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PROSECUTION FOR A PORPOISE: STRENGTHEN U.S. ENFORCEMENT AGAINST CRIMINAL NETWORKS TO ADDRESS INTERNATIONAL TRAFFICKING OF ENDANGERED SPECIES

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Abstract

The vaquita marina is a critically endangered porpoise, only found in the Gulf of California, whose numbers have dropped precipitously over the last few years such that fewer than 20 individuals remain in the population. Their predicament is exacerbated by the fact that they are often killed as bycatch in Mexican fishing nets set out to catch totoaba, an endangered fish endemic to the same waters. The totoaba, like many other endangered species, are imperiled by the high prices they command in illegal wildlife markets in other countries. Although both vaquita and totoaba are protected by environmental regimes such as the U.S. Endangered Species Act and the Convention on International Trade in Endangered Species, efforts to apprehend and prosecute totoaba traffickers under these laws have been weak and ineffective, as have fishing bans and enforcement in Mexico.

But wildlife traffickers who trade internationally in these endangered species are committing additional crimes such as smuggling, bribery, money laundering, and even drug trafficking. Yet existing tools and resources for these financial and

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other crimes, which include heavier penalties than environmental crimes, often go unused by law enforcement in investigating and charging wildlife traffickers. This article argues that wildlife traffickers should be more consistently prosecuted under these financial crime tools. Moreover, financial sanctions tools available to the U.S. Treasury could be effective for rapidly cutting off funds to the organized criminal networks engaged in wildlife trafficking.

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Introduction

Sightings of marine mammals in the ocean can be a truly rare event and cause for celebration by eager ocean enthusiasts, and sightings of baby mammals even more so. But for the vaquita marina, the sightings that occurred on September 26, 2018, of at least one mother and calf pair and two other vaquita pairs,² and then again sightings of three pairs of vaquita between August and September 2019,³ have been near miraculous. The vaquita is a critically endangered species of porpoise found only in the waters of the Gulf of California

² Elisabeth Malkin, *Scientists Catch Rare Glimpse of the Endangered Vaquita*, N.Y. TIMES (Oct. 17, 2018), <https://www.nytimes.com/2018/10/17/science/vaquitas-endangered-porpoise.html>.

³ Kendal Blust, *Vaquita marina sightings give conservationists hope for the critically endangered porpoise*, CRONKITE NEWS (Sept. 19, 2019), <https://cronkitenews.azpbs.org/2019/09/19/endangered-vaquita-marina-sightings/>.

near northwestern Mexico, and by summer 2019 there were estimated to be fewer than 19 individuals remaining in their entire population.⁴ Their endangered status has been known for many years and the vaquita population had been shown to be steadily dropping, from an estimated 600 vaquitas in 1997 to the 2016 population estimate of 30 individuals.⁵ However, efforts by various environmental and governmental organizations to assist with vaquita recovery were stymied for various reasons, and the feeling was widespread that there was little anyone could do but wait for their inevitable extinction.⁶ The proof of new vaquita births has buoyed hopes that the vaquita may yet survive, but they remain in a critical near-extinction state.

In this Article I describe the plight of the vaquita and its relationship to the endangered totoaba, and analyze efforts that have been conducted to date to prevent further species loss. Given the failure of these efforts to stem species loss at the point of catch by Mexican fishermen, I argue that there should be more sustained focus on the wildlife trafficking aspect of endangered species trade, with more aggressive prosecutions of actors caught conducting these crimes, and more robust penalties applied to those prosecuted as a deterrent to repeat violations. Finally, I explore the potential for multiple tools used to fight financial crime to be more robustly applied to issues of environmental enforcement. These tools include existing crimes of money laundering, smuggling, and tax evasion, the application of resources and tools from drug trafficking efforts, and newer tools such as the recently enacted Global Magnitsky Act. There is a real possibility that the application of these financial crimes and sanctions frameworks to the corruption and trafficking of endangered species can provide an extra boost to environmental enforcement that has been woefully underfunded and often ineffective to date.

So far, efforts to combat the illegal totoaba trade and its associated devastating effects on the vaquita population have focused on activities within Mexico, mainly pressuring Mexican authorities to crack down on the fishermen catching totoaba and the trafficking networks operating within Mexico. More recently, the investigative efforts of nonprofit organizations and journalists such as those featured in the 2019 documentary “Sea of Shadows” are shedding light on the criminal trafficking networks within Mexico and recognize the need for Chinese authorities to assist with enforcement against smuggling networks within China.⁷

⁴ Anna Ploszajski, *Fewer than 19 vaquita porpoises left – study*, THE GUARDIAN (July 30, 2019), <https://www.theguardian.com/environment/2019/jul/31/fewer-than-19-vaquita-porpoises-left-study-mexico-illegal-fishing-nets>.

⁵ Kendal Blust, *Vaquita's last stand: The struggle to save the world's rarest marine mammal*, CRONKITE NEWS (Nov. 21, 2018), <https://cronkitenews.azpbs.org/2018/11/21/narco-fishing-vaquitas-last-stand-the-struggle-to-save-the-worlds-rarest-marine-animal/>; Malkin, *supra* note 2.

⁶ Rod Nordland, *Only Captivity will Save the Vaquita, Experts Say*, N.Y. TIMES (Apr. 27, 2017), https://www.nytimes.com/2017/04/27/world/americas/only-captivity-will-save-the-vaquita-experts-say.html?_r=1.

⁷ SEA OF SHADOWS (National Geographic Documentary Films 2019).

My contribution with this Article is the recognition that the United States also has plenty of existing enforcement tools that it can use on its own to target totoaba traffickers and handicap the totoaba trade without relying solely on other countries' efforts. These include financial enforcement tools to target the money laundering, smuggling, and other crimes that go hand in hand with the illegal trade in endangered species. The United States can apply the greater penalties that are available for prosecuting these financial crimes as more effective deterrents than those contained within the environmental statutes alone and effectively disrupt these trafficking networks by applying financial sanctions and other enforcement tools to seize the criminal proceeds that are often stashed in stable countries like the United States.

I. The Imperiled Vaquita Marina, and the Complexities of Saving the Species

The vaquita marina, known also as the Gulf of California harbor porpoise,⁸ is the world's smallest porpoise, with black-rimmed eyes and dark noses that have led to the nickname of "panda of the sea."⁹ The species also has the smallest geographic range of any marine cetacean species, an area of only 4000 square kilometers in the Gulf of California.¹⁰ In 1997, it had an estimated population of 567, but by 2014 its estimated population was only 97 individuals.¹¹ Most recently it has been estimated there are fewer than 19 vaquitas left,¹² and some estimates place it even lower at fewer than 10 individuals.¹³ The IUCN considers the vaquita to be critically endangered, and the vaquita was listed on Appendix I of the Convention on the International Trade in Endangered Species in 1979.¹⁴

Efforts in 2017 by the Mexican and U.S. governments to capture the remaining vaquita with the help of U.S. Navy dolphins in order to protect them and encourage their recovery in captivity were met with some hope as a last

⁸ ENVTL. INVESTIGATION AGENCY, DUAL EXTINCTION: THE ILLEGAL TRADE IN THE ENDANGERED TOTOABA AND ITS IMPACT ON THE CRITICALLY ENDANGERED VAQUITA (Jan. 2016), <https://eia-international.org/wp-content/uploads/EIA-Dual-Extinction.pdf>.

⁹ Livia Albeck-Ripka, *30 Vaquita Porpoises are Left. One Died in a Rescue Mission*, N.Y. TIMES (Nov. 11, 2017), <https://www.nytimes.com/2017/11/11/climate/vaquita-porpoise-dies.html>.

¹⁰ ENVTL. INVESTIGATION AGENCY, *supra* note 8.

¹¹ *Id.*

¹² Ploszajski, *supra* note 4.

¹³ Press Release, Ctr. for Biological Diversity, Only 10 Vaquita Remain, May Not Survive President Obrador's Tenure (Mar. 14, 2019), https://www.biologicaldiversity.org/news/press_releases/2019/vaquita-03-14-2019.php.

