will continue.

The CITES Secretariat have recently confirmed that funding is available to implement Decision 17.149 (Box 2);

“the Secretariat shall commission a report, to be submitted to the Standing Committee, on the current status of totoaba and vaquita, and ongoing conservation efforts, information on illegal trade and markets, and recommendations to guarantee the recovery of totoaba and vaquita and combat illegal trade.”

It is intended that the study shall be prepared in time for the 70th Meeting of the Standing Committee, which will take place in Sochi, Russia, in October 2018.

The mission concludes that the State Party has undertaken significant efforts, at the highest level and through CITES, to address the issue of the illegal trade in totoaba swim bladders with transit and consumer countries, in particular the United States and China.

The mission considers that the results of the study requested at CITES COP17, on the current status of totoaba and vaquita, and in particular, information on illegal trade and markets (Decision 17.149), will be key in mapping trafficking routes and in identifying appropriate strategies to combat illegal trade. The mission therefore, recommends that

⁷ <https://cites.org/sites/default/files/eng/com/sc/69/E-SC69-65-02.pdf>

⁸ <https://cites.org/sites/default/files/eng/com/sc/69/E-SC69-65-02.pdf>

the State Parties of Mexico, China and the United States immediately review the recommendations of this study, as soon as they are available (mid 2019).

4 STATE OF CONSERVATION OF THE PROPERTY ASSESSMENT

The 2017 mission noted that the terrestrial components of the property remained in a good state of conservation or are improving following successful invasive species eradication programmes. The mission further considered that illegal, unsustainable and unregulated fisheries associated with the marine components of the property are affecting the OUV of the property. It noted that while pressures remained high in some areas, overall there had been a positive trend in recent years towards shifting the fisheries towards more regulated and sustainable ones. The mission concluded that overall the property continued to demonstrate its OUV and is satisfactorily managed, with the exception of the illegal, unsustainable fishing in the Upper Gulf.

The 2017 mission also recalled that the vaquita was specifically recognised as part of the property's OUV and is endemic to the Gulf of California. It further considered that the dramatic decline in the vaquita population, from approximately 300 at the time of the inscription of the property to an estimated 30 individuals in 2016-2017, presented a risk of imminent extinction. The 2017 mission therefore, concluded that the risk of extinction represented a clear ascertained danger to the OUV of the property in line with paragraph 180 c) i) of the *Operational Guidelines* and recommended four urgent measures in an attempt to avert imminent extinction.

The current mission notes that there is no reason to reconsider the overall assessment of the OUV as concluded by the 2017 mission. The current assessment is therefore, focused on the progress made by the State Party on the implementation of the 2017 recommendations.

The current mission notes also that estimating population size for very small populations, such as the vaquita, is extremely challenging, as also pointed out in the 2017 report. The acoustic monitoring data analyses adopts the most recent developments in statistical model development and trend analyses. It relies on the acoustic detection rate as a proxy for animal density and is used to determine the annual rate of decline of a previously estimated population size from visual survey methods. Several assumptions have been made that make it extremely difficult to state with precision, the exact number of vaquita that remain in the Upper Gulf. The analyses concludes that the estimated annual rate of population decline is 34% (95% Bayesian credible interval –48% to –21%) (Jaramillo-Legorreta, *et al.*, 2017). Even the best of techniques have inherent errors and uncertainties, and although this is acknowledged, all available evidence indicates that the vaquita has undergone a catastrophic decline since 2011. The current population estimate of no more than 30 individuals is still accepted (CIRVA, 2017). Although only one by-caught vaquita has been reported between in February-March 2018 when compared to the same period in 2017 (5 individuals), it cannot be said with certainty that this is due to the enhanced enforcement activities and net retrieval efforts. Given the small number of vaquita left and uncertainty over population size, such a conclusion may, as yet, be premature and more time is required to determine the true effectiveness of the enhanced programme.

It is stressed that the mission was undertaken before the real start of the totoaba spawning season (March-July) and at this time, the full implementation of the recommendations made in 2017 was still underway. The mission therefore concludes that, at this stage, it is not possible to determine how effective the significant efforts undertaken by the State Party to improve law enforcement have averted the risk of extinction of the vaquita. The mission considers the data on by-caught vaquita at the end of the current season, in addition to the

overall results of the net retrieval programme, might provide additional indicators on the effectiveness of the enhanced enforcement operation.

The mission further notes that if the information collected during the current totoaba season were to indicate illegal fishing was being effectively combatted in the Upper Gulf of California, such enforcement efforts would need to be maintained over the long term to avert possible extinction.

The mission therefore, recommends that the World Heritage Committee defer a decision on the possible inscription of the property on the List of World Heritage in Danger to its 43rd session in 2019, when more data will be available from the Upper Gulf enforcement operations and the CITES study on the current status of totoaba and vaquita, and in particular, information on illegal trade and markets (as requested in CITES decision 17.49) will have been completed.

5. CONCLUSIONS AND RECOMMENDATIONS

The mission supports the conclusion of the 2017 mission that the property continues to demonstrate its OUV and is satisfactorily managed, with the exception of the illegal, unsustainable fishing, in particular in the Upper Gulf.

The core objective of this mission was to assess progress in the implementation of the recommendations of the 2017 reactive monitoring mission, as included in Decision 41 COM 7B.15, and the effectiveness of the measures undertaken by the State Party for the protection of the threatened vaquita.

The outcome of VaquitaCPR has clearly established that removing vaquita to a temporary sanctuary is not a viable option to safeguard the species from extinction. The only way in which vaquita mortality can be reduced is the cessation of illegal fishing activities. The mission considers it encouraging that so far only one net entanglement fatality has been recorded during 2018, but notes that even with the increased at-sea surveillance, illegal totoaba nets continue to be recovered on a regular basis, demonstrating that illegal fishing activities still occur.

The mission recognises, as have other entities before, that the illegal fishing for totoaba is a multi-faceted issue and, as such, there must be tremendous effort on many fronts to curb the drivers behind the trade, and ultimately to protect the two species which are at risk from these activities: the totoaba and the vaquita. This mission **commends** the State Party on the comprehensive enhanced monitoring programme that is taking place in the Upper Gulf and **acknowledges** that the coalition and coordination of military, law enforcement and judiciary bodies has only been possible due to commitment from the highest levels of government.

The mission highlights that the State Party had only seven months to act on recommendations, following the adoption of the Decision 41 COM 7B.15 by the Committee at its 41st session. Based on the observations made during this mission, details and information provided and subsequent discussions with many other stakeholders and authorities, it is concluded that the State Party has made progress on all **four** urgent recommendations made by the 2017 mission, and significant progress on recommendation 1 (*permanent gill net ban and strengthening effectiveness of law enforcement*); recommendation 3 (*streamline enforcement procedures in the Upper Gulf*); and recommendation 4 (*pursue high level international cooperation to combat the international trade of totoaba*).

Law enforcement procedures have been significantly strengthened by the enactment of the permanent gillnet ban, the location of greater resources within San Felipe and the Upper Gulf

and improvements to legal procedures associated with gathering data and investigating illegal activities. The greatly enhanced surveillance activity of both law enforcement and armed forces was evident during this mission. The Comprehensive Attention Programme of the Upper Gulf of California (COI) has mobilised multiple law enforcement agencies and incorporated the assistance of civil societies. The increased participation of CONEPESCA and INEPESCA is noted. Unprecedented financial and operational resources have been made available for the operation, including the use of state of the art technology. Net retrieval operations have significantly increased and very few abandoned nets are now being recovered, indicating that considerable progress has been made on clearing the area of old nets. The interagency cooperation through COI is exemplary and fully integrates the efforts of civil societies, whose operations are supported by the presence of law enforcement staff on their vessels. Progress has been made in streamlining and simplifying procedures for the enforcement of regulations. Efforts have been made, at the highest level, to address the issue of the international trade in totoaba with the most important transit and consumer countries, the United States and China, both through bilateral channels and through the CITES Convention.

