WWF

ANALYSIS

2017

VANISHING VAQUITA

SAVING THE WORLD'S MOST ENDANGERED MARINE MAMMAL

AN ANALYSIS FOR WWF BY
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This document presents a call for global action to save the vaquita and conserve the *Islands and Protected Areas of the Gulf of California* World Heritage site. With fewer than 30 individuals remaining, this species could go extinct before the next Mexican presidential election in 2018.

The vaquita lives only in the northern part of this World Heritage site – an area affected by illegal and unsustainable fishing practices and wildlife trafficking of the critically endangered totoaba fish, together with urbanization and increased pollution. These impacts have started to damage the site's *outstanding universal value* and are compromising its ability to support the millions of people relying on the site for food, income and other important benefits offered by the local ecosystem.

WWF has spent over 10 years working with fishermen, the Mexican government and partner organizations to promote sustainable fisheries in the Upper Gulf of California. This work targets the recovery of the critically endangered vaquita, while maintaining the resources local communities depend on. But the threats faced today also require collective global action.

An immediate, increased response from the Mexican government, World Heritage Committee and CITES Parties, NGOs and civil society groups is needed to protect the last remaining vaquitas and set the Upper Gulf of California on a pathway to recovery.

Failure to act will result in the imminent extinction of the vaquita.

CRITICAL PATH FOR SECURING THE FUTURE OF THE VAQUITA

WWF calls on the **Mexican government** to take immediate action to protect and revive the vaquita population and restore the Upper Gulf of California to help secure the entire ecosystem and its inhabitants. Specifically, the government must:

- Immediately implement a permanent ban on gillnets and remove and destroy ghost nets, to prevent bycatch of the vaquita and other marine species and create the enabling conditions for sustainable and resilient fisheries.
- Allow fishermen to use the existing, vaquita safe alternatives to and provide incentives for immediate and full adoption.
- Continue developing innovative solutions that improve fishing gear and technology that will enable sustainable and profitable fisheries.
- Stop illegal fishing and strengthen relevant laws and regulations to facilitate enforcement.
- Commit to, and implement, a robust plan for the recovery of the vaquita within its natural habitat that includes specific population increases and timelines.

WWF calls on the **Chinese and United States governments** to collaborate with the Mexican government to halt the illegal fishing and trade of totoaba. Specifically, they should:

- Increase enforcement efforts to intercept and halt the illegal transport, entry and sale of totoaba products.
- Make public, time-bound commitments to reduce consumer demand for totoaba swim bladders.
- Prioritize enforcement of the illegal totoaba trade under the 2017 U.S. Presidential Executive Order on Enforcing Federal Law with Respect to Transnational Criminal Organizations and Preventing International Trafficking.

WWF calls on **international institutions**, including the **World Heritage Committee** and the **Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES)**, to hold China, Mexico and the United States accountable for the alarming decline of the vaquita and the increase in illegal trade of totoaba products, including:

- The World Heritage Committee to initiate the procedure to inscribe the Gulf of California on UNESCO's List of World Heritage in Danger if the Mexican government does not take the action required to save vaquita populations.
- CITES to initiate sanction procedures if relevant countries fail to demonstrate adequate progress in halting totoaba trade to the CITES Standing Committee by their September 2017 reporting deadline.

WWF commits to and calls on **civil society and non-governmental organizations** to:

- Work constructively with governments in the management and conservation of the Gulf of California, and promote the value of this site in delivering sustainable development outcomes for people and nature.
- Work for the recovery of the vaquita within their natural habitat.
- As a last resort, support the recommendation of the International Committee for the Recovery of the Vaquita (CIRVA) to temporarily relocate the vaquita with the goal of returning them to a gillnet-free and healthy ecosystem in the Upper Gulf of California.
- Collaborate with communities and promote activities, policies, projects and interventions that contribute positively toward their long-term prosperity and well-being.

WWF calls on **corporate and finance institutions** active in the Gulf of California region to adhere to sustainable business practices and avoid any activities that threaten to degrade the capacity of the Gulf of California to support wildlife populations and local communities, now and in the future.

WWF calls on **local communities** to act as custodians of their natural heritage by pursuing and promoting sustainable fishing practices, and adhering to gillnet and totoaba fishing bans, to protect the integrity of the ecosystem in the Gulf of California as well as current and future livelihoods.