¹⁴ See L. Rojas-Bracho & B.L. Taylor, *Vaquita: Phocoena sinus*, *The IUCN Red List of Threatened Species 2017*, INT'L UNION FOR CONSERVATION OF NATURE (last visited Mar. 20, 2020), <https://www.iucnredlist.org/species/17028/50370296>.

resort.¹⁵ However, the first attempts to round up the vaquita caused the elusive, shy creatures to react in shock and distress, resulting in a vaquita death from a heart attack during the roundup process.¹⁶ The joint effort by the Mexican government and conservation groups was soon after called off.¹⁷

A. Totoaba Trafficking at the Heart of the Problem

Although the fact that the vaquita is near extinction is reason itself for concern and impetus to push for immediate change, the vaquita can also, perhaps, be described as merely the “charismatic megafauna”¹⁸ of its own story. Vaquita are caught incidentally as bycatch in gillnets set by fishermen whose goal is to catch another endangered fish species, the totoaba.¹⁹ Totoaba, like vaquita, are also only found in the upper Gulf of California²⁰ and have been fished by Mexican fishermen since the early 20th century.²¹ Both totoaba meat and their swim bladders were consumed in Mexico, the United States, and China.²² But this resource was soon overfished, with annual totoaba catch dropping from over 2,000 tons in 1947 to just 50 tons by 1975—a reduction of 97%.²³

Legal protections quickly followed this signal of dramatic population decrease, with Mexican authorities banning the commercial fishing of totoaba from the northern Gulf of California since the late 1970s.²⁴ The totoaba was also included on various protective lists, including its 1975 listing on the Convention on International Trade in Endangered Species (CITES), the listing under the U.S.

¹⁵ See C4ADS, HOOKED: HOW DEMAND FOR A PROTECTED FISH LINED THE POCKETS OF MEXICAN CARTELS & SUNK THE FUTURE OF AN ENDANGERED PORPOISE SPECIES 14 (Aug. 2017), <https://static1.squarespace.com/static/566ef8b4d8af107232d5358a/t/59c011106f4ca3a44430588c/1505759529205/Hooked.pdf> [hereinafter HOOKED]; see also Nordland, *supra* note 6.

¹⁶ Albeck-Ripka, *supra* note 9.

¹⁷ Elizabeth Pennisi, *Update: After death of captured vaquita, conservationists call off rescue effort*, SCIENCE (Nov. 9, 2017), <https://www.sciencemag.org/news/2017/11/update-after-death-captured-vaquita-conservationists-call-rescue-effort>.

¹⁸ See, e.g., Eric de Place, *Charismatic animals get all the love*, GRIST (May 12, 2005), <https://grist.org/article/the-case-for-charisma/> (defines “charismatic megafauna” as “large, attractive animals”); Emma Marris, *Charismatic mammals can help guide conservation*, NATURE (Dec. 24, 2013), <https://www.nature.com/news/charismatic-mammals-can-help-guide-conservation-1.14396>.

¹⁹ HOOKED, *supra* note 15, at 11-12 (A number of organizations have focused on the decline of the vaquita, but few have tracked the trafficking networks and cartel activity that takes totoaba bladders to market. The nonprofit organization C4ADS, which conducts analysis and reporting on global conflict and transnational security issues, has broken new ground in uncovering the linkages in this supply chain).

²⁰ Gwynn Guilford, *How China’s Fish Bladder Investment Craze is Wiping Out Species on the Other Side of the Planet*, QUARTZ (Aug. 24, 2015), <https://qz.com/468358/how-chinas-fish-bladder-investment-craze-is-wiping-out-species-on-the-other-side-of-the-planet/>.

²¹ HOOKED, *supra* note 15, at 9.

²² *Id.*

²³ *Id.* at 9-10.

²⁴ Guilford, *supra* note 20.

Endangered Species Act in 1979, and by 1994 under Mexico's Law for Endangered Species Protection.²⁵

However, totoaba remain in high demand for more than just their meat. What has really driven its increased depletion is the belief by consumers in China that the totoaba bladder contains medicinal properties.²⁶ Specifically, soups made from totoaba bladders, known as "fish maws," are believed to ease the discomfort of pregnancy and joint pain.²⁷ Chinese emigrants to Mexico discovered the totoaba in the early 1920s.²⁸ But the recent demand for totoaba has been exacerbated by the fact that its only perceived equal, the Chinese bahaba or giant yellow croaker, which once flourished in the waters from the Yangtze estuary to Hong Kong, has already been decimated due to rampant overfishing.²⁹ And the bahaba itself hovers on the brink of extinction, having been listed as a Grade II State Protected Species by China since 1989.³⁰ Other factors in the spike in totoaba demand include the "growth of the Chinese middle class, and the 2008 global financial crisis, which allegedly drove consumers in China to purchase totoaba bladders and other high-value assets as perceived safe investments."³¹ For example, in 2011 a single totoaba bladder could be sold for as much as HK\$1,000,000 (about U.S. \$137,000) in Hong Kong or Guangzhou, China.³²

The high price of totoaba bladders has caused Mexican fishermen to respond accordingly, despite the illegality of totoaba catch. For example, in 2015 Mexican fishermen reported earning as much as \$8,000 per kilogram of totoaba bladder, compared to only 300 pesos or \$19 per kilogram of shrimp.³³ Fishing communities shifted away from other Gulf species in 2011 to focus on the higher profits brought in by totoaba.³⁴ But the high profits attracted other actors – by 2014, locals were reporting the entrance of organized criminal groups into the totoaba market.³⁵ This result almost seems inevitable, since the Mexican drug traffickers operate in the same region as totoaba traffickers – and the totoaba bladder's nickname, aquatic cocaine, is said to come from the shared trafficking routes.³⁶ To the drug traffickers, the totoaba trade is attractive not only for these high profits (totoaba can be worth more by weight than cocaine), but also for the

²⁵ HOOKED, *supra* note 15, at 10.

²⁶ *Id.* at 9.

²⁷ Guilford, *supra* note 20.

²⁸ *Id.*

²⁹ *Id.*

³⁰ Ng Wai Chuen & W. Cheung, *Bahaba taipingensis*, *The IUCN Red List of Threatened Species 2017*, INT'L UNION FOR CONSERVATION OF NATURE, <http://dx.doi.org/10.2305/IUCN.UK.2006.RLTS.T61334A12463147.en> (last visited Mar. 29, 2020).

³¹ HOOKED, *supra* note 15, at 10.

³² Markets are volatile, however, due to speculative investments and crashes in the markets, in 2015 the same bladder would only fetch HK\$200,000. Guilford, *supra* note 20.

³³ HOOKED, *supra* note 15, at 10.

³⁴ *Id.*

³⁵ *Id.* at 10-11.

³⁶ *Id.* at 14.

relatively lower risks associated with the penalties of being caught with the contraband – those found smuggling or illegally fishing for totoaba faced no more (and often less) than 2 years in prison, compared to 10 to 25 years in prison and approximately 8,000 to 40,000 pesos (or approximately \$450 to \$2,240) for a narcotics conviction in Mexico.³⁷

The presence of the cartels in the totoaba trade has complicated the livelihoods of fishermen who might want to support themselves through legal fishing activity. The organized crime networks entered the totoaba trade with the same advantages they developed for the drug trade: “organization, established networks, routes, contacts, outlets, and sponsors in institutions.”³⁸ These networks have also begun to conduct fishing themselves, earning the name *narcobucheros* for their trade in both drugs and totoaba bladders.³⁹ Moreover, they have used their advantages to push out competition from the individual fishermen previously engaged in totoaba and other fishing (although some smaller-scale fishermen do still participate in totoaba fishing to support their families and supplement incomes).⁴⁰ In addition, some criminal organizations have conscripted local fishermen in their own illicit activities. Some fishermen are used as bait for law enforcement, sent into the protected zone in the Gulf of California to ensure that any enforcement boats will be distracted by the fishermen and allowing the traffickers’ speedboats with narcotics and other contraband to escape undetected.⁴¹ Other fishermen have been recruited by the organized criminal networks to fish on their behalf and are supplied with fishing gear and paid by the criminal groups.⁴² Thus, those who ask local fishermen to protect the endangered vaquita and totoaba must recognize that the fishermen would not only be giving up their own subsistence needs and the lucrative opportunities involved in the totoaba trade, but may also be taking great personal risk to defy the dangerous cartels.

B. International Totoaba Trafficking Routes

The organized criminal networks that have entered into totoaba fishing and trafficking operate in the same regions in Baja California and Sonora near the Gulf of California, and their trafficking methods mirror those used for drug trafficking.⁴³ These groups have also brought violence, drugs, weapons, and increased corruption into the totoaba trade, resulting in a number of deaths and attacks over which gangs control the trade networks.⁴⁴ Both Mexican organized

³⁷ *Id.* at 11.

³⁸ *Id.* at 14.

³⁹ *Id.* at 28.

⁴⁰ *Id.*

⁴¹ *Id.* at 14.

⁴² *Id.* at 28.

⁴³ *Id.* at 24, 31.