The mission considers that while some progress has been made in recommendation 2, the introduction of multiple and viable alternative fishing gears, it remains largely insufficient. The process of trialing and integrating alternative fishing gears that do not endanger vaquita and other non-target species must be expedited in the Upper Gulf of California, and elsewhere within the property. Fishing communities must be engaged to their full potential in this process. The considerable expertise and experience provided by ECOFT should be the foundation of all future actions so that transition to sustainable and viable fisheries is swift and successful.

The mission was requested to make a recommendation whether or not the property meets the conditions for inscription on the List of World Heritage in Danger.

The mission concludes that, at this time, it is not possible to determine how effective the significant efforts undertaken by the State Party to implement the 2017 recommendations have averted the risk of extinction of the vaquita. Therefore, **the mission recommends that the World Heritage Committee defer a decision on the possible inscription of the property on the List of World Heritage in Danger to its 43rd session in 2019**, when more data from the 2018 and 2019 totoaba season is available and the CITES study on the current status of totoaba and vaquita, and information on illegal trade and markets (COP17: Decision 17.149) will be completed.

In order to prevent the extinction of the vaquita and thus **prevent iconic attributes of the OUV from becoming irreversibly lost**, the mission requests that the State Party **urgently** address the following five key recommendations:

Recommendation 1: Surveillance and Monitoring

The mission recommends that the State Party maintain a high level of surveillance and monitoring activities, particularly during the totoaba fishing season, in the Upper Gulf of California. In addition, as the practises of the groups involved in illegal fishing evolve to avoid detection and apprehension, the State Party should increase resources, either by area or by type of personnel, to better pursue and subsequently prosecute the most determined fishermen who continue to evade the law.

Recommendation 2: Viable Alternative Fishing Gears

The mission reiterates previous recommendations that urge the development of multiple alternative gears, designed with the help of experts and local fishermen. The mission endorses the recommendations made by the expert committee on fishing technologies (ECOFT) and urges the State Party to expediently incorporate these into fisheries management plans and actions.

The mission recommends that integral to this transition in fisheries practices, the State Party should review the current economic compensation programme for fishermen and transform it into an initiative to incentivize fishermen to develop and use alternative fishing gear. The mission further highlights the urgent need for a transparent, multi-year working plan that clearly shows activities and timelines for developing a gillnet-free fishery for the Upper Gulf of California.

Recommendation 3: Strengthening the Legal Status of the Permanent Gillnet Ban

The mission recommends that the Decree that bans all commercial fishing using gillnet and/or longline in the northern Gulf of California, decided between the Secretary of Environment and Natural Resources and the Secretary of Agriculture, Livestock, Rural Development, Fisheries and Food, be formalised via a legislative branch of government, by a Presidential Decree or by jurisprudence created by the federal court.

Recommendation 4: Trafficking of Totoaba Products

The mission recommends that the State Party strengthen its efforts to investigate the national and international networks involved in the illegal fishing operations and the illegal trafficking of totoaba bladders, and that the new provisions made for wildlife trafficking under Mexican Federal Law be used to actively pursue collaborations with global organisations dedicated to the monitoring and prosecution of international criminal syndicates.

Recommendation 5: Implement the Recommendations of the CITES Study

The mission considers that the results of the study requested at CITES COP17, on the current status of totoaba and vaquita, and in particular, information on illegal trade and markets (Decision 17.149), will be key in mapping trafficking routes and in identifying appropriate strategies to combat illegal trade. The mission therefore, recommends that the State Parties of Mexico, China and the United States immediately review and act upon the recommendations of this study, as soon as they are available (mid 2019).

In order to guarantee the **long-term protection of the OUV of the property, further improve the conservation of the property and strengthen its management** the mission further considers that the following long term recommendations be addressed by the State Party:

Recommendation 6: Sustainable Fisheries

The mission recommends that the State Party continue to develop a programme of transition from unregulated fisheries into regulated practices that adhere to clear guidelines for sustainable catch, in the entire World Heritage property, with defined timelines and regular assessment of programme targets.

Recommendations 7: Community Programmes

The mission recommends that the State Party continue to support the highly successful community programmes developed by NGOs that aim to strengthen the involvement of local communities into the protection of the property and their transition into sustainable livelihoods, as well as climate change adaptation programmes.

Recommendation 8: Management Frameworks

The mission reiterates the statements made during the 2017 mission and recommends that an integrated management framework for the property "Islands and Protected Areas of the Gulf of California" in its entirety be developed, and that this includes a formal coordination structure.

The mission further proposes the following recommendations as additional measures which can support the implementation of the key recommendations stated above:

Recommendation 9: Enforcement Outcomes

The mission recommends that the State Party consider developing a publicly available system that reports enforcement procedures, including regular updates of seizures, prosecution and penalty statistics, for all wildlife trafficking incidents, particularly those that involve illegal totoaba fishing, transport and trade. Outcomes from the 2018 enhanced enforcement operation should be publicly available by before the commencement of the 2019 totoaba spawning season.

Recommendation 10: Assessment of the Totoaba Population

The mission recommends that the "Report on the Status of the Gulf of California Totoaba (*Totoaba macdonaldi*)" (Mata, 2017) be peer-reviewed and published, ideally by mid-2019, with a view to continuing the assessment of the totoaba in the long term and acting on the outcomes of the assessment.

Recommendation 11: General Law on Biodiversity

The mission understands that a new biodiversity law (Ley General de Biodiversidad) is under review and this law may have implications for long term protection of the property. The mission requests that the State Party provide clarification on the standing of the new Law and its potential impact on the protection status of this, and other, natural World Heritage properties in Mexico.

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Annex I

Decision: 41 COM 7B.15 (Krakow, 2017)

The World Heritage Committee,

1. Having examined Document WHC/17/41.COM/7B.Add.2,
2. Recalling Decision **40 COM 7B.75**, adopted at its 40th session (Istanbul/UNESCO, 2016),
3. Notes with appreciation the State Party's ongoing commitment and efforts aimed at the preservation of the critically endangered vaquita and totoaba, particularly through the establishment of an unprecedented level of cooperation between different national authorities, including the Mexican Navy and regrets that the Integral Strategy for the Protection of the vaquita has not delivered the expected results and that illegal fisheries are still threatening both totoaba, as the target, and vaquita, as bycatch;
4. Notes with utmost concern the conclusions of the 2017 joint World Heritage Centre/IUCN Reactive Monitoring mission that the decline of the critically endangered vaquita has continued to an estimated 30 individuals, therefore putting it at risk of imminent extinction and that the main cause of its mortality is entanglement in illegal gillnets;
5. Notes the confirmation of the mission that other attributes of the property's Outstanding Universal Value (OUV) remain in good condition and that the State Party has started the implementation of the most urgent recommendations made by the mission;
6. Also notes the adoption of a joint Decree by the Secretary of Environment and Natural Resources and the Secretary of Agriculture that permanently bans gillnets use in the vaquita area, while prohibiting night fishing and enforcing control and monitoring of small vessels; and further notes that the State Party signed a Memorandum of Understanding with the Leonardo DiCaprio and Carlos Slim Foundations seeking at working with communities to promote sustainable fishing practices and remove illegal fishing gear from the vaquita habitat;
7. Urges the State Party to ensure fully effective implementation and enforcement of the recently established permanent ban on gillnets use, sale, manufacture and possession at sea and on land within the Vaquita Refuge and the current gillnet and longline suspension zone and in the adjacent land areas;
8. Also urges the State Party to fully implement the programme on development of alternative gear for legal fisheries which would not cause bycatch of vaquita and other marine mammal species, sharks and turtles;
9. Welcomes the initial efforts by the State Party aimed at strengthening cooperation with State Parties that are transit and destination countries for the illegal trade of totoaba swim bladder, and reiterates its calls to other States Parties to support the State Party of Mexico to halt this illegal trade, in particular through the implementation of the Convention on International Trade of Endangered Species of Wild Fauna and Flora (CITES);
10. Requests the State Party to invite a joint World Heritage Centre/IUCN Reactive Monitoring Mission to the property to assess the effectiveness of the implementation of the recently adopted measures for the protection of the threatened vaquita;
11. Also requests the State Party to submit to the World Heritage Centre, by **1 February 2018**, an updated report on the state of conservation of the property and the implementation of the above, for examination by the World Heritage Committee at its 42nd session in 2018, **with a view to considering, in the case of the absence of significant progress in the implementation of the above, the inscription of the property on the List of World Heritage in Danger.**