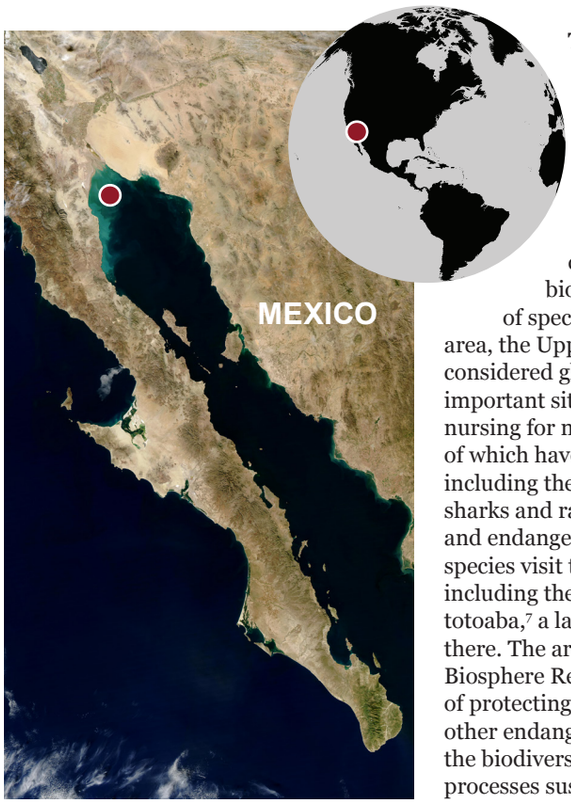
WWF CALLS ON ALL PEOPLE TO WORK TOGETHER IN SAVING OUR SHARED HERITAGE.

THE VALUE

MEXICO'S GULF OF CALIFORNIA IS ONE OF THE MOST DIVERSE, PRODUCTIVE MARINE WORLD HERITAGE SITES ON THE PLANET

The Islands and Protected Areas of the Gulf of California World Heritage site is an area of global conservation importance. The Gulf of California was officially listed as a World Heritage site in 2005.[1] The site extends south from the Colorado River Delta for 270 kilometres, between the mainland of Mexico and the Baja Peninsula. It contains 244 islands and islets, and nine protected areas including the Upper Gulf of California. It supports an incredibly diverse array of species, including over one third of the world's marine mammal species, five of the world's seven sea turtle species, and almost 900 fish species.[2] The site is also an important breeding area for several great whale species and provides habitats and breeding areas for migratory seabirds.

The site supports some of the most important fisheries in Mexico and is a major international tourist destination, which are key drivers of local economic growth. The Gulf of California's immense biodiversity, together with the striking natural beauty of its rugged islands, high cliffs and sandy beaches[3], attracts 4.8 million tourists each year, and generates nearly US$2 billion in annual revenue.[4] The site also supports half of Mexico's total fisheries production, which provides income, food and livelihoods to local communities. Almost 500,000 tonnes of tuna, shrimp, sardines and squid are commercially fished each year and an additional 70 species of fish, totalling 200,000 tonnes, are caught in wetland areas.[5]



The northernmost part of the site – the Upper Gulf of California – has tremendous biological and economic importance. Because of its ecological characteristics, high biodiversity and the number of species that only occur in the area, the Upper Gulf of California is considered globally unique.[6] This is an important site for spawning, mating and nursing for numerous fish species, many of which have high commercial value, including the blue shrimp, corvina, sharks and rays, and other endemic and endangered species. Many fish species visit the Upper Gulf to spawn, including the critically endangered totoaba,[7] a large marine fish only found there. The area was designated as a Biosphere Reserve in 1993 with the aim of protecting the totoaba's habitat, and other endangered species, as well as the biodiversity and the evolutionary processes sustaining them.[8]

The Upper Gulf of California also supports the critically endangered vaquita, which plays an important role in the local ecosystem. The vaquita, meaning 'little cow' in Spanish, is the world's smallest cetacean, which includes whales and dolphins. It is the world's rarest porpoise and is found only in the northern region of the World Heritage site. The vaquita's unique facial markings (a black ring around each eye and black curved lips) have been compared to a smiling panda. The vaquita is very elusive and was only discovered in 1958.[9] Research on the marine mammal has been very limited but has shown that the vaquita makes strong contributions to the ecosystem and can aid ecosystem recovery.[10] The latest estimates suggest that fewer than 30 vaquitas remain in the Gulf of California, making it the world's most endangered marine mammal.[11] The evolutionary distinctiveness and level of threat to the vaquita make it an urgent conservation priority as a 'one-of-a-kind species'.[12] If the vaquita becomes extinct, the World Heritage site will lose a species of irreplaceable universal value.