⁴⁴ *Id.* at 24.

criminal networks and Asian networks based in California participate in trafficking totoaba.⁴⁵

Totoaba are fished on the coasts of the Gulf of California, often in the towns of San Felipe and Puertocitos in Baja California. From there, the bladders are removed and the “wet” bladders are trucked by highway to go through a drying process in consolidation centers in the towns of San Luis Rio Colorado in Sonora, or Mexicali, Tijuana, or Ensenada in Baja California.⁴⁶ There are military checkpoints on these highways, known as *la ruta narcobuchera* (the *narcobucheros* route), where Mexican officials may detect and seize the bladders.⁴⁷ Because wet bladders are heavier than dry bladders, have a strong odor, and need refrigeration, it is easier for traffickers to smuggle dry bladders across borders.⁴⁸ From those larger cities, the bladders are dried and repackaged for export to the United States, and it becomes more difficult for officials to find or confiscate the bladders.⁴⁹ Any totoaba bladders seized by U.S. officials are usually detected at border crossings. Surprisingly, totoaba seizures have only occurred at the Calexico border crossing, whereas none have been seized at the San Luis Rio Colorado-Yuma crossing even though San Luis Rio Colorado is known as a major processing center.⁵⁰ This suggests that many totoaba bladders are successfully trafficked without interception at these locations.⁵¹

In addition to the Mexican trafficking networks, Asian organized crime has also long been involved in the trafficking of totoaba through Mexico, since Chinese people have immigrated to Baja California since the early 1900s.⁵² They developed strong Chinese communities in Mexicali in particular, opening bars, casinos, restaurants, and hotels, and had an underground tunnel system connecting bordellos and opium dens with Mexicali’s sister city Calexico across the border.⁵³ By 1920, the Chinese population of Mexicali outnumbered the Mexican population by 14:1 and developed control of prostitution and gambling rings, although the Mexican population in Mexicali later outnumbered the Chinese population after World War II.⁵⁴ The long history of Chinese immigrants in Mexico and their practice of smuggling goods across the U.S. border has proved an asset to their involvement in totoaba trafficking.⁵⁵ Many Chinese gangs not only participate in totoaba trafficking, but also in human trafficking and smuggling other endangered species, counterfeited goods, opium, chemicals that

⁴⁵ *Id.*

⁴⁶ *Id.* at 31.

⁴⁷ *Id.* at 31-33.

⁴⁸ *Id.* at 32.

⁴⁹ *Id.* at 31, 38.

⁵⁰ *Id.* at 47.

⁵¹ *Id.*

⁵² *Id.*

⁵³ *Id.*

⁵⁴ *Id.* at 47-48.

⁵⁵ *Id.* at 48.

can form methamphetamine, and other contraband across the U.S. border.⁵⁶ From the U.S., the dried totoaba bladders are hidden with other goods that are exported to China through commercial routes, such as fish or other food products, in air freight shipments or by sea.⁵⁷ This process will often involve false declarations on customs forms, mislabeling the products as a legal item.⁵⁸ The bladders can also be hidden in personal checked baggage of traffickers themselves or other individuals used as “mules.”⁵⁹

In 2008, a direct Aeromexico flight from Tijuana to Shanghai opened, causing the Chinese population in Tijuana to grow rapidly.⁶⁰ This flight also now provides a totoaba trafficking route directly from Mexico to China, without the need to smuggle the bladders across the U.S. border first.

II. Recent Efforts to Address Vaquita and Totoaba Catch

Thus far, much of the enforcement effort by governments and advocacy by nongovernmental organizations has been to put pressure and sanctions on the Mexican fishermen who intentionally fish for totoaba. One major problem with this approach is that these enforcement targets are fishermen whose livelihoods depend on fishing, and who live in remote coastal villages without other industries present to develop alternate sources of income. Efforts to prevent totoaba catch have focused mainly on the beginning of the totoaba supply chain without attempting to police other parts of the supply chain along the trafficking trade route, ultimately proving unsuccessful.

A. Legal Bans on Fishing Methods in Gulf of California

The Mexican government began taking action to address the large numbers of vaquita caught in gillnets by creating the Biosphere Reserve of the upper Gulf of California and Colorado River Delta in 1993.⁶¹ In 1997, the Mexican government created the International Committee for the Recovery of the Vaquita (CIRVA), bringing together scientists from Europe, the United States, and Mexico to determine, monitor, and reverse the causes of the vaquita's decline and create a vaquita recovery program.⁶² CIRVA's second meeting in 1999 concluded that gillnets, which can be used to catch totoaba as well as other fish, were the biggest threat to the vaquita's continued existence and recommended expansion of the Biosphere Reserve to include the entire known vaquita habitat.⁶³

⁵⁶ *Id.*

⁵⁷ *Id.* at 50-51.

⁵⁸ *Id.* at 52.

⁵⁹ *Id.* at 51.

⁶⁰ *Id.* at 48.

⁶¹ *Id.* at 12.

⁶² *Id.*

⁶³ *Id.*

In late 2005, gillnets were banned in a portion of the upper Gulf of California to create a gillnet-free Vaquita Refuge Zone.⁶⁴

Similarly, as described earlier, commercial fishing for totoaba has long been banned in the region and the totoaba was placed on domestic and international endangered species lists from the 1970s through 1990s. Nevertheless, thanks to limited law enforcement capacity and few prosecutions, fishing activity for totoaba continues, with the number of pangas (the small motor boats used by totoaba fishermen) doubling between the 1990s and 2004, and then doubling again from 2005 to 2007.⁶⁵

Efforts to reduce gillnet fishing more generally in the region, in order to reduce vaquita bycatch even in non-totoaba fishing operations, have not been successful. In 2006, a fisheries buyout program that would compensate fishermen for turning in their fishing permits and permanently leave the fishing sector was not successful because it did not also require them to turn in their fishing nets.⁶⁶ The program was restructured in 2008 to require that fishing gear be turned in as well as fishing permits, which initially did reduce the size of the legal fishing fleet—but had no effect on the number of pangas fishing illegally.⁶⁷

More recently, the Mexican government has made efforts to reduce illegal fishing and vaquita deaths and invested considerable time and resources, but these efforts may have only contributed to an increase in criminal activity.⁶⁸ Mexican President Enrique Peña Nieto declared a gillnet ban in April 2015, along with a compensation program to support fishermen who would lose significant income as a result of the ban.⁶⁹ The gillnet ban, initially intended to be in effect for two years, was made permanent in 2017.⁷⁰ The Mexican government created a registry of all fishermen, fishing permit holders, and fishing cooperatives in the region affected by the ban.⁷¹ The government distributed the replacement income through the listed permit holders and cooperative owners to then distribute further to their employees.⁷² Poor implementation of the reimbursement program caused it to have little impact on reducing gillnet fishing, with some saying the program was “deeply flawed.”⁷³ Some permit holders did not distribute the income to their

⁶⁴ *Id.*

⁶⁵ *Id.* at 11-13.

⁶⁶ *Id.* at 17.

⁶⁷ *Id.*

⁶⁸ *Id.* at 17, 19.

⁶⁹ *Id.* at 13.

⁷⁰ See Cliff White, *Mexico bans drift gillnets in Gulf of California in last-ditch effort to save vaquita*, SEAFOODSOURCE (July 7, 2017), <https://www.seafoodsource.com/news/environment-sustainability/mexico-bans-drift-gillnets-in-gulf-of-california-in-last-ditch-effort-to-save-vaquita>; see also *Gillnets are permanently banned in Gulf of California*, NAT'L AQUACULTURE & FISHERIES COMM'N, MEX. (June 30, 2017), <https://www.gob.mx/conapesca/articulos/se-prohiben-permanentemente-las-redes-agalleras-en-el-alto-golfo-de-california-114586?idiom=es>.

⁷¹ HOOKED, *supra* note 15, at 19-20.

⁷² *Id.*

⁷³ *Id.*

employees, or did not do so equitably, or gamed the system by listing their family members as employees to receive greater shares.⁷⁴ Meanwhile other individual fishermen complained they were not accounted for or compensated through the program, or that the payments were insufficient.⁷⁵ The failures of the compensation program may have counterproductively pushed otherwise law-abiding fishermen to enter the illegal totoaba trade.⁷⁶ Yet merely abandoning the flawed compensation program would not have provided a solution. Indeed, after the Mexican elections in 2018, the new administration of President Andrés Manuel López Obrador ended the compensation payments to fishermen by the time he took office in December 2018, resulting in fishermen returning to openly fishing in the upper Gulf of California.⁷⁷

B. Trade Sanctions on Fish Products from Gulf of California

Various conservation groups have also pursued trade sanctions imposed by the United States on imports of fish from the region of Mexico that vaquita and totoaba inhabit, in the hope that the lack of access to markets will prevent the fishermen from using gillnets to fish. One method that conservation groups have pursued is petitioning the U.S. Secretary of Commerce and Secretary of the Interior, under the Pelly Amendment⁷⁸ to the Fishermen's Protective Act, to certify that Mexico's failure to stem the growing trade and export of totoaba "diminishes the effectiveness" of CITES and place trade sanctions on Mexico.⁷⁹ In 2017, 30 Congressional Democrats signed a letter in support of the petition and efforts to impose a ban on U.S. imports of fish caught with gillnets in vaquita habitat.⁸⁰

However, the conservation groups met with no success on their Pelly Amendment petition to the relevant agencies. Seeing the continued drastic decline of the vaquita, the conservation groups then sued the U.S. Department of Commerce and other agencies in March 2018 in the U.S. Court of International Trade to seek a preliminary injunction banning all imports into the U.S. from Mexico of fish products caught with gillnets in the upper Gulf of California.⁸¹ They were successful, and in July 2018 the court granted the ban on gillnet-caught

⁷⁴ *Id.*

⁷⁵ *Id.*

⁷⁶ *Id.*

⁷⁷ Mark Stevenson, *Agency says government must pay fishermen to save vaquita*, ASSOCIATED PRESS (Oct. 24, 2019), <https://www.eenews.net/greenwire/stories/1061364419/>.