Terms of Reference

World Heritage Centre-IUCN Reactive Monitoring Mission Islands and Protected Areas of the Gulf of California (Mexico) (12-16 February 2018)

At its 41st session, the World Heritage Committee requested the State Party of Mexico to invite a joint World Heritage Centre-IUCN Reactive Monitoring mission to the World Heritage property “Islands and Protected Areas of the Gulf of California” (Decision 41 COM 7B.15, appended). The objective of the monitoring mission is to “assess the effectiveness of the implementation of the recently adopted measures for the protection of the threatened vaquita”. The mission will be conducted by a representative of the World Heritage Centre and an IUCN cetacean specialist.

In particular, the mission should assess:

1. the status of implementation of the recommendations of the 2017 monitoring mission and the effectiveness of the measures undertaken by the State Party for the protection of the threatened vaquita, including
 - a. implementation and enforcement of the recently established permanent ban on gillnets use within the Vaquita Refuge and the current gillnet and longline suspension zone and in the adjacent land areas;
 - b. the effectiveness of programmes aimed at promoting sustainable fishing practices and development and introduction of alternative fishing gear which does not cause bycatch of vaquita, other marine mammal species, sharks or turtles;
 - c. measures undertaken to improve the effectiveness of law enforcement;
 - d. efforts aimed at strengthening cooperation with State Parties that are transit and destination countries for the illegal trade of totoaba swim bladder, in particular through the Convention on International Trade of Endangered Species of Wild Fauna and Flora (CITES);
2. based on the review of progress made in the implementation of the above measures to avoid the extinction of the vaquita, and based on Decision 41 COM 7B.15, make a recommendation whether or not the property meets the conditions for inscription on the List of World Heritage in Danger. If the mission considers that the property meets these conditions, and recommends Danger Listing, (and only in that case) it should develop, in close cooperation with the State Party, a set of corrective measures as well as a Desired state of conservation for the removal of the property from the List of World Heritage in Danger (DSOCR);
3. any other relevant issues that may negatively impact on the OUV of the property, including its conditions of integrity and protection and management, in line with paragraph 173 of the Operational Guidelines.

NB: For all these points above, the mission should focus on any changes that may have occurred since the previous reactive monitoring mission that visited the property in 2017.

The State Party should facilitate necessary field visits to key locations.

To enable the mission’s preparation, the State Party should, as soon as possible, and before the start of the mission, provide the World Heritage Centre and IUCN with:

- a) Update on the implementation of measures for protection of the critically endangered vaquita, including data on illegal fishing activities detected in 2017;
- b) Update on the development of alternative fishing gear and promotion of sustainable fishing activities within the property and adjacent areas;

- c) Most recent data on the remaining population of the vaquita, if available;
- d) The most recent versions of the management plans of the entire property and its component protected areas;
- e) Any relevant information regarding international efforts undertaken or planned jointly in cooperation with CITES and with other States Parties for the protection of the vaquita.

The mission should hold consultations with all relevant stakeholders, including representatives of the Ministry of Environment, National Commission for the Protection of Natural Areas (CONANP), the Mexican Navy, Ministry of Agriculture, CONAPESCA, INAPESCA, PROFEPA, Gendarmeria, as well as relevant regional and local authorities and representatives of civil society, including local communities and non-governmental organizations (NGOs), relevant scientists and experts such as biodiversity specialists and ecologists.

Based on the results of the above-mentioned reviews, assessments and discussions with the representatives of the State Party and other stakeholders, the mission should prepare a concise report on the findings and recommendations within six weeks following the site visit, following the attached reactive monitoring mission report format. The mission's recommendations to the Government of Mexico as well as the World Heritage Committee should have the objective of providing guidance to the State Party to ensure the ongoing conservation of the property's OUV. It should be noted that recommendations should be provided in the mission report and not during the mission.

Annex III

List of People Met During the Mission

Rafael Pacchiano	Secretary of the Environment and Natural Resources
Alejandro del Mazo Maza	National Commissioner of Protected Natural Areas
Emb. Luis Javier Campuzano	General Director for the Organization of United Nations SRE
Norma Munguía Aldaraca	General Director of Global Treaties SRE
Nuria Sanz	Director and Representative of the UNESCO Office in Mexico
María Amparo Martínez Arroyo	General Director of the National Institute of Ecology and Climate Change
Mario Gilberto Aguilar Sánchez	National Commissioner of Aquaculture and Fisheries
Enrique Lendo Fuentes	Head of the Matters Coordination Unit International, SEMARNAT
Pablo Roberto Arenas Fuentes	General Director INAPESCA
Abel Benjamín Corona Cárdenas	Chief Commissioner Gendarmeria
Chap. Ship CGDEM. Carlos Guerra Ortega	Head of Protection Subsection Civil and Contingency SEMAR
César Estrada	Delegate of SAGARPA in BCS
Joel González Moreno	General Director of Inspection and Surveillance of Wildlife, Marine Resources and Coastal Ecosystems PROFEPA
José Luis Funes Izaguirre	General Directorate of Wildlife SEMARNAT
Fernando Camacho Rico	Head of Dispatch of the General Directorate of Institutional Development and Promotion CONANP
David Gutiérrez Carbonell	General Director of Special Projects CONANP
Rigoberto García Soto	Head of the Legal Affairs Unit CONAPESCA
Iván Saavedra Euroza	Deputy Director General in the Legal Sub-Attorney's Office and International Affairs PGR
Lorenzo Rojas Bracho	Specialist in Vaquita Marina SEMARNAT
Laura F. Rodríguez	Representative of the Foundation in Defense of Environment (EDF)
Nadia Olivares	Representative of the Foundation in Defense of Environment (EDF)
Enrique Sanjurjo	Representative of the World Fund for Nature (WWF)
María José Villanueva	Representative of the Global Fund for the Nature (WWF)
Alejandro Olivera	Representative of the Center for Biological Diversity
Ignacio March Mifsut	Director of Evaluation and Monitoring (CONANP)
César Sánchez Ibarra	General Director of Conservation for the Development (CONANP)
María Pía Gallina Tessaro	Director of World Heritage Natural and MaB Program (CONANP)

