

SUSTAINABLE DEVELOPMENT LAW & POLICY



EXPLORING HOW TODAY'S DEVELOPMENT AFFECTS FUTURE GENERATIONS AROUND THE GLOBE

In This Issue:

COMPARATIVE INTERNATIONAL APPROACHES TO ENVIRONMENTAL CHALLENGES

- 2 | EDITORS' NOTE
by Brianna DelDuca and Hannah Gardenswartz
- 4 | THE USE OF THE REGULAR MILITARIES FOR NATURAL DISASTER ASSISTANCE: CLIMATE CHANGE AND THE INCREASING NEED FOR CHANGES TO THE LAWS IN THE UNITED STATES, CHINA, JAPAN, THE PHILIPPINES, AND OTHER COUNTRIES
by Donald D.A. Schaefer
- 19 | THE RIGHT TO LEGALLY SOURCED LUMBER? HOW THE EFFECTIVE ENFORCEMENT OF THE LACEY ACT IS A U.S. HUMAN RIGHTS OBLIGATION AND CRITICAL TO PREVENTING ABUSE IN THE ILLEGAL LOGGING INDUSTRY
by Melanie Hess

<https://www.wcl.american.edu/impact/initiatives-programs/environment/student-activities>

EDITORS' NOTE

Dear Readers,

The *Sustainable Development Law & Policy Brief (SDLP)* is celebrating twenty years of legal scholarship on issues related to environmental, energy, and international development law. We are honored to be the Editors-in-Chief at this pivotal moment in *SDLP*'s history. Over the past twenty years, *SDLP* has addressed cutting-edge legal issues developing within international environmental law. This year is no different. We continue to publish articles that push the limits of legal theory and policy, while giving a space for students to be involved in the conversation.

This issue focuses on how different countries around the world are using their laws and resources to respond to challenges with international ramifications and impacts. From climate change to deforestation, the challenges addressed are global in scope, but the solutions provided in this issue show how existing legal mechanisms can be used to meet these global challenges. Schaefer outlines military-based responses to climate change, and Hess describes how U.S. and Peruvian trade laws can combat the illegal lumber trade. The articles present hopeful and practical approaches because the solutions provided are creative uses of already-existing mechanisms.

We would like to thank all the article and feature authors for their insights and dedication to raising important legal issues. We would also like to thank the professors, e-board, staff, and publisher of *SDLP* for making this publication possible. *SDLP* is a team endeavor, so everyone's effort is so appreciated. Finally, we would like to thank our readers, whose involvement and investment in *SDLP* are the reasons that we have been able to create this publication for twenty years.

Sincerely,



Brianna DelDuca and Hannah Gardenswartz

Features:

- 15 | LAKE ERIE BILL OF RIGHTS GETS THE AX: IS LEGAL PERSONHOOD FOR NATURE DEAD IN THE WATER?
by Devon Alexandra Berman
- 17 | AN ACE UP THEIR SLEEVE OR A HOUSE OF CARDS: CAN THE EPA'S AFFORDABLE CLEAN ENERGY RULE WITHSTAND CHEVRON DEFERENCE?
by Shannon Zaret
- 31 | STATE PREEMPTION AND SINGLE USE PLASTICS: IS NATIONAL INTERVENTION NECESSARY?
by Ethan D. King

To subscribe to the Sustainable Development Law & Policy Brief, email our Managing Editor at sdlp.wcl@gmail.com

ABOUT SDLP

The Sustainable Development Law & Policy Brief (ISSN 1552-3721) is a student-run initiative at American University Washington College of Law that is published twice each academic year. The *Brief* embraces an interdisciplinary focus to provide a broad view of current legal, political, and social developments. It was founded to provide a forum for those interested in promoting sustainable economic development, conservation, environmental justice, and biodiversity throughout the world.

Because our publication focuses on reconciling the tensions found within our ecosystem, it spans a broad range of environmental issues such as sustainable development; trade; renewable energy; environmental justice; air, water, and noise regulation; climate change; land use, conservation, and property rights; resource use and regulation; and animal protection.

The Sustainable Development Law & Policy Brief prints in accordance with the standards established by the Forest Stewardship Council ("FSC") that are designed to eliminate habitat destruction, water pollution, displacement of indigenous peoples, and violence against people and wildlife that often accompanies logging. Achieving FSC Certification requires that every step of the printing process, from lumber gathering to transportation to printing to paper sorting, must comply with the chain of custody established by the FSC which runs a strict auditing system to maintain the integrity of their certification process.

Currently, FSC certification is one of four methods a publisher can employ to ensure its publications are being produced using the best sustainable practices. It is the method practiced by our printer, HBP, Inc. (FSC Chain-of-Custody Certification: SWCOC-002553).

To purchase back issues please contact William S. Hein & Co. at hol@wshein.com. To view current and past issues of the publication please visit our website at <http://www.sd.lp.strikingly.com>. Current and past issues are also available online through HeinOnline, LexisNexis, Westlaw, vLex, and the H.W. Wilson Company. Please note that Volume I and Volume II, Issue 1 are published as *International and Comparative Environmental Law*.