⁷⁸ 22 U.S.C. § 1978 (2018).

⁷⁹ Letter from Sarah Uhlemann & Brendan Cummings, Ctr. for Biological Diversity, Petition for Certification of Mexico pursuant to the Pelly Amendment for Trade in Violation of the Convention on International Trade in Endangered Species (Sept. 29, 2014), https://www.biologicaldiversity.org/species/mammals/vaquita/pdfs/Totoaba_Pelly_Petition_9_29_14.pdf.

⁸⁰ Jacqueline Tooth, *Democrats urge Interior, Commerce to protect the vaquita porpoise*, CQ ROLL CALL, 2017 WL 2874460 (July 6, 2017).

⁸¹ *NRDC Sues to Protect Vaquita Porpoise*, NAT. RES. DEF. COUNCIL (Mar. 21, 2018), <https://www.nrdc.org/experts/nrdc/nrdc-sues-protect-vaquita-porpoise>.

imports from the region.⁸² This ban was upheld on appeal to the Federal Circuit in May 2019.⁸³

Efforts to save the vaquita by addressing the international totoaba trade have also been made at the triannual meetings of the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES). Conservation group Sea Shepherd spoke on the floor of the meeting held in August 2019 (known as CoP18) to urge Mexico, with the assistance of other parties, to make more progress in enforcement against fishermen and traffickers.⁸⁴ The Environmental Investigation Agency (EIA) produced a report just ahead of the CoP18 meeting to urge additional action and full implementation of the agreements from CoP17 in 2016 to address the illegal totoaba trade.⁸⁵ This report concluded that Mexico had failed to stop illegal fishing for totoaba or crack down on the organized criminal networks.⁸⁶ Ultimately, the conference appears to have ended without the parties taking any concrete action, but merely urging Mexico to prevent illegal fishing within the vaquita refuge.⁸⁷

C. Fishermen Caught Between Survival and the Law

However, these efforts to punish the fishermen through fishing bans and trade sanctions do not address the demand for the totoaba bladders that continues without regard to the pressures on the producers in the supply chain. The bans on gillnet use in these waters and bans on U.S. imports of fish caught from these regions manifest as punitive measures that remove legal fishing as an option for impoverished fishing communities and result in driving them into illegal totoaba poaching activity.⁸⁸ Throwing poor fishermen in prison can alienate the local community and cause some communities to actively desire the extinction of the

⁸² *Court of Appeals Upholds U.S. Ban on Mexican Seafood Imports to Save Vaquita*, NAT. RES. DEF. COUNCIL (Nov. 28, 2018), <https://www.nrdc.org/media/2018/181128>.

⁸³ Kendal Blust, *Appeals Court Upholds Mexican Seafood Ban to Protect the Endangered Vaquita Porpoise*, KJZZ (May 29, 2019), <https://kjzz.org/content/969706/appeals-court-upholds-mexican-seafood-ban-protect-endangered-vaquita-porpoise>.

⁸⁴ *See Sea Shepherd's Recommendations Taken Seriously at CITES CoP18*, SEA SHEPHERD (Aug. 29, 2019), <https://seashepherd.org/2019/08/29/sea-shepherds-recommendations-taken-seriously-at-cites-cop-18/>.

⁸⁵ ENVTL. INVESTIGATION AGENCY, *CITES' LAST CHANCE: STOP THE ILLEGAL TOTOABA TRADE TO SAVE THE VAQUITA* (Aug. 2019), <https://eia-international.org/wp-content/uploads/EIA-report-citess-last-chance-single-pages-for-print.pdf>.

⁸⁶ *Id.*

⁸⁷ Press Release, CITES, *CITES responds to extinction crisis by strengthening international trade regime for wildlife* (Aug. 28, 2019), https://www.cites.org/eng/CITES_conference_responds_to_extinction_crisis_by_strengthening_international_trade_regime_for_wildlife_28082019.

⁸⁸ *See, e.g.*, Kendal Blust, *Vaquita's last stand: Fishermen want to help but need to feed their families, too*, CRONKITE NEWS (Nov. 22, 2018), <https://cronkitenews.azpbs.org/2018/11/22/competing-for-survival-vaquitas-last-stand-california-fisherman/>.

vaquita so they can return to their fishing livelihoods.⁸⁹ Meanwhile, the willing buyers of totoaba bladders remain eager to traffic the goods from Mexico into the U.S. and to their ultimate destinations.

Additionally, there are some fishermen who claim they are legally targeting other fish species, such as the curvina, and are committed to fishing in a way that does not harm vaquita. Curvina fishermen use gillnets to fish for curvina in a fishing season that overlaps with the totoaba season, but instead of leaving their gillnets hanging in the water, they encircle the curvina with the nets in a more active fishing method.⁹⁰ Although these curvina fishermen were not swept up by the gillnet bans, they were impacted by trade sanctions that apply to any fish products caught by gillnets that they seek to export to the United States (although totoaba poaching has continued at high rates regardless of these sanctions).⁹¹ Some advocates believe that the trade impacts to these curvina fishermen and others fishing legally during the totoaba season are necessary in order to reduce totoaba fishing because such non-totoaba activity can provide a cover for those engaging in illegal totoaba fishing, making enforcement against totoaba fishermen more difficult.⁹² However, advances in technology can assist with tracking curvina fishing boats that follow the laws and stay out of the vaquita protected zones,⁹³ and presents an argument that continued totoaba fishing is less about enforcement difficulty and more about the corruption and lack of political will that allows illegal totoaba fishing to occur in the open. Indeed, the conservation group Sea Shepherd recently reported that totoaba poachers have encircled totoaba schools in broad daylight, gutted the fish onboard, harvested the swim bladder and thrown the rest of the carcass overboard, with over 80 fishing skiffs participating at once to overwhelm the meager law enforcement presence.⁹⁴

I suggest that measures focused on enforcement further downstream in the supply chain could provide a more effective solution, with the potential to neutralize the midstream demand for totoaba and remove an important driver for totoaba catch. This suggestion mirrors the recommendations of conservation organizations such as Earth League International, which has investigated the totoaba supply chain and “believes that dismantling all the various networks associated with the totoaba black market is the best chance to end totoaba trafficking. This effort should begin with the middlemen—those Chinese

⁸⁹ See Vanda Felbab-Brown, *The Vanishing Vaquita and the Challenges of Combating Wildlife Trafficking*, BROOKINGS (June 5, 2017), <https://www.brookings.edu/blog/order-from-chaos/2017/06/05/the-vanishing-vaquita-and-the-challenges-of-combating-wildlife-trafficking/>.

⁹⁰ HOOKED, *supra* note 15, at 30.

⁹¹ *Id.*

⁹² *Id.*

⁹³ See, e.g., ENVTL. DEFENSE FUND, SMART BOATS AND NETWORKED FISHERIES 31 (Mar. 2019), <https://www.edf.org/sites/default/files/documents/SmartBoatVision.March2019.web.pdf>.

⁹⁴ Press Release, Sea Shepherd, Sea Shepherd Reveals Unbridled Poaching as 80 Skiffs Raid Habitat of Critically Endangered Vaquita Porpoise (Dec. 9, 2019), <https://seashepherd.org/2019/12/10/sea-shepherd-reveals-unbridled-poaching-as-80-skiffs-raid-habitat-of-critically-endangered-vaquita-porpoise/>.

nationals in Mexico who supply the market in China.”⁹⁵ I agree and would recommend that enforcement focus include all middlemen participating in the trafficking effort, to include both Mexican and Chinese nationals who are intermediate steps between the fishermen and the Chinese market. Moreover, as will be described later in the Article, the use of financial enforcement tools focused on the illegal trafficking activity occurring with downstream demand could be more effective than the use of environmental enforcement tools alone.