Salvador Tomassini	Management Programs
Alfonso de la Torre	Advisor to the Office of the Secretary
Ricardo Cano Rentería	Deputy Director for the Green Agenda of the UCAI, SEMARNAT
Isaac López Vargas	SEMAR, Capitán Puerto San Felipe
Rosa Amelia Soria C.	PGR
Oscar H. Bylon Greco	CONAPESCA
Pedro Sierra Rodríguez	INAPESCA
Teniente Coronel de Inf. Dem Juventino Rojas Popoca	SEDENA 40/a2.M
Bernardo R. Reyes Herrera	Comandante General Militar San Felipe, SEDENA
Iván Saavedra Euroza	PGR
César Augusto Lezama González	PGR
César Estrada Neri	SAGARPA
Mario Alberto Castanedo Peñúñuri	CONAPESCA
Matías G. Arjona	SEPESCA B.C.
Contralmirante José M. Pomares Contreras	SEMAR
Alfonso O. Blancafort Camarena	SEMARNAT
Jorge L. Cruz Balledo	SEMAR RN-2
Joel González Moreno	PROFEPA
Contralmirante Marco A. Pencina	SEMAR
Isaac Jonathan García	PROFEPA
Jean Paul Geoffroy	Sea Shepherd
Henoch E. Rizo Rochin	Museo de la Ballena
Alejandro Castillo	PRONATURA Noroeste
Juan Pablo Miranda Verduzco	CONAPESCA, Sonora
Teniente Coronel de Inf. DEM Javier Vázquez Paz	SEDENA
Capitán de Navío CG DEM Carlos Guerra Ortega	SEMAR

Dr. Lorenzo Rojas Bracho	SEMARNAT/CONANP
Minister Andrea García Guerra	SER/DGONV
Fernando Camacho Rico	CONANP
Erika Yazmin Aguirre V	PROFEPA
Dax Urrea Cárdenas	PROFEPA
Faustino García Hernández	SEMAR
Gustavo Cárdenas Hinojosa	INECC
Carolina Castro	Sea Shepherd

List of Participants Included in Teleconference Calls Made After the Mission

Organisation and Name	Role
WildAid Hong Kong	
Alex Hofford	Wildlife Campaigner
Animal Welfare Institute	
DJ Schubert	Wildlife Biologist
Kate O'Connell	Marine Wildlife Consultant
Natural Resources Defense Council	
Zak Smith	Senior Attorney, Director, Wildlife Trade Initiative
Center for Biological Diversity	
Alejandro Olivera	Mexico's Representative
Sarah Uhlemann	Senior Attorney and International Programme Director
WWF	
Elena Khishchenko	Campaign Manager on Saving the Vaquita in the Gulf of California
CITES	
Tom De Meulenaer	Chief Scientific Services Team

Annex IV

Itinerary

Joint Reactive Monitoring Mission to the World Heritage Property
Islands and Protected Areas of the Gulf of California, Mexico
12-16 February 2018

Objective of the Mission: Evaluate the effectiveness in the implementation of the recent measures adopted for the protection of the vaquita marina.

No	Hour	Activity	Responsable / observations
Sunday, February 11			
1	18:00	Arrive to Mexico City and Transfer to the Hotel	Transportation by CONANP
2	20:00-21:00	Dinner at the Hotel http://www.hotelmariacristina.com.mx/	Hotel María Cristina http://www.hotelmariacristina.com.mx/
Monday, February 12			
3	8:00 – 9:00	Breakfast at the Hotel	
4	9:00- 10:00	Transportation to the Ministry of Foreign Affairs	Transportation by CONANP
		Opening meeting of the Mission	
5	10:00–10:10	Welcome by the Ministry of Foreign Affairs	SRE
6	10:10–10:20	Welcome by the Ministry of Environment and Natural Resources	SEMARNAT
7	10:20–10:30	Background and introduction to the Decision of the World Heritage Committee	CONANP
8	10:30–10:40	Description of the Mission Program	CONANP
9	10:40–10:45	Presentation of participants	Each participant
10	10:45–11:00	Official photography of the Mission participants	CONANP
11	11:00-11:15	Coffee Break	
		Institutional Presentation of the actions developed to meet the recommendations	
12	11:15 – 11:50	Session 1. Protection of species and ecosystems	CONANP - SEMARNAT
	11:50 – 12:00	Questions and answers session	
13	12:00 – 12:50	Session 2. Fishing measures for the protection of species	CONAPESCA / INAPESCA
	12:50 – 13:00	Questions and answers session	
14	13:00 – 15:00	Lunch	
15	15:00 – 15:50	Session 3. Actions to strengthen the legal framework and law enforcement	SEMAR, PGR, PROFEPA, CONAPESCA, Gendarmeria
	15:50 – 16:00	Questions and answers session	
16	16:00 – 16:50	Session 4. Development projects for the communities	CONANP / INECC / SEMARNAT

	16:50 – 17:00	Questions and answers session	
17	19:00 – 21:00	Dinner at the Hotel and overnight	
Tuesday, February 13			
18	7:30 – 9:00	Breakfast at the Hotel	
19	9:00 – 9:30	Transportation to SEMARNAT	CONANP
20	10:00 – 12:00	Meeting with civil society organizations	CONANP: WWF, EDF (Retirement of nets and GPS pangas). CA-OCS
21	12:00 – 13:00	Information of the National System of Natural Protected Areas. Management Effectiveness of protected areas	CONANP
22	13:00 – 15:00	Lunch	
23	15:00 – 16:00	Visit to UNESCO Office in Mexico	CONANP
24	17:00 – 18:00	Transportation to the international airport (AICM)	CONANP
25	18:00 – 19:00	Dinner at the international airport (AICM)	
26	19:00	Flight to Mexicali	Fligh Mexico City to Mexicali Volaris Y4753 Departure 20:52 arrival 22:30
27	23:00	Transportation to the hotel in Mexicali and overnight	SEMARNAT Delegation Regional CONANP
Wednesday, February 14			
28	8:00 – 9:00	Breakfast	
29	9:00 – 11:30	Transportation from Mexicali to San Felipe	SEMARNAT Delegation Regional CONANP
30	11:30 – 13:30	Meeting with the Inter- Institutional Operating Committee (COI)	SEMAR
31	13:30 - 15:30	Lunch at the Navy Sector	SEMAR
32	15:30 – 18:00	Meeting with local actors	CONANP Regional
33	18:00 – 19:00	Transportation an Check in at the hotel in San Felipe	SEMARNAT Delegation Regional CONANP
34	19:00- 20:00	Free time	
35	20:00 – 21:00	Dinner	
Thursday, February 15			
36	7:30 – 9:00	Breakfast	
37	9:00 – 14:00	Maritime tours Meeting with members of the International Committee for the Recovery of the Vaquita (CIRVA) above Oceanic Patrol Tour around the protection area of the Vaquita marina Ghost nets retreat exercise Tour above the Oceanic Patrol	SEMAR- SEMARNAT - CONANP -PROFEPA
38	14:00 – 16:00	Lunch	

39	16:00 – 17:00	Land tours Visit to the Naval Search and Rescue Station - ENSAR	SEMAR, CONANP, PROFEPA
40	17:00 – 20:00	Transportation to Mexicali. Hotel registration. Dinner and overnight	SEMARNAT Delegation Regional CONANP
Friday, February 16			
41	7:00 – 8:00	Transportation to the airport of Mexicali	SEMARNAT Delegation CONANP Regional
42	8:00 – 14:00	Flight from Mexicali to the International airport in CDMX	Flight Mexicali- Ciudad de México Volaris Y4753 Departure 8:09, Arrival 13:25
43	14:00 – 16:30	Lunch and technical reunion. End of Mission	
44	16:30	End of Mission	

Permanent Gillnet Ban Decree

DOF: 30/06/2017

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.

Al margen un sello con el Escudo Nacional, que dice: Estados Unidos Mexicanos.- Secretaría de Agricultura, Ganadería, Desarrollo Rural, Pesca y Alimentación.