THE THREATS

UNSUSTAINABLE FISHING PRACTICES AND TRANSNATIONAL ILLEGAL WILDLIFE TRADE ARE THREATENING THE ECONOMIC, NATURAL AND SOCIAL VALUE OF THE UPPER GULF OF CALIFORNIA AND DRIVING THE VAQUITA TO EXTINCTION

Unsustainable fishing is the biggest threat to the Upper Gulf of California and is compromising the site's ability to meet the needs of current and future generations. Fishing in the Upper Gulf is crucial for the livelihoods of local communities and, more broadly, to Mexico but many artisanal and commercial fisheries are already overfished. For many years, the use of hook-and-line equipment supported healthy fisheries alongside fully functioning natural ecosystems. However, as stocks began to decline in the early 1990s, and demand increased from the growing population in the Upper Gulf of California,[13] fishermen adopted new equipment and techniques including gillnets, which greatly increased the average catch size. Gillnets are walls of netting that catch fish by their gills when they swim through.[14] This technique has caused a significant decline in stocks of ecologically and economically important fish species, changes in the dominance of particular species, and the loss of older populations of large fish. Estimates suggest that 85 per cent of the Gulf's fisheries are overexploited or at their maximum sustainable yield.[15] If current trends continue, it is likely that many fisheries in the Upper Gulf of California will collapse, eliminating an important source of food and income both locally and nationally.

Unsustainable and illegal fishing practices are the main drivers pushing vaquita to extinction, particularly due to bycatch from illegal fishing of totoaba. The use of gillnets results in the unintentional bycatch of non-targeted species, including vaquitas, dolphins, whales and sharks. The main driver of vaquita bycatch is gillnet fishing of totoaba, a fish whose swim bladder is highly prized in Asian markets. According to traditional Chinese medicine, the totoaba swim bladder is believed to cure a variety of illnesses and diseases, and it typically sells for up to US$ 8,500 per kilogram on the black market.[16] Despite a ban on totoaba fishing and trade being in place since 1975, illegal totoaba fishing has continued. Since 2013, authorities have seized swim bladders from more than 1,500 illegally caught totoabas.[17] Gillnets used to catch totoaba often unintentionally trap vaquitas, which suffocate and drown on capture. According to CIRVA, the vaquita population has fallen by 90 per cent since 2011 due to gillnet fishing and now fewer than 30 vaquitas remain in the wild.[18]

Failure to take the required action to protect and preserve vulnerable wildlife populations in the Upper Gulf of California will result in the vaquita's imminent extinction and could lead to the inscription of the site on the List of World Heritage in Danger. Under the World Heritage Convention, the World Heritage Committee may list a World Heritage site as "in danger" if it is "threatened by serious and specific dangers".[19] These threats may include "a serious decline in the population of the endangered species … of OUV (outstanding universal value), for which the property was legally established to protect".[20] Given the recent dramatic decline in vaquita and totoaba populations in particular, the World Heritage site could be placed on the List of World Heritage in Danger in the immediate future.

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THE SOLUTION

A PERMANENT, FULLY ENFORCED GILLNET BAN IS REQUIRED TO SAVE THE VAQUITA AND PRESERVE THE GULF OF CALIFORNIA'S OUTSTANDING UNIVERSAL VALUE

Solutions for preserving the *outstanding universal value* of the Gulf of California World Heritage site are two-fold: immediate action to protect the endangered vaquita population and long-term action to protect the site's ecological integrity. The most urgent conservation issue in the Gulf of California is the potential extinction of the vaquita. Extinction of these rare marine mammals would compromise the site's *outstanding universal value* and, given the current population size, immediate action to halt all gillnet fishing is required to have any chance of saving this species. Efforts to save the vaquita, however, will be in vain if long-term actions are not implemented in parallel to prevent further damage to the Gulf of California's ecosystems and ensure it remains a productive, diverse region in the future.