D. Prosecution of Traffickers Under Existing Environmental Law

Although there have been no major prosecutions of Mexican totoaba traffickers,⁹⁶ a few enforcement actions have occurred with limited success. Mexico has been more successful in seizing totoaba bladders during the trafficking process than the United States or China, in part because it is easier to detect the “wet” bladders before they have been processed (i.e., dried) and because they are often packaged with other goods as they are trafficked further in the supply chain, making them harder to identify as contraband.⁹⁷ Enforcement in the United States has generally stemmed from totoaba seizures at border crossings, with some examples of prosecution. However, the penalties resulting from prosecution in both the U.S. and Mexico have been insufficient to stem the flow of trafficked totoaba bladders across the border into the U.S. or directly from Mexico to Asia, or to prevent repeat offenses.⁹⁸

In one notable case, Jason Jin Shun Xie was arrested on March 30, 2013 while delivering 169 totoaba bladders in Calexico, California.⁹⁹ Investigations revealed that Xie had received wire transfers of over \$3 million over an eight-month period and was likely operating a network of shell companies, including a set of recycling companies and a restaurant, to launder the proceeds he received from totoaba trafficking.¹⁰⁰ None of these companies could reasonably explain the large amount of money transferred, but Xie had sent 15 FedEx packages declared as shipments of “dry fish gift” to the individual who had wired him \$2.3 million.¹⁰¹ The prosecutor in his case estimated those shipments contained at least 560 totoaba bladders worth about \$2.8 million to Xie, and would sell for much

⁹⁵ *OPERATION FAKE GOLD – the Totoaba Cartels and the Vaquita Extinction*, EARTH LEAGUE INT’L, <https://earthleagueinternational.org/operation-fake-gold/> (last visited Mar. 30, 2020).

⁹⁶ HOOKED, *supra* note 15, at 18.

⁹⁷ *Id.* at 55.

⁹⁸ *Id.* at 42 (“The recurring involvement of relatively few individuals in totoaba seizures at the border may indicate that totoaba trafficking efforts are often successful... [and] may also indicate that totoaba trafficking penalties are too low to act as a meaningful deterrent (with fines often as low as 10% or less of the price of one bladder), or that the chances of getting caught are low enough for traffickers to risk multiple attempts.”).

⁹⁹ *Id.* at 44.

¹⁰⁰ *Id.* at 44.

¹⁰¹ *Id.* at 45.

more in China.¹⁰² Ultimately, the criminal case resolved with Xie receiving a penalty of four months of jail time and eight months of house arrest, forfeiting the totoaba bladders he was caught with and his approximately \$350,000 Seattle home, and paying \$500,000 in restitution to a totoaba breeding facility in Mexico.¹⁰³

In another example, Song Shen Zhen was apprehended while crossing into the U.S. on April 10, 2013 at the Calexico West Port of Entry with 27 totoaba bladders hidden in plastic grocery bags under the floor mats of his vehicle.¹⁰⁴ Customs and Border Patrol agents seized one bladder for testing and permitted Zhen to leave, but followed him to his home in Calexico.¹⁰⁵ After obtaining a search warrant, the agents found 241 totoaba bladders spread out to dry as well as packaging materials for shipping the bladders overseas.¹⁰⁶ These bladders were conservatively estimated to be worth more than \$3.6 million overseas.¹⁰⁷ Charged with smuggling, Zhen was sentenced to one year in prison and payment of \$120,500 to Mexico's environmental protection agency.¹⁰⁸

However, these rare and disparate examples of prosecutions for totoaba trafficking have been viewed as insufficient to make an impact on vaquita populations by groups such as the Sea Shepherd Conservation Society that are closely watching the issue, and the outcomes do not even match the rhetoric the DOJ has employed to show it takes the problem seriously.¹⁰⁹ For example, although the DOJ highlighted in press releases the severity of potential sanctions totoaba traffickers faced, in the commentators' view, the actual sanctions that have been imposed "reflect a level of leniency unwarranted in the context of a species' imminent extinction."¹¹⁰ Overall, out of 11 DOJ prosecutions that had been conducted by May 2017, defendants had been sentenced in nine of the cases, and in all but one case each defendant was sentenced to either probation or the time served as they awaited trial.¹¹¹ These groups decry the sentence of only four months of jail given to Jason Xie, who was described as a "lead player in the

¹⁰² *Id.* at 45.

¹⁰³ *Id.* at 46.

¹⁰⁴ Press Release, U.S. Dep't. of Justice, U.S. Attorney's Office, S. Dist. of Cal., Fishy Business – Smuggle of Swim Bladders is Sentenced in Federal Court (Aug. 11, 2014), <https://www.justice.gov/usao-sdca/pr/fishy-business-smuggler-swim-bladders-sentenced-federal-court> [hereinafter Fishy Business].

¹⁰⁵ *Id.*

¹⁰⁶ *Id.*

¹⁰⁷ Press Release, U.S. Dep't. of Justice, U.S. Attorney's Office, S. Dist. of Cal., Massive Trade in Endangered Species Uncovered; U.S. Attorney Charges 7 with Smuggling Swim Bladders of Endangered Fish Worth Millions on Black Market; Officials See Trend (Apr. 24, 2013), <https://www.justice.gov/usao-sdca/pr/massive-trade-endangered-species-uncovered-us-attorney-charges-7-smuggling-swim>.

¹⁰⁸ Fishy Business, *supra* note 104.

¹⁰⁹ Letter from Elephant Action League & Sea Shepherd Conservation Soc'y to the Presidential Task Force on Wildlife Trafficking (May 24, 2017), https://www.kkc.com/assets/Site_18/files/resources/Rule%2012/5.25.2017%20Vaquita%20Letter%20FINAL.pdf [hereinafter Wildlife Trafficking Letter].

¹¹⁰ *Id.* at 7.

¹¹¹ *Id.*

trafficking, who coordinated cross-border smuggling.”¹¹² The most recent of those totoaba smuggling cases was investigated by the U.S. Fish and Wildlife Service and National Oceanic and Atmospheric Administration, and the guilty pleas in 2017 resulted in lax sentences of low fines and mere probation: five years for co-defendant June Lee plus \$15,000 in restitution, and two years for co-defendant Byung Cheoul Kim plus \$6,000 in restitution.¹¹³

III. Prosecution of Financial Crimes Can Provide Stronger Penalties Than the Underlying Environmental Crimes Alone

On the other hand, environmental crimes involving wildlife trafficking or illegal trade in protected species are often accompanied by financial crimes due to the illicit networks they must operate to smuggle their products to market. Wildlife traffickers, like other traffickers, must often cross international borders by bribing government officials, and the lack of legal financing for their trade in illegal products requires under-the-table cash transactions and laundering of the proceeds. As a result, a focus on and prosecution of those financial crimes can be more likely to bring an end to the environmental violations. For a domestic example, Carlos Rafael was a notorious member of the New England fishing industry and known for incorporating violations of fishing laws into his business operations. His frequent brushes with the law did not prevent his ongoing fishing violations until he was finally prosecuted for associated financial crimes. In the rare instances of totoaba trafficking prosecutions described earlier, any fines, jail sentences, and probation received (although minimal) were mainly due to charges of smuggling or conspiracy as opposed to the charges of importation of wildlife.¹¹⁴

A. Carlos Rafael Was Finally Held Accountable for Long History of Fishing Crimes—Due to Money Laundering and Tax Evasion

New England fishing magnate Carlos Rafael (also known as the “Codfather”) was, for decades, open about his tendency to violate fishing regulations over the course of his career, including those violations that were considered crimes,¹¹⁵ but he rarely received more than occasional slaps on the

¹¹² *Id.*

¹¹³ *Environmental Crimes Monthly Bulletin*, U.S. DEP’T. OF JUSTICE, ENV’T & NAT. RES. DIV. (Apr. 2017), <https://www.justice.gov/enrd/page/file/960696/download>.

¹¹⁴ Wildlife Trafficking Letter, *supra* note 109, at 11-12.