RAFAEL PACCHIANO ALAMÁN, Secretario de Medio Ambiente y Recursos Naturales y JOSÉ EDUARDO CALZADA ROVIROSA, Secretario de Agricultura, Ganadería, Desarrollo Rural, Pesca y Alimentación, con fundamento en lo dispuesto en los artículos 26, 32 Bis, fracciones II y XLII, y 35, fracciones XXI y XXII, de la Ley Orgánica de la Administración Pública Federal; 4o. de la Ley Federal de Procedimiento Administrativo; 1o., 4o., 8o., fracciones I, II, III, XII, XIV, XXI, XXII, XXIX, XXXVIII, XXXIX y XLI; 9o. fracciones I, II y V; 17, fracciones I, III, IV, VII y VIII, 19, párrafo segundo, 29 fracción II, 124, 126 y 132 de la Ley General de Pesca y Acuacultura Sustentables; 5o., fracciones I, VIII, XI, XVIII, 6o., 79, fracciones I, III y VIII, 83, 160, 161 y 162 de la Ley General del Equilibrio Ecológico y la Protección al Ambiente; 1o., 2o., 3o., 5o., fracciones I y II, 9o. fracciones I, IV y XVII y párrafos segundo y tercero, 14 y 122 fracciones I, II y III de la Ley General de Vida Silvestre; 5, fracción XXV, 41, 42, 45, fracción I y último párrafo y 70, fracciones I, XIII y XV del Reglamento Interior de la Secretaría de Medio Ambiente y Recursos Naturales; 1o., 2o. letra "D" fracción III, 3o., 5o. fracción XXII, 44, 45 y Octavo Transitorio del Reglamento Interior de la Secretaría de Agricultura, Ganadería, Desarrollo Rural, Pesca y Alimentación, vigente; en correlación con los artículos 37 y 39 fracciones III, V, VIII y XXII del Reglamento Interior de la Secretaría de Agricultura, Ganadería, Desarrollo Rural, Pesca y Alimentación, publicado en el Diario Oficial de la Federación el 10 de julio de 2001, y

CONSIDERANDO

Que corresponde a la Secretaría de Medio Ambiente y Recursos Naturales, fomentar la protección, restauración y conservación de los ecosistemas y recursos naturales y bienes y servicios ambientales, con el fin de propiciar su aprovechamiento y desarrollo sustentable.

Que es facultad de la Secretaría de Medio Ambiente y Recursos Naturales, la conservación y protección de las especies y poblaciones en riesgo, incluyendo a la vaquita marina (*Phocoena sinus*), así como sus entornos naturales y el establecimiento de medidas que contribuyan a su conservación.

Que es facultad de la Secretaría de Agricultura, Ganadería, Desarrollo Rural, Pesca y Alimentación, a través de la Comisión Nacional de Acuacultura y Pesca, administrar y regular el uso, así como promover el aprovechamiento sustentable de los recursos de la flora y fauna acuáticas, ordenando las actividades de las personas que intervienen en ella y estableciendo las condiciones en que deberán realizarse las operaciones pesqueras; así como también proponer, formular, coordinar y ejecutar la política nacional de pesca sustentable; establecer las medidas administrativas y de control a que deban sujetarse las actividades de pesca y fijar los métodos y medidas para la conservación de los recursos pesqueros.

Que de las diferentes especies de cetáceos presentes en aguas del Golfo de California, la vaquita marina (*Phocoena sinus*) es de especial interés, por ser un mamífero marino de los más pequeños a nivel mundial (1.5 metros como máximo), porque representa una especie endémica cuya biología es poco conocida, por estar catalogada en peligro de extinción y porque generalmente se encuentra asociada con la totoaba (*Totoaba macdonaldi*), lo que incrementa la posibilidad de su interacción con redes de enmalle, incluyendo las denominadas "agalleras".

Que el Gobierno Mexicano ha contribuido con la protección y recuperación del número de ejemplares de vaquita marina (*Phocoena sinus*), así como en la reducción de los factores de riesgo que han propiciado el peligro de extinción de la especie, a través del establecimiento de medidas tendientes a la recuperación de la población de la vaquita marina, cuya zona de distribución se ubica en el Norte del Golfo de California, por lo cual, se publicó en el Diario Oficial de la Federación, el 8 de septiembre de 2005, el "Acuerdo mediante el cual se establece el área de refugio para la protección de la vaquita (*Phocoena sinus*)" y el 29 de diciembre de 2005, el "Programa de Protección de la Vaquita dentro del Área de Refugio ubicada en la porción occidental del Alto Golfo de California".

Que en consonancia con lo anterior, el Gobierno de los Estados Unidos Mexicanos decidió establecer una suspensión temporal de la pesca con redes de enmalle, incluyendo además a las cimbras o palangres, en la zona de distribución de la vaquita marina (*Phocoena sinus*), durante dos años, como medida que contribuya a la conservación de la especie, mediante el 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, publicado en el Diario Oficial de la Federación el 10 de abril de 2015.

Que existen especies de peces de interés comercial que se distribuyen en aguas de jurisdicción federal del Norte del Golfo de California, las cuales por su disponibilidad y abundancia son susceptibles de aprovechamiento bajo un esquema de manejo que asegure el mantenimiento de sus poblaciones.

Que existe una pesquería establecida de curvina golfina (*Cynoscion othonopterus*) por parte de los pescadores del Golfo de Santa Clara, Sonora, así como de San Felipe y la zona denominada "Bajo Río Colorado" en Baja California, incluyendo a la comunidad Cucapá, cuyas operaciones de captura se realizan principalmente durante los meses de febrero a abril de cada año, mediante el sistema de pesca de encierro (al cerco) del cardumen.

Que la Ley General de Pesca y Acuacultura Sustentables precisa en su artículo 8o. fracción XXI, que corresponde a la Secretaría proponer el establecimiento y regulación de los sitios de desembarque y acopio para las operaciones pesqueras y acuícolas y promover ante las autoridades competentes la ubicación de los mismos.

Que resulta necesario establecer medidas de manejo para el aprovechamiento pesquero, de forma que se fortalezca la seguridad de nula interacción con especies no objetivo.

Que el Instituto Nacional de Pesca y Acuacultura (INAPESCA) emitió opinión técnica mediante oficio RJL/INAPESCA/DGAIPP/0520/2017 de fecha 17 de marzo de 2017, en el que indica que no existe objeción de orden técnico respecto a la decisión del Gobierno Federal para refrendar el compromiso de protección a la vaquita marina (*Phocoena sinus*) mediante la suspensión del uso de todas las redes agalleras en la región Norte del Golfo de California, excepto las empleadas para el aprovechamiento de la curvina golfina, entre las que se encuentran las redes curvineras denominadas "Sistemas de pesca de encierro", opinión que ratifica lo manifestado previamente en el documento similar No. RJL/INAPESCA/DG/120/2015 de fecha 27 de febrero de 2015.

Que el Instituto Nacional de Pesca y Acuacultura, mediante oficio RJL/INAPESCA/DGAIPP/1030/2017 de fecha 16 de junio de 2017, emitió opinión técnica favorable respecto a la prohibición permanente de redes agalleras y de enmalle en el Alto Golfo de California; prohibición de la pesca nocturna con un horario de las 21:00 a las 05:00 horas; recuperación de redes fantasmas o abandonadas; instalación de dispositivos de monitoreo en embarcaciones menores y la definición de los sitios de desembarque de embarcaciones menores.

Que en consecuencia, fundándose las presentes disposiciones en razones de orden técnico y de interés público, hemos tenido a bien emitir el siguiente:

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

ARTÍCULO PRIMERO.- El presente acuerdo es aplicable a las actividades de pesca con embarcaciones menores que se realicen en aguas marinas de jurisdicción federal de los Estados Unidos Mexicanos en el Norte del Golfo de California, dentro de la zona que enseguida se indica y que se presenta en el anexo único:

Vértice	Coordenadas Decimales		Coordenadas Métricas (UTM)		Coordenadas Grados, minutos, segundos	
	X	Y	X	Y	X	Y
A	31.493300	-114.022800	782806.16	3488114.57	31°29'35.86"	114°1'22.09"
B	30.095000	-114.022000	787011.95	3333054.46	30°5'41.99"	114°1'19.24"
C	30.095000	-114.600005	731287.04	3331742.07	30°5'42.00"	114°36'0.02"
D	31.587500	-114.820300	706823.40	3496775.96	31°35'14.97"	114°49'13.10"
E	31.703300	-114.532200	733876.99	3510197.40	31°42'11.87"	114°31'55.96"

ARTÍCULO SEGUNDO.- Se prohíben, permanentemente, las redes de enmalle, incluyendo agalleras, operadas de forma pasiva o dormida para la realización de actividades de pesca en la zona marina señalada en el artículo anterior. No se podrán transportar dichas artes de pesca en esa zona marina ni por cualquier otro medio terrestre o aéreo a, o entre las, ciudades, poblaciones, ejidos, comunidades y/o campos pesqueros aledaños a la misma.