Printed by HBP, Inc., Hagerstown, MD.

Editors-in-Chief

Brianna DelDuca, 3L
Hannah Gardenswartz, 3L

Senior Editorial Board

Executive Editor Adam Gould, 3L

Managing Editor Kate Juon, 3L

Senior Features Editor Philip Killeen, 2L

Articles Editor Amanda Tomack, 3L

Symposium Editor Amanda Stoner, 3L

Associate Features Editor Victoria Khaydar, 2L

Senior Editors Ethan King, 4L; Daniel Tillman, 3L;
Alexis Bauman, 2L; Keanu Bader, 2L

Staff

Will Alexakos, 2L; Mara Elisa Andrade, LL.M.; Kubra Babaturk, 1L; Creighton Barry, 3L; MacKenzie Battle, 2L; Devon Berman, 2L; Max Borger, 3L; Hector Contreras, 2L; Casey Crandell, 2L; Kimberly Davis, 2L; Gabrielle Feulner, 1L; Jackson Garrity, 2L; Lydia Hanson, 2L; Sydney Helsel, 1L; Saideh Herrera, 1L; Madison Howard, 2L; Nic Johnson, 2L; Ruslan Klafehn, 2L; Ismaat Klaibou, 1L; Juan Moreno, 3L; Nivea Ohri, 2L; Maya Patel, 1L; Savannah Pugh, 3L; Maren Taylor, 2L; Mariya Tikhonova, 1L; William Wetter, 2L; Shannon Zaret, 2L



THE USE OF THE REGULAR MILITARIES FOR NATURAL DISASTER ASSISTANCE:

CLIMATE CHANGE AND THE INCREASING NEED FOR CHANGES TO THE LAWS IN THE UNITED STATES, CHINA, JAPAN, THE PHILIPPINES, AND OTHER COUNTRIES

By Donald D.A. Schaefer*

INTRODUCTION

Today's environment has been changing, with ever-more hurricanes, typhoons, and cyclones becoming stronger and causing increasing damage to lives, communities, and countries as a whole. For the most part, the response time has been slow due to bureaucratic missteps and other top-down governance. Regular militaries have often been brought in haphazardly, and in many cases toward the end of the event. Militaries around the world should find ways to allow more effective use in assisting natural disaster efforts. Currently, politicians call in the military more as an afterthought when things start to get catastrophic, but by that time it is often too late. Instead, countries should have a plan in place for a single call from the president, prime minister, or other national leader to his or her military leader(s) to mobilize military forces when an event such as a category 5 typhoon or hurricane is approaching. Many nations will need to change their laws, revise their plans, and provide ongoing training for both military leaders and personnel to ensure that such protocols are allowed, understood, and implemented. With increased climate change and the impact that it is having, such action will become increasingly necessary: millions of lives will depend upon changes to many nations' current internal laws regarding local and international disaster assistance in order to survive.

This paper examines four developed nations that all face frequent natural disasters and that also share troubled histories concerning cooperating on military matters: the United States, China, Japan, and the Philippines. These nations were chosen to complete a comparative analysis with the United States. The selected countries were chosen from the Asia-Pacific region, which has continued to experience some of the greatest impacts from typhoons, flooding, and earthquakes, and to survey a variety of governmental policies. The concerns this paper raises set a precedent for other countries to take similar plans to train regular militaries for internal catastrophic natural disasters in advance and to put these practices into play immediately, preventing wasted time trying to figure out what to do next. These changes require amendments and reinterpretations of Constitutional laws, but nations around the world could benefit from making the necessary changes to ensure that loss of life and property decrease.

CURRENT USE OF MILITARIES

Currently, militaries around the world primarily protect their countries and, if deemed necessary, fight wars. In discussing the political nature of wars, 19th century martial strategist Clausewitz posits that "war is simply a continuation of political intercourse, with the addition of other means. We . . . want to make it clear that war in itself does not suspend political intercourse or change it into something entirely different. In essentials that intercourse continues, irrespective of the means it employs."¹ War, therefore, is politics by other means. Nations have used their militaries to quell domestic uprisings as well as fight wars from both those who would invade them and those they would invade. Militaries do not appear to frequently deploy to provide aid to those in disaster-stricken areas, however, ignoring a major political role that militaries could play outside war time.