¹¹⁵ *See, e.g.*, John Doherty, *The Codfather*, NEW BEDFORD STANDARD-TIMES (Sept. 23, 2003, updated Jan. 13, 2011), <https://www.southcoasttoday.com/article/20030923/News/309239997>; Ben Goldfarb, *The Deliciously Fishy Case of the ‘Codfather’*, MOTHER JONES (Apr. 2017), <https://www.motherjones.com/environment/2017/03/codfather-carlos-rafael-fish-fraud-catchshares/> (“I am a pirate,” he once told regulators. “It’s your job to catch me.”).

wrist for his transgressions.¹¹⁶ Civil penalties from the National Marine Fisheries Service are generally less than \$500 per violation, are often adjusted up or down from the initial base penalty based on mitigating factors, and can be further reduced through the administrative appeals process¹¹⁷—and violations that rise to the level of a crime are rare and difficult to prove. In contrast, Rafael’s severest prior penalties had consistently resulted from his associated financial crimes, including: six months in prison for tax evasion in 1988; his indictment in 1994 (but ultimate acquittal) for fixing the price of fish he and competitors sold; and a guilty plea in 2001 for forging sales receipts, in order to qualify for fishing permits, that resulted in two years of probation and six months of home confinement.¹¹⁸

Indeed, this pattern continued into the present day for Rafael – until he was finally caught for good. When Rafael publicized that he was considering selling his business, undercover IRS agents posing as Russian mafia questioned why his asking price was so high when the official government documents valued his business much lower.¹¹⁹ This question led Rafael to explain his complex pattern of illegal conduct, which started from catching fish that was subject to strict quotas and falsely reporting the fish as some other abundant fish species instead on documents he submitted to the National Marine Fisheries Service, in violation of fisheries regulations.¹²⁰ He then sold that fish to a distributor who would help make the fish “disappear” in the New York City fish markets, in exchange for bags of cash that Rafael himself smuggled onto flights to Portugal (with the assistance of a law enforcement agent who helped him get the cash around airport security),¹²¹ where Rafael deposited the cash into Portuguese bank accounts to evade paying tax on the income.¹²²

When Rafael was finally indicted in January 2016 for the crimes that would ultimately remove him permanently from the fishing industry,¹²³ the charges that carried the most significant penalties were the conspiracy, smuggling,

¹¹⁶ Doherty, *supra* note 115 (“Over the years, Mr. Rafael’s been sued for fisheries violations almost too many times to count by the National Marine Fisheries office” and “he and his boats have been fined numerous times for violations”).

¹¹⁷ See *Penalty Policy and Schedules*, NAT’L OCEANIC & ATMOSPHERIC ADMIN. OFFICE OF GEN. COUNSEL, <https://www.gc.noaa.gov/enforce-office3.html> (June 27, 2019) (Summary Settlement Schedules and Penalty Policy).

¹¹⁸ Antonia Noori Farzan, *The ‘Cofather’ was a seafood kingpin, until fake Russian mobsters took him down. Now he’ll never fish again*, WASH. POST (Aug. 20, 2019), <https://www.washingtonpost.com/nation/2019/08/20/codfather-fishing-russian-mobsters-carlos-rafael/>; See also Doherty, *supra* note 115 (additional details about other New England fishermen heavily involved in smuggling and money laundering).

¹¹⁹ Goldfarb, *supra* note 115.

¹²⁰ E.g., Press Release, U.S. Dep’t. of Justice, U.S. Attorney’s Office, Dist. of Mass., Owner of One of the Nation’s Largest Commercial Fishing Businesses Sentenced for Falsifying Records & Smuggling Proceeds Abroad (Sept. 25, 2017), <https://www.justice.gov/usao-ma/pr/owner-one-nation-s-largest-commercial-fishing-businesses-sentenced-falsifying-records> [hereinafter *Fisherman Sentenced*].

¹²¹ Goldfarb, *supra* note 115.

¹²² *Fisherman Sentenced*, *supra* note 120.

¹²³ Farzan, *supra* note 118.

and tax evasion charges, rather than the 23 counts of false labeling violations under the Lacey Act for the environmental crimes at the heart of his activity.¹²⁴ The 23 counts of Lacey Act false labeling violations, together, carried a maximum penalty of no greater than five years in prison and a fine of \$250,000, whereas merely two counts of falsifying federal records under statutory provisions of the Sarbanes-Oxley Act¹²⁵ allowed a maximum of 20 years in prison and a fine of \$250,000.¹²⁶ Meanwhile, the lone count of bulk cash smuggling in Rafael's indictment provided for a maximum sentence of five years and a fine of \$250,000; similarly, the count of conspiracy and tax evasion provided for no greater than five years in prison and a fine of \$250,000.¹²⁷

Ultimately, Rafael's criminal prosecution ended in September 2017 when he pleaded guilty to all counts and was sentenced to 46 months in prison, three years of supervised release, a fine of \$200,000, restitution to the U.S. Treasury of \$108,929, and forfeiture of a few fishing vessels.¹²⁸ His civil and administrative case before the National Oceanic and Atmospheric Administration (NOAA) resolved in August 2019 with a settlement providing that Rafael pay a \$3 million civil monetary penalty, relinquish his seafood dealer permit, permanently cease all commercial fishing, and sell all his federal fishing and vessel permits through transactions approved by NOAA to ensure the permits were not merely transferred to related or similarly fraudulent entities.¹²⁹ This robust outcome against the notorious kingpin of New England fisheries is likely intended to set an example for others and represents a much-deserved accounting of Rafael's crimes over the years. It remains to be seen whether NOAA's future enforcement actions and the DOJ's prosecutions of bad actors will incorporate the lessons that finally

¹²⁴ Indictment, *United States v. Rafael*, No. 16-cr-10124-WGY (D. Mass. 2016), https://sherloc.unodc.org/res/cld/case-law-doc/criminalgroupcrimetype/usa/united_states_of_america_v_carlos_a_rafael_html/Codfather_Carlos_Rafael_indictment.pdf.

¹²⁵ These were charges made under 18 U.S.C. § 1519, the "provisions of the Sarbanes-Oxley Act dealing with destruction of evidence. [...] The act is generally regarded as the federal government's attempt to regulate the financial practices of corporations." Louise Smith & David J. Grindle, *Sarbanes-Oxley Evidence Destruction Statute has Much Wider Impact than on Just Business Cases*, THE FEDERAL LAWYER (July 2011), http://www.fedbar.org/Resources_1/Federal-Lawyer-Magazine/2011/July/Features/Sarbanes-Oxley-Evidence-Destruction-Statute-Has-Much-Wider-Impact-Than-on-Just-Business-Cases.aspx?FT=.pdf.

¹²⁶ Press Release, U.S. Dep't. of Justice, U.S. Attorney's Office, Dist. Of Mass., Owner of One of the Largest Commercial Fishing Businesses in U.S. Pleads to Falsifying Records & Smuggling Proceeds Abroad (Mar. 30, 2017), <https://www.justice.gov/usao-ma/pr/owner-one-largest-commercial-fishing-businesses-us-pleads-falsifying-records-smuggling> [hereinafter *Fisherman Pleads Guilty*].

¹²⁷ *Id.*

¹²⁸ *Fisherman Sentenced*, *supra* note 120.

¹²⁹ Press Release, Nat'l Oceanic and Atmospheric Admin., Details of the Settlement of the Government's Civil Case Against Carlos Rafael and His Fishing Captains (Aug. 19, 2019), <https://www.fisheries.noaa.gov/new-england-mid-atlantic/enforcement/details-settlement-governments-civil-case-against-carlos>.

ended Rafael's long career in fraudulent activity and more regularly include charges for associated financial crimes.

It is also significant to note that the investigation that led to Rafael's indictment was conducted by agents of the Internal Revenue Service¹³⁰ rather than the enforcement arms of the National Marine Fisheries Service, and his prosecution was overseen by the sections within the Department of Justice that prosecute financial crimes rather than the DOJ's environmental or natural resources divisions.¹³¹ The successful prosecution of Carlos Rafael is likely due to this arrangement, as NOAA's Office of Law Enforcement often faces limited resources and the challenge of enforcing its rules over the open ocean.¹³² This challenge requires NOAA to enter into cooperative and joint enforcement agreements with the U.S. Coast Guard and coastal state enforcement agencies who may not be knowledgeable of the specific fisheries violations involved in federal fishery management.¹³³ A more sustained cooperation with other enforcement agencies can bring additional resources to bear that environmental enforcement lacks on its own and lead to successful prosecutions of the full range of crimes committed by the offenders.

Although I offer the Rafael example as one in which he was successfully prosecuted and received heavy penalties for his history of crimes, I do not necessarily advocate that higher jail sentences are the only or most effective type of penalty that could be imposed. Indeed, recognizing that there has been a general trend of overcriminalization in the U.S. and the discourse is moving away from the use of incarceration as a reflexive solution, I would suggest that the higher financial penalties associated with the prosecution of financial crimes may also be the more appropriate penalties to apply in the context of environmental crimes. The application of more aggressive financial sanctions and fines would more effectively cripple the illegal commercial activity of those who incorporate such violations of environmental and financial laws into their unlawful business operations.

¹³⁰ See Affidavit of Special Agent Ronald Mullett in Support of Criminal Complaint, United States v. Rafael, No. 16-cr-10124-WGY (D. Mass. 2016), https://sherloc.unodc.org/cld/case-law-doc/criminalgroupcrimetype/usa/2016/united_states_of_america_v._carls_a._rafael.html.

¹³¹ See Fisherman Pleads Guilty, *supra* note 126 (identifying the attorney prosecuting the case as within the DOJ's Economic Crimes Unit).

¹³² See generally Valentin Schatz, *Marine Fisheries Law Enforcement Partnerships in Waters Under National Jurisdiction: The Legal Framework for Inter-State Cooperation and Public-Private Partnerships with Non-Governmental Organizations and Private Security Companies*, 32 OCEAN Y.B. 1 (2018), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2987883 (noting key difficulties that exist in policing fishing industry).