Quedarán exceptuadas de la prohibición anterior, las redes usadas al cerco mediante el sistema de pesca de encierro operadas de forma activa para la pesca de curvina golfina y sierra, que, previa opinión técnica del Instituto Nacional de Pesca y Acuacultura, que incluya las mejoras tecnológicas que dicho Instituto recomiende, se autoricen en los permisos de pesca que expida la autoridad pesquera.

ARTÍCULO TERCERO.- Se prohíbe la realización de actividades de pesca con embarcaciones menores, incluyendo la pesca deportivorecreativa, en la zona indicada en el artículo primero de este Acuerdo, en el horario nocturno comprendido entre las 21:00 (veintiún) horas y las 5:00 (cinco) horas diarias.

ARTÍCULO CUARTO.- Las personas que realicen actividades de pesca con embarcaciones menores en la zona señalada en el artículo primero y en horario distinto al indicado en el artículo tercero, ambos del presente Acuerdo, deberán informar a la Oficina de Pesca de la Comisión Nacional de Acuacultura y Pesca más cercana a su domicilio, dentro de las veinticuatro horas siguientes al arribo de la embarcación a su sitio de arribo o puerto base, sobre la pérdida o extravío de artes de pesca durante sus actividades de pesca y que no hubiesen podido recuperar en todo o en parte. La autoridad pesquera levantará constancia escrita de las circunstancias de tiempo, modo y lugar del hecho, y requerirá a dichas personas para que participen en las

tareas de recuperación del arte de pesca, que se determinen.

ARTÍCULO QUINTO.- Las embarcaciones menores que cuenten con concesión o permiso para realizar actividades de pesca en la zona indicada en el artículo primero de este Acuerdo, deberán tener un sistema de monitoreo instalado y funcionando, con la tecnología y características que se determinen en las concesiones o permisos de pesca correspondientes, conforme a lo dispuesto por el artículo 125 de la Ley General de Pesca y Acuacultura Sustentables.

ARTÍCULO SEXTO.- Las embarcaciones menores que cuenten con concesión o permiso para realizar actividades de pesca en la zona indicada en el artículo primero de este Acuerdo, tendrán como lugares de embarque y desembarque los siguientes sitios:

I.- Golfo de Santa Clara

Bajadas	Coordenadas geográficas
El Delfín	31°41'7.75"N - 114°30'13.50"O
Duarte	31°40'56.93"N - 114°29'54.40"O
Las Cabinas	31°40'35.31"N - 114°29'31.12"O
Las Brisas	31°31'31.36"N - 114°13'21.07"O
Los Pinitos	31°30'52.87"N - 114°12'28.65"O

II.- San Felipe

Bajadas	Coordenadas geográficas
Muelle de San Felipe	30°59'31.56"N - 114°49'37.50"O
Puertecitos	30°21'1.16"N - 114°38'20.32"O
San Luis Gonzaga	29°47'45.44"N - 114°23'47.52"O
Lucky Landing	30° 4'47.80"N - 114°35'18.52"O

III.- El Indiviso/Bajo Río

Bajadas	Coordenadas geográficas
El Zanjón	31°56'50.05"N - 114°57'48.08"O

ARTÍCULO SÉPTIMO.- El presente Acuerdo es obligatorio para los titulares de concesiones y permisos de pesca con embarcaciones menores, así como capitanes o patrones de pesca, motoristas u operadores, pescadores y tripulantes de dichas embarcaciones, incluyendo pescadores deportivos y prestadores de servicios a la pesca deportivorecreativa y demás sujetos que realicen actividades de pesca en las aguas marinas de jurisdicción federal señaladas en el artículo primero.

ARTÍCULO OCTAVO.- Las personas que incumplan o contravengan el presente Acuerdo, se harán acreedores a las sanciones que establece la Ley General de Pesca y Acuicultura Sustentables y demás disposiciones legales aplicables.

ARTÍCULO NOVENO.- La vigilancia del cumplimiento de este Acuerdo estará a cargo de la Secretaría de Medio Ambiente y Recursos Naturales, por conducto de la Procuraduría Federal de Protección al Ambiente, con la intervención que corresponda a la Comisión Nacional de Áreas Naturales Protegidas, así como de la Secretaría de Agricultura, Ganadería, Desarrollo Rural, Pesca y Alimentación, por conducto de la Comisión Nacional de Acuicultura y Pesca, en el ámbito de sus respectivas competencias. Ambas Dependencias se coordinarán con la Secretaría de Marina para la vigilancia en las zonas marinas mexicanas.

TRANSITORIO

PRIMERO.- El presente Acuerdo entrará en vigor el día de su publicación en el Diario Oficial de la Federación.

SEGUNDO.- La Comisión Nacional de Acuicultura y Pesca realizará las acciones de simplificación sobre el trámite indicado en el anexo correspondiente de la MIR, para dar cumplimiento al Artículo Quinto del "Acuerdo que fija los lineamientos que deberán ser observados por las dependencias y organismos descentralizados de la Administración Pública Federal, en cuanto a la emisión de los actos administrativos de carácter general a los que les resulta aplicable el artículo 69-H de la Ley Federal de Procedimiento Administrativo" en un plazo de nueve meses contados a partir de la publicación de este Acuerdo en el Diario Oficial de la Federación.

TERCERO.- Se derogan todas las disposiciones que se contrapongan al presente instrumento.

Ciudad de México, a 21 de junio de 2017.- El Secretario de Medio Ambiente y Recursos Naturales, **Rafael**

Pacchiano Alamán.- Rúbrica.- El Secretario de Agricultura, Ganadería, Desarrollo Rural, Pesca y Alimentación, **José Eduardo Calzada**

Rovirosa.- Rúbrica.