Whilst stakeholders have taken action to save vaquita populations in the past, these have been insufficient to increase populations. In April 2015, the Mexican government implemented an emergency two-year gillnet fishing ban throughout the vaquita range which included economic compensation for fishermen. In addition, the CITES Standing Committee requested increased collaboration from all Parties to discourage international illegal trade of totoaba.[21] Alongside the Mexican authorities and stakeholders on the ground, WWF has been working for over a decade to help protect the vaquita. WWF has helped to develop alternative, vaquita-safe fishing gear, retrieved ghost nets that threatened endangered species in the region, and trained local fishermen to use vaquita-friendly practices. However, the continued high levels of illegal gillnet fishing and the 90 per cent decline in the vaquita population since 2011[22] show that current conservation and enforcement measures have been insufficient. There is a critical need for increased action.

A permanent, fully enforced gillnet ban and improved community engagement is required immediately to prevent the impending vaquita extinction. The Mexican government's ban on gillnet fishing in the Upper Gulf of California is due to expire at the end of May 2017. As the vaquita population is in critical decline, the current ban must now be expanded, made permanent, and effectively enforced. Effective implementation of the ban will require the government to immediately permit the use of existing alternative and profitable fishing methods by local fishermen (something that has previously hindered successful uptake of the ban) and continue to develop innovative new fishing practices. This will help to empower local communities to support conservation efforts and act as agents of change.

The gillnet ban must be supported by strengthened laws and penalties that make all gillnet possession illegal, wherever they are found (in water or on land) or however they are used (fishing, storage, selling or buying). All gillnets in the Upper Gulf should be seized by authorities and destroyed. Any proof of possession or use of gillnets should be accepted as evidence in court.

In parallel, national and international stakeholders must work collaboratively to curb the global illegal trade in totoaba swim bladders. Increasing protection around the World Heritage site will help to make poaching of totoaba more difficult, but if the demand for totoaba swim bladders continues, criminal fishers will find potentially more dangerous and damaging ways to poach the fish, taking vaquitas with them. The Chinese government should therefore take immediate steps to reduce the demand for totoaba swim bladders, and the United States government should introduce improved safeguards to prevent trafficking of totoaba through the country to Chinese markets.

Given the critically low numbers of vaquitas, and the very limited window left to prevent species extinction, WWF supports the ex-situ Conservation, Protection and Recovery plan designed by CIRVA. CIRVA has designed a US$ 4 million program to place a limited number of vaquitas into a nearby sanctuary situated within the Upper Gulf of California. This would be a first step in a conservation breeding program aimed at restoring numbers and returning vaquitas to the wild. Whilst this program may be necessary given the limited number of remaining vaquitas, current level of threats and rate of population decline, the program carries significant risks as vaquitas have never been captured, transported or kept in captivity before, and scientists do not know how the animals will react. These risks must be carefully considered and comprehensive, credible mitigation strategies must be developed before the program begins. The program must also be part of a long-term conservation plan for reintroduction of the vaquita into the wild.

These immediate, short-term solutions must be supported by a range of intermediate and long-term actions that will help to restore the vaquita's natural habitat and ensure its long-term recovery. Even if ex-situ conservation efforts are successful, restoring the vaquita's natural habitat and eliminating illegal fishing practices will be fundamental to any long-term recovery of the species. Although lack of genetic variability has always been a concern for the vaquita, researchers have found that it has a naturally small population; as long as there is reproduction, there is potential for recovery.[23] Stakeholders must therefore implement the short-term solutions outlined above, alongside long-term actions such as the promotion and adoption of sustainable fishing practices throughout the World Heritage site, to ensure a gillnet-free, healthy Upper Gulf where the vaquita, other marine species and local communities can thrive.

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Vaquita in numbers

100% RECYCLED

30

Fewer than 30 vaquitas remain in the wild

MAY 31

Temporary gillnet ban expires on May 31st

90%

The vaquita population has fallen by 90 per cent since 2011 due to gillnet fishing

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