¹³³ See *Cooperative Enforcement*, NAT'L OCEANIC & ATMOSPHERIC ADMIN., <https://www.fisheries.noaa.gov/topic/enforcement#cooperative-enforcement>; OFFICE OF INSPECTOR GEN., U.S. DEP'T. OF COMMERCE, NOAA'S MANAGEMENT OF THE JOINT ENFORCEMENT PROGRAM NEEDS TO BE STRENGTHENED (Sept. 30, 2008), <https://ntrl.ntis.gov/NTRL/dashboard/searchResults/titleDetail/PB2009102653.xhtml>.

B. Money Laundering and Financial Crimes Are Common to International Wildlife Trafficking Networks and Should Be Charged Simultaneously

It is certainly appropriate to apply the financial crimes framework to environmental crimes, in particular because many environmental crimes are concurrent with other crimes. Wildlife trafficking in particular often depends on the same smuggling networks that conduct drug trafficking and other financial criminal activity both within individual countries and internationally. For example, some commentators highlight the potential of the Money Laundering Control Act of 1986¹³⁴ to impose harsher penalties on wildlife traffickers engaged in concurrent money laundering crimes.¹³⁵ Such penalties include prison terms far longer than those provided in conservation statutes such as the Lacey Act, and criminal and civil forfeiture of all property involved in the money laundering crime.¹³⁶ The passage in 2016 of the Eliminate, Neutralize, and Disrupt (END) Wildlife Trafficking Act has also added certain conservation statutes (notably, criminal violations under the Endangered Species Act) to the predicate offenses of the Money Laundering Control Act, but has not yet yielded results in the form of prosecution for money laundering cases that cite these new wildlife offenses.¹³⁷ More changes to the money laundering statutes should also occur to make them more effective in the wildlife trafficking space, for example by adding the Lacey Act to the predicate offenses, which would expand the ability to prosecute any type of illegal wildlife trafficking rather than relying on species-specific offenses.¹³⁸ Another option could be to change the laws to strengthen the maximum penalties and sentences available when charging a defendant for environmental trafficking under the Lacey Act to reflect a higher societal value on preventing crimes against the environment and wildlife. Both of these options involving further changes to statute would require the passage of legislation through the U.S. Congress, which is never an easy feat.

Some environmental lawyers who are steeped in wildlife trafficking and endangered species advocacy and prosecution have begun to advocate for a similar integration of the tools that target financial crimes into the wildlife arena. John Cruden, former Assistant Attorney General for the Environment and Natural Resources Division at the DOJ, reflected at the end of his term in the Obama Administration on the signs of progress being made to address wildlife trafficking.¹³⁹ The END Wildlife Trafficking Act of 2016, which followed

¹³⁴ 18 U.S.C. §§ 1956-1957 (2018).

¹³⁵ Vanessa Dick, *Dirty Money and Wildlife Trafficking: Using the Money Laundering Control Act to Prosecute Illegal Wildlife Trade*, 49 ELR 10334 (Apr. 2019).

¹³⁶ *Id.* at 10338.

¹³⁷ *Id.* at 10339-40.

¹³⁸ *Id.*

¹³⁹ John C. Cruden & David S. Gualtieri, *Toward a More Coordinated, Integrated Response to Wildlife Trafficking and other Natural Resource Crime*, 12 U. PENN. ASIAN L. REV. 23 (2016).

President Obama's July 2013 Executive Order establishing the Task Force on Wildlife Trafficking and subsequent strategies and implementation plans, recognizes a "collaborative, interagency approach" to address wildlife trafficking and gives the agencies additional tools.¹⁴⁰ Congress also provided at least \$180 million for federal agencies to combat wildlife trafficking for fiscal years 2014-2016.¹⁴¹ Cruden celebrates the increased penalties faced by those prosecuted for wildlife trafficking, although he only vaguely refers to such penalties when discussing totoaba prosecutions conducted under "Operation Totoaba Drama," an enforcement initiative led by the Department of Homeland Security Immigration and Customs Enforcement.¹⁴² Cruden recognizes that U.S. enforcement efforts can be improved, including an "increased emphasis on prosecution and conviction rates in source and transit countries" rather than merely on arrest and seizure figures, and better coordination between agencies that often work in isolation.¹⁴³ Recognizing that wildlife trafficking is often accompanied by many other crimes (such as false documentation, mislabeling, forgery, fraud, customs violations, tax offenses, money laundering, bribery, conspiracy, official corruption, and smuggling), one of Cruden's recommendations includes charging defendants with all related criminal activity and pushing for significant criminal penalties.¹⁴⁴ He also recommends "addressing the broader criminal enterprise (from middle-men to financiers)" and "attacking the financial heart of transnational criminal organizations through prosecution of financial crimes...and using legal tools to freeze, seize, and forfeit the natural resources being trafficked, instrumentalities, and illicit proceeds derived from trafficking."¹⁴⁵

But conservation organizations recognize that these efforts have been insufficient. The National Whistleblower Center, Elephant Action League and Sea Shepherd have noted that efforts to date to address the vaquita's pending extinction and the illegal trade in totoaba swim bladders have failed to adequately uncover the scope of financial crimes being conducted.¹⁴⁶ They note that investigations into totoaba traffickers did not appear to examine the defendants' bank records or electronic media "to identify other traffickers and/or learn the full scope of the networks," or subject them to wiretaps to uncover the same.¹⁴⁷ And in very few cases was the apprehended trafficker used to identify the U.S. recipients of the bladders, which would help uncover the larger trade networks and criminal participants downstream beyond the immediate next layer.¹⁴⁸ Indeed, as they noted, "no apparent attempts were made to identify upstream and downstream violations of the law – such as bribery, money laundering, wire fraud, or falsified customs documents – despite the fact that these types of

¹⁴⁰ *Id.* at 25-26.

¹⁴¹ *Id.*

¹⁴² *Id.* at 34-37.

¹⁴³ *Id.* at 45-46.

¹⁴⁴ *Id.* at 53.

¹⁴⁵ *Id.* at 50-53.

¹⁴⁶ Wildlife Trafficking Letter, *supra* note 109, at 8.

¹⁴⁷ *Id.*

¹⁴⁸ *Id.*

activities regularly facilitate and accompany trafficking.”¹⁴⁹ Moreover, they view the vaunted government efforts to target totoaba traffickers via “Operation Totoaba Drama” as a failure for a number of reasons: 1) the operation was only initiated in 2013, 2) resulted in mild sanctions imposed on the individuals caught with totoaba bladders, and 3) was followed soon after by an apparent reduction in totoaba enforcement efforts which “suggests that the effort was more a short-term experiment than a strategic plan to save the vaquita from extinction.”¹⁵⁰

C. Expand Use of Statutory Tools Beyond the Lacey Act

Additional statutes passed in recent years may also provide an opportunity to address environmental crimes occurring further downstream in the totoaba supply chain and financially stymie the wildlife traffickers. For example, the U.S. Congress passed the Global Magnitsky Act in 2016, expanding on an earlier 2012 law passed to sanction Russian officials engaged in human rights violations.¹⁵¹ The expanded Global Magnitsky Act empowers the Secretary of the Treasury, in consultation with the Secretary of State and the Attorney General, to freeze the assets of people of any country considered responsible for corruption and human rights violations.¹⁵² The Treasury Secretary may freeze assets that are within the control of the United States or its citizens, may impose these sanctions without prior notice but based on “credible evidence” to support the sanctions, and may lift the sanctions at the Secretary’s discretion.¹⁵³ For this reason, the Global Magnitsky Act is viewed as a “powerful weapon in the executive branch’s arsenal because it is empowered to unilaterally freeze the assets of allegedly corrupt actors worldwide.”¹⁵⁴ The use of financial sanctions and freezing U.S.-controlled assets as punishment is seen as particularly effective against corrupt actors who have amassed their wealth in unstable countries and seek to secure that wealth in banks and properties in the U.S. and Europe, because the addition of their name to a Magnitsky List pressures Western financial institutions to close their accounts.¹⁵⁵

Although some note that President Trump has “established a poor track record for promoting human rights” during the early portion of his term in

¹⁴⁹ *Id.*

¹⁵⁰ *Id.* at 9.

¹⁵¹ *The U.S. Global Magnitsky Act: Questions and Answers*, HUMAN RIGHTS WATCH (Sept. 13, 2017), <https://www.hrw.org/news/2017/09/13/us-global-magnitsky-act#>.

¹⁵² *Implementation of the Global Magnitsky Act: What Comes Next?*, CTR. FOR THE ADVANCEMENT OF PUBLIC INTEGRITY (Sept. 20, 2018), <https://www.law.columbia.edu/https%3A/www.law.columbia.edu/public-integrity-/magnitsky-implementation>.