While the United States' military has grown under the leadership of United States President Donald Trump,² China has steadily risen as a global military power.³ Weizhen Tan, Markets Editor for CNBC Asia points out, "Asia does not depend solely on the U.S. for security, but with the Chinese navy, army and air force growing in strength, a 'far more multi-polar, unstable military environment' has resulted."⁴ A recent report by the U.S. Department of Defense acknowledges this shift:

China's leaders have benefited from what they view as a "period of strategic opportunity" during the initial two decades of the 21st century to develop domestically and expand China's "comprehensive national power." Over the coming decades, they are focused on realizing a powerful and prosperous China that is equipped with a "world-class" military, securing China's status as a great power with the aim of emerging as the preeminent power in the Indo-Pacific region.⁵

* Donald D.A. Schaefer, J.D. (2004, University of Washington), M.A. in Education (2001, University of Michigan), Ph.D. in Political Science (1999, University of Michigan), B.A. in Political Science and B.A. in Religion [double major] (1993, University of Hawaii). This is written in memory of his dissertation chair, Harold K. Jacobson. The author would like to thank his wife Ma. Crisha F. Schaefer, his editor Charles C. Grimm, and the editors of this journal for their editorial support.

China also has a very large military when compared to the United States.⁶ According to *Business Insider*, “With a population of 1.3 billion to draw from . . . China has over 2.3 million in active service, with an additional 1.1 million as reserves and military police.”⁷ With such large militaries, both would be expected to be able to address internal disasters with force, but neither side has done an adequate job with formally stated and provisioned preparations to this point.

The final two countries this paper analyzes, the Philippines and Japan, both have much smaller militaries and have chosen to use them for primarily defensive purposes.⁸ China and the United States have continued strong if tenuous relationships with Japan – relationships that are being tested as China increases its reach within the Eastern Hemisphere.⁹ Japan has a tremulous history with both China and the United States¹⁰ due to the wars against and occupation of these countries, but today Japan depends on and benefits from both.¹¹ Japan surrendered to the United States after a lengthy and bloody war,¹² but has since gained influence as a key American ally.¹³ Japan’s military has been primarily used for defense purposes in the post-World War II era.¹⁴ It is a military, however, that can and should be used in the case of natural disasters.

With China’s increasing presence in the Asian world, however, Japan appears to be moving away from the United States as an ally¹⁵ even as it continues to receive vast amounts of aid through a large U.S. military presence within its borders.¹⁶ For Prime Minister Shinzō Abe, finding that balance between China’s Xi and America’s Trump continues to be a challenge. On the one hand, his relationship with Trump maintains the strong ties his country continues to enjoy economically and militarily with the United States. Despite this history of mutual support, Trump has found Japan willing to push back against him and perhaps even win regarding economics. William Pesek, author of *Japanization: What the World Can Learn from Japan’s Lost Decade* and *Politico* reporter, states, “Trump might be surprised to find Abe is more willing to push back than roll over” when it comes to trade relations with the United States.¹⁷

Both Xi and Abe have strengthened their countries’ friendship, despite the histories of their two respective countries. Japan’s relationship with China has come with a price, however. Many Chinese citizens refuse to forget¹⁸ the Nanjing Massacre¹⁹ even as officials bypass mentioning this incident in order for the two countries to work more closely together. The Associated Press states, “Chinese officials struck a tempered tone on the 80th anniversary of the Nanking Massacre on Wednesday, saying China would ‘look forward’ and deepen friendship with its neighbor Japan despite historical misgivings.”²⁰ Current tensions over the Senkaku Islands, which both China and Japan claim, also threaten ongoing efforts at reconciliation.²¹ Yet, both countries appear ready to move beyond these islands. As Nakamaru points out,

On his three-day visit to Beijing from Saturday, Foreign Minister Taro Kono was on a mission to further a recent improvement in Sino-Japanese ties following years of

animosity over a territorial dispute and differing views on wartime history.

“Japan-China relations have normalized,” Kono told Chinese Premier Li Keqiang in a meeting Monday. “There are many difficult issues that we have yet to resolve, but we should stand shoulder to shoulder to work on issues on a global scale.”²²

As these two countries grow closer and put their differences aside, simple economic cooperation and peace-time diplomacy should not overshadow international disaster preparation. For true peace between China and Japan, a mutual agreement to assist each other should a catastrophic event impact either of them needs to be established.

In the case of the Philippines, the military (estimated to be around 300,000 in strength²³) has transformed recently from a primarily internal defense posture to one of protecting its seas against China and others who would use its territorial waters.²⁴ At the same time, this nation has gotten closer to China as the Philippines sees such relationship with the United States as waning²⁵: “‘Your Honors, in this venue, I announce my separation from the United States . . . both in military, but economics also,’ said Philippine president Rodrigo Duterte to a burst of applause from an audience of officials in Beijing’s Great Hall of the People. . . .”²⁶ This distancing has continued. De Castro points out the difference in Duterte’s administration more specifically,

President Duterte has charted a different course for Philippine foreign policy. His pronouncements and actions are undoing former President Aquino’s agenda of balancing China’s expansive claim in the South China Sea specifically by weaning the Philippines away from its long-standing treaty ally, the United States. In turn, he has gravitated toward China. President Duterte believes that an appeasement policy on China is advantageous for the Philippines and is worth pursuing in exchange for the latter’s economic largesse.²⁷

Still, Duterte must contend with the ongoing conflict with