ANEXO ÚNICO

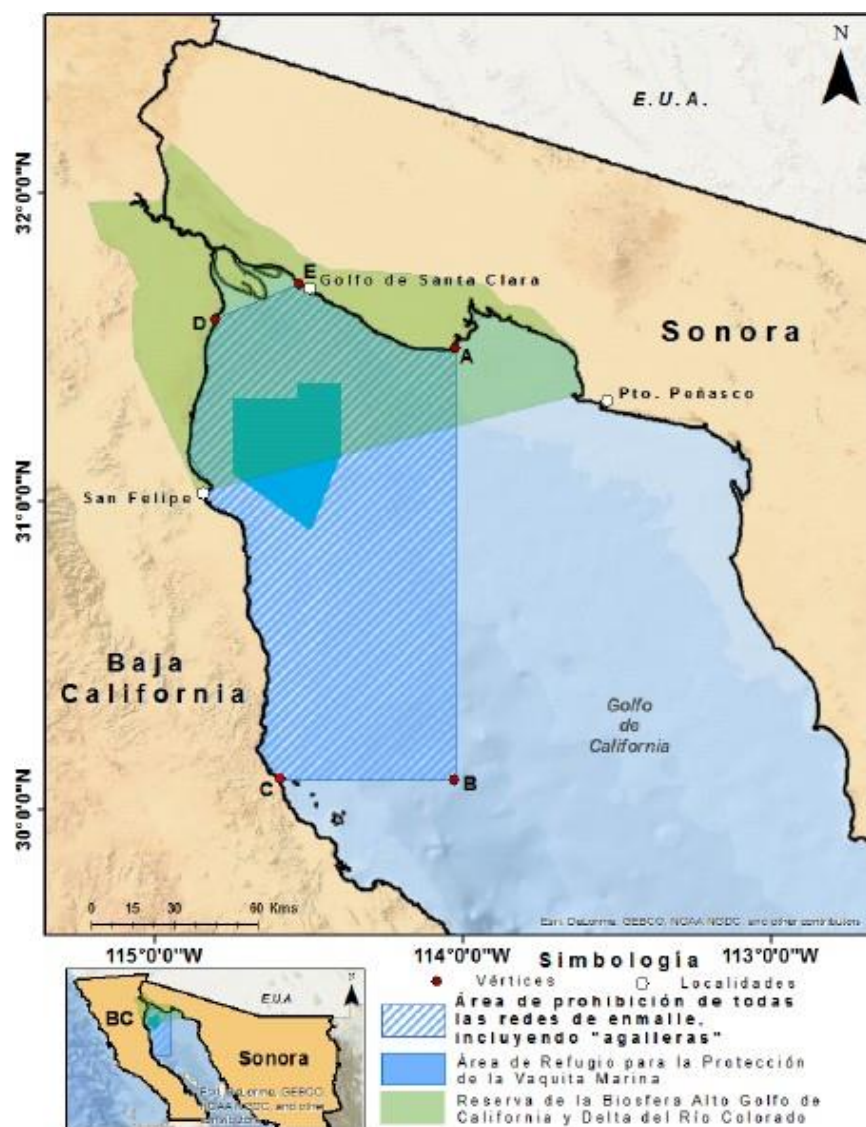


Figura. Mapa del área de prohibición de redes de enmalle, incluyendo las denominadas "agalleras", en el Norte del Golfo de California.

Vértice	Coordenadas Decimales		Coordenadas Métricas (UTM)		Coordenadas Grados, minutos, segundos	
	X	Y	X	Y	X	Y
A	31.493300	-114.022800	782806.16	3488114.57	31°29'35.86"	114°1'22.09"
B	30.095000	-114.022000	787011.95	3333054.46	30°5'41.99"	114°1'19.24"
C	30.095000	-114.600005	731287.04	3331742.07	30°5'42.00"	114°36'0.02"
D	31.587500	-114.820300	706823.40	3496775.96	31°35'14.97"	114°49'13.10"
E	31.703300	-114.532200	733876.99	3510197.40	31°42'11.87"	114°31'55.96"

Tabla. Vértices del área de prohibición de redes de enmalle, incluyendo las denominadas "agalleras", en el Norte del Golfo de California.

Announcement of Vaquita Refuge Extension

Viernes 20 de abril de 2018

DIARIO OFICIAL

(Primera Sección)

SECRETARIA DE MEDIO AMBIENTE Y RECURSOS NATURALES**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*).**

Al margen un sello con el Escudo Nacional, que dice: Estados Unidos Mexicanos.- Secretaría de Medio Ambiente y Recursos Naturales.

RAFAEL PACCHIANO ALAMÁN, Secretario de Medio Ambiente y Recursos Naturales, con fundamento en lo dispuesto por los artículos 32 Bis fracciones I, II, III y XLII de la Ley Orgánica de la Administración Pública Federal; 1, 5 fracciones I y II, 9 fracción XVII, 58 inciso a), 60, 65, 66, 67 fracción IV, 68 y 69 de la Ley General de Vida Silvestre; 79 fracciones I y III, 80 fracción VII, y 83 de la Ley General del Equilibrio Ecológico y la Protección al Ambiente; y, 5 fracción XXV del Reglamento Interior de la Secretaría de Medio Ambiente y Recursos Naturales, y

CONSIDERANDO

Que el Plan Nacional de Desarrollo 2013-2018, en la meta nacional México Próspero, establece como objetivo 4.4. "Impulsar y orientar un crecimiento verde incluyente y facilitador que preserve nuestro patrimonio natural al mismo tiempo que genere riqueza, competitividad y empleo", y para tal efecto prevé como una de las líneas de acción de la Estrategia 4.4.4 "Proteger el patrimonio natural" e incrementar la superficie del territorio nacional bajo modalidades de conservación, buenas prácticas productivas y manejo regulado del patrimonio natural;

Que el Decreto por el que se declara área natural protegida 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, Estado de Baja California, de Puerto Peñasco y San Luis Río Colorado, Estado de Sonora, fue publicado en el Diario Oficial de la Federación del 10 de junio de 1993, con el propósito de conservar y proteger los ecosistemas representativos de la región, la biodiversidad, los procesos evolutivos, los hábitat de reproducción, desove y alimentación de especies marinas de importancia ecológica y comercial, y sobre todo, las especies endémicas o en peligro de extinción como la vaquita y la totoaba, entre otras;

Que en 1996 se constituyó el Comité Internacional para la Conservación de la Vaquita (CIRVA), el cual está conformado por especialistas en temas relacionados con la vaquita marina (*Phocoena sinus*). El CIRVA realizó en 2004 un estudio donde evaluó los factores de riesgo que inciden en la disminución de la población de dicha especie;

Que el 8 de septiembre de 2005 se publicó en el Diario Oficial de la Federación el Acuerdo mediante el cual se establece el área de refugio para la Protección de la vaquita (*Phocoena sinus*), con el objeto de conservar y contribuir al desarrollo de esta especie, así como conservar y proteger su hábitat;

Que el 29 de diciembre de 2005, se publicó en el Diario Oficial de la Federación el Programa de Protección de la vaquita dentro del área de refugio ubicada en la porción occidental del Alto Golfo de California, con el objeto de establecer las bases y lineamientos generales y específicos de conservación, así como para promover las medidas y mecanismos para regular las actividades productivas y la realización de obras que se pretendan desarrollar en la superficie comprendida dentro del Área de Refugio establecida mediante Acuerdo Secretarial publicado en el Diario Oficial de la Federación el 8 de septiembre de 2005 para la protección y recuperación de la vaquita (*Phocoena sinus*);

Que la Carta Nacional Pesquera, publicada en el Diario Oficial de la Federación el 24 de agosto de 2012, señala que en 1997 se hizo una evaluación que estimó 567 individuos, con un intervalo de confianza de 177 a 1,074 vaquitas (*Phocoena sinus*). Asimismo, señala que, a diciembre de 2011, como resultado del PACE: Vaquita, se han retirado 243 embarcaciones menores, con 329 permisos de pesca y en 250 permisos se han sustituido las redes agalleras y de enmalle, por artes de pesca que evitan la captura incidental de vaquitas. Adicionalmente se indica que la línea de mortandad incidental para evitar extinción debe ser menor a 1 individuo por año, es decir una tasa cero;

Que el CIRVA estimó que, para noviembre de 2016, probablemente sólo quedaban aproximadamente 30 ejemplares de vaquita marina (*Phocoena sinus*), siendo que, la disminución de la población de esta especie ha seguido avanzando;

Que en 2017 se ejecutó el Programa de Monitorización Acústica de la Vaquita, el cual se expandió a 87 sitios para respaldar el proyecto VaquitaCPR, por lo que abarca toda el Área de Refugio de la vaquita marina y algunas áreas adyacentes fuera de la misma;

Que aún en la actualidad se han detectado actividades de pesca ilegal, en particular el establecimiento de

redes de enmalle de malla grande para la totoaba (*Totoaba macdonaldi*) dentro del rango de distribución de la vaquita marina (*Phocoena sinus*), por lo que el CIRVA recomendó continuar con el Programa de Monitorización Acústica para posibilitar la estimación de la tendencia de la población y la evaluación de la eficacia de las medidas de conservación actuales y futuras, así como continuar con la eliminación de equipo de pesca en el rango de distribución de la vaquita marina (*Phocoena sinus*), centrándose en el área de mayor riesgo durante la temporada de desove de la totoaba (*Totoaba macdonaldi*);

Que el estudio de avistamiento de la vaquita marina (*Phocoena sinus*) demuestra que la distribución de la misma no se limita al polígono de la Reserva de la Biosfera del Alto Golfo de California y Delta del Río Colorado y Área de Refugio para la Protección de la vaquita marina, sino que excede tales límites, por lo que resulta necesario ampliar el polígono del área de refugio para la protección de esta especie acuática que abarque tanto la zona dentro del área natural protegida, como fuera de ella.

Que del estudio señalado en el párrafo que antecede, el CIRVA determinó que en la porción occidental del Alto Golfo de California, frente a las costas del Estado de Baja California, en las proximidades del Puerto de San Felipe, se encuentra la zona de mayor concentración de la vaquita marina (*Phocoena sinus*), especie endémica de nuestro país que se encuentra catalogada en peligro de extinción por la Norma Oficial Mexicana 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.

Que la Dirección General de Vida Silvestre de la Secretaría de Medio Ambiente y Recursos Naturales, elaboró el estudio justificativo a que se refiere el artículo 67 de la Ley General de Vida Silvestre, en el que concluyó que resulta fundamental ampliar el polígono del área de refugio para la vaquita marina (*Phocoena sinus*), especie nativa del Golfo de California.

Que derivado de lo anterior y tomando en consideración las recomendaciones emitidas por el CIRVA, así como los estudios técnicos y sociales orientados al conocimiento de la vaquita marina (*Phocoena sinus*), las condiciones naturales que permiten su sobrevivencia y las pesquerías que se realizan en la zona y con el objeto de conservar y contribuir al desarrollo de la vaquita, así como conservar y proteger su hábitat, he tenido a bien expedir el siguiente:

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*)

ÚNICO.- Se **reforman** los artículos 1 y 2 del Acuerdo por el que se establece el área de refugio para la protección de la vaquita (*Phocoena sinus*), para quedar como sigue:

Artículo 1.- Se establece el área de refugio para la protección de la vaquita marina (*Phocoena sinus*), comprendida en la porción occidental del Alto Golfo de California, frente a las costas del Estado de Baja California, con el fin de permitir y fomentar la recuperación de la población, en la zona delimitada por el polígono con vértices en las siguientes coordenadas:

Superficie de 1,841 Km²

(Un mil ochocientos cuarenta y un kilómetros cuadrados)

Vértices	X	Y
A	705502.491	3473323.82
B	723474.106	3473692.34
C	734316.27	3474673.99
D	747348.43	3474974.15
E	747960.18	3449027.58
F	747962.79	3448916.7
G	739317.43	3421871.52
H	724459.355	3427300.34
I	716852.075	3427142.48
J	706068.283	3444416.61

Artículo 2. El área de refugio a que se refiere el artículo que antecede está subdividida en:

- a) La porción dentro del polígono de la Reserva de la Biosfera Alto Golfo de California y Delta del Río Colorado, la cual tiene una superficie de 1,307.05 Km² (Un mil trescientos siete punto cero cinco kilómetros cuadrados) y está delimitada por los siguientes vértices:

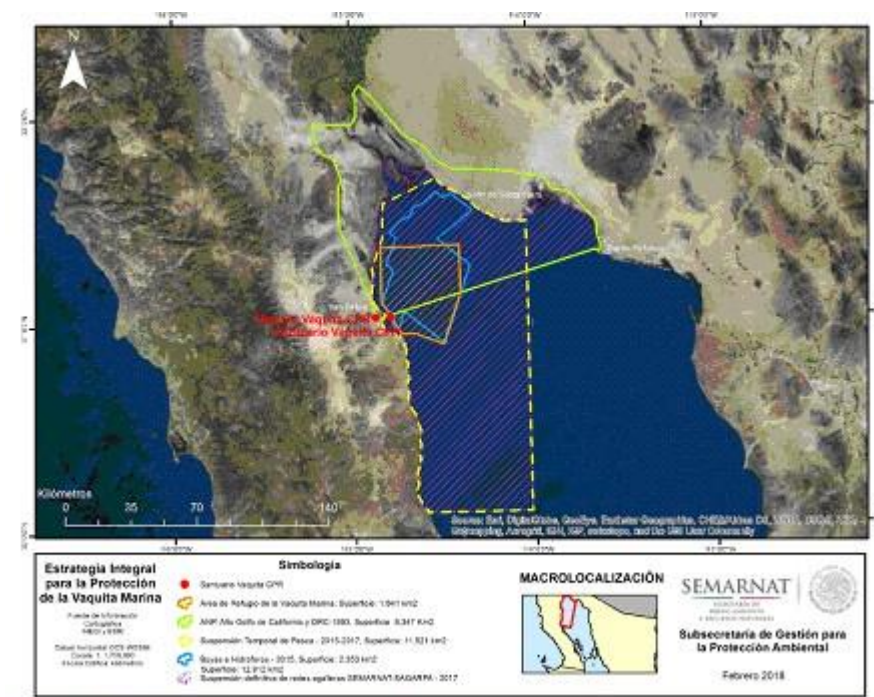
Vértices	X	Y
A	705502.491	3473323.82
B	723474.106	3473692.34
C	734316.27	3474673.99
D	747348.43	3474974.15
E	747953.98	3449286.59
F	710644.62	3437085.95
G	706068.283	3444416.61

- b) La porción que se encuentra fuera de la Reserva de la Biosfera Alto Golfo de California y Delta del Río Colorado, la cual tiene una superficie de 533.96 Km² (Quinientos treinta y tres punto noventa y seis kilómetros cuadrados) y está delimitada por los siguientes vértices:

Vértices	X	Y
A	747953.98	3449286.59
B	747962.79	3448916.7
C	739317.43	3421871.52
D	724459.355	3427300.34
E	716852.075	3427142.48
F	710644.62	3437085.95

La descripción analítico-topográfica y límite del polígono que se describe a continuación se encuentra definidas en el sistema de coordenadas UTM, zona 11 Norte, con un Datum Horizontal y Elipsoide WGS84, con base en el Marco Geoestadístico 2016 del Instituto Nacional de Estadística y Geografía.

El plano de ubicación que se contiene en el presente Acuerdo es sólo con fines de referencia geográfica y sin valor cartográfico.



El plano oficial del Área de Refugio para la protección de la vaquita marina (*Phocoena sinus*), que contiene la descripción límite analítico-topográfica del polígono general que se describe en el presente Acuerdo, se encontrará en las oficinas de la Dirección General de Vida Silvestre, ubicadas en Ejército Nacional número 223, Colonia Anáhuac, Delegación Miguel Hidalgo, código postal 11320, Ciudad de México, México.

Artículo 3.- ...

TRANSITORIOS

PRIMERO. El presente Acuerdo entrará en vigor al día siguiente de su publicación en el Diario Oficial de la Federación.

SEGUNDO. La Secretaría de Medio Ambiente y Recursos Naturales, a través de la Comisión Nacional de Áreas Naturales Protegidas, realizará y publicará en el Diario Oficial de la Federación la actualización del Programa de Protección correspondiente en un plazo no mayor a 180 días naturales contados a partir de la entrada en vigor del presente Acuerdo.

Dado en la Ciudad de México, a los doce días del mes de abril de dos mil dieciocho.- El Secretario de Medio Ambiente y Recursos Naturales, **Rafael Pacchiano Alamán**.- Rúbrica.