¹⁵³ *Id.*

¹⁵⁴ *Id.*

¹⁵⁵ See Bill Browder, *We Must Use the Global Magnitsky Act to Punish the Killers of Jamal Khashoggi*, TIME (Oct. 15, 2018), <https://time.com/5424504/bill-browder-khashoggi-magnitsky-act-saudi-arabia/>.

office,¹⁵⁶ and thus his Administration's efforts against corruption may suffer from "selective enforcement" while failing to impose sanctions against allies,¹⁵⁷ the opportunity still exists to hold corrupt actors accountable via the Magnitsky Act. Indeed, the Trump Administration became more active in using the Global Magnitsky Act to impose sanctions in 2018 and 2019 against individuals in countries such as Iraq, South Sudan, and Nicaragua for human rights abuses and corruption.¹⁵⁸ In December 2017, thirteen people and 39 affiliated individuals and business entities were sanctioned from a variety of countries, including private businessman and mining magnate Dan Gertler for millions of dollars' worth of corrupt oil and mining deals in the Democratic Republic of the Congo.¹⁵⁹ In May 2019, the Treasury formally designated Roberto Sandoval Castaneda, former governor of the Mexican state of Nayarit, under the Global Magnitsky Act for corruption including misappropriation of state assets and accepting bribes from drug trafficking organizations.¹⁶⁰

The Treasury should evaluate whether imposition of sanctions under the Global Magnitsky Act can be appropriate against totoaba traffickers with assets in or controlled by the United States, and provide an effective means to stem the demand for totoaba bladders that results in both totoaba overfishing and harm to the vaquita. Further investigation, conducted by the government as well as outside groups, of the specific individuals involved in totoaba trafficking will help the Treasury in this evaluation. Given the significant overlap between drug traffickers and totoaba traffickers, and the recent designation under the Global Magnitsky Act of those benefitting from corruption involved with Mexican drug trafficking, expanding this tool against totoaba traffickers may not be too far a stretch. Moreover, application of the financial tools available under the Global Magnitsky Act could accomplish for critically endangered species what fishing bans have not. The important investigative work conducted by conservation organizations into the organized criminal networks involved in totoaba trafficking can lay the foundation for the U.S. government's imposition of financial sanctions against the traffickers. For example, the nonprofit organization C4ADS has reported that the Aispuro network in Mexico is associated with the Sinaloa drug cartel and has ties to public officials and police, engaging in both public corruption and trafficking of totoaba as well as firearms and narcotics.¹⁶¹ The nonprofit Environmental

¹⁵⁶ HUMAN RIGHTS WATCH, *supra* note 151.

¹⁵⁷ CTR. FOR THE ADVANCEMENT OF PUBLIC INTEGRITY, *supra* note 152.

¹⁵⁸ See Press Releases, U.S. Dep't. of State, Global Magnitsky Act, <https://www.state.gov/global-magnitsky-act/> (last visited Mar. 30, 2020).

¹⁵⁹ CTR. FOR THE ADVANCEMENT OF PUBLIC INTEGRITY, *supra* note 152; Press Release, U.S. Dep't. of Treasury, United States Sanctions Human Rights Abusers and Corrupt Actors Across the Globe (Dec. 21, 2017), <https://home.treasury.gov/news/press-releases/sm0243>.

¹⁶⁰ Press Release, U.S. Dep't. of Treasury, Treasury Works with Government of Mexico Against Perpetrators of Corruption and their Networks (May 17, 2019), <https://home.treasury.gov/news/press-releases/sm692>.

¹⁶¹ AUSTIN BRUSH, C4ADS, STRINGS ATTACHED: EXPLORING THE ONSHORE NETWORKS BEHIND ILLEGAL, UNREPORTED, AND UNREGULATED FISHING 40 (Aug. 13, 2019), <https://static1.squarespace.com/static/566ef8b4d8af107232d5358a/t/5d7022301845f300016ee532/1567629912450/Strings+Attached.pdf>. The report also notes that illegal fishing operations often include human

Investigation Agency (EIA) has also uncovered Chinese-led criminal groups operating totoaba processing facilities in Mexico City and Culiacán, and sourcing the totoaba bladders from the Sinaloa drug cartels.¹⁶² Notably, EIA reports that some of the marine products businesses trafficking totoaba bladders are being financed by investors based in San Diego, California, suggesting that U.S.-based financial sanctions could impact the viability of these trafficking operations.¹⁶³ Moreover, as the development of direct flights from Mexico to China has reduced the need for traffickers to pass totoaba bladders through the United States first (where they could be discovered by U.S. law enforcement),¹⁶⁴ the application of sanctions against traffickers to freeze their U.S. assets may be one of the few options remaining to U.S. law enforcement to disrupt totoaba trafficking operations and stem the flow of funds.

There may also be a number of additional relevant tools available from the lengthy and well-resourced war on drugs and efforts against terrorism. The Global Magnitsky Act designation and sanctions imposed on Roberto Sandoval Castaneda in May 2019 were accompanied by designations pursuant to the Foreign Narcotics Kingpin Designation Act of a Mexican magistrate judge who received bribes from narcotics traffickers, and other individuals and organizations linked to Castaneda.¹⁶⁵ Thus, financial sanctions under the Kingpin Act may be a helpful resource against the traffickers involved in both the narcotics and totoaba trade. Broad counterterrorism measures that provide similar sanctions authority may also be relevant; for example, both the Bush and Trump administrations have created counterterrorism sanctions regimes under the International Emergency Economic Powers Act,¹⁶⁶ and President Trump has indicated his desire to designate Mexican drug cartels as terrorist groups.¹⁶⁷ The plentiful resources available for both counterterrorism and drug enforcement, in particular compared to the resources available for environmental enforcement, as well as a plethora of other asset seizure and forfeiture tools available to law enforcement, could provide a useful way for disparate agencies to collaborate to achieve complementary goals.

trafficking and forced labor, which may also be an area of overlap with the Magnitsky Act's goal of sanctioning people who are responsible for human rights abuse. *Id.*

¹⁶² ENVTL. INVESTIGATION AGENCY, *supra* note 85.

¹⁶³ *Id.* at 8.

¹⁶⁴ MARY UTERMOHLEN & PATRICK BAINE, C4ADS, IN PLANE SIGHT: WILDLIFE TRAFFICKING IN THE AIR TRANSPORT SECTOR 136 (Aug. 6, 2018), <https://c4ads.org/environmental-crimes-fusion-cell>.

¹⁶⁵ U.S. Dep't. of Treasury, *supra* note 160.

¹⁶⁶ CTR. FOR THE ADVANCEMENT OF PUBLIC INTEGRITY, *supra* note 152.

¹⁶⁷ See, e.g., Christopher Meme & Kirk Semple, *Trump Says He Will Delay Terrorist Designation for Mexican Cartels*, N.Y. TIMES (Dec. 6, 2019), <https://www.nytimes.com/2019/12/06/us/trump-drug-cartels-terrorists.html>.

IV. Conclusion

In summary, endangered species issues are often part of broader wildlife trafficking operations that cross international borders, and these trafficking operations are often conducted by the same organized crime networks that traffic other types of contraband. Therefore, the focus of enforcement efforts against these wildlife crimes should target the traffickers and the downstream demand that drives the upstream actors, often impoverished people, to seek out the endangered species. In addition, efforts to address these endangered species issues should be given a similarly high priority and receive a similar level of resources as other efforts to combat criminal financial and trafficking operations, or be conducted jointly with those efforts. As exemplified in the case of totoaba trafficking, the transnational security organization C4ADS notes that “[w]ithout a concerted effort to dismantle the entirety of the totoaba supply chain within Mexico and other jurisdictions, the totoaba mafia will continue to operate with impunity.”¹⁶⁸

Fortunately, some legal tools already exist to combat the trafficking efforts more effectively, or could be strengthened by small changes to the law. Moreover, the trafficking and organized crime networks that form an essential part of the international wildlife trade can be effectively targeted through more coordinated and sustained use of financial enforcement tools that target the money laundering, smuggling, and other crimes that go hand in hand with the underlying environmental crimes. Environmental enforcement and criminal prosecution efforts should charge defendants with the associated financial crimes they commit to ensure sentences act as an appropriate deterrent, and incorporate the sanctions tools that can disrupt trafficking networks by seizing criminal proceeds and preventing criminal organizations and individuals from accessing ill-gotten funds. Rather than relying on the meager criminal penalties included within environmental statutes alone, the combination of greater resources for prosecution of the associated financial crimes with the greater penalties available for these crimes is likely to be more effective in combating the underlying environmental crimes occurring with wildlife trafficking. The use of these additional tools and resources could finally be the key to dismantling the illegal totoaba trade and saving the vaquita, as well as the many other endangered species currently at risk due to illegal wildlife trafficking.

¹⁶⁸ HOOKED, *supra* note 15, at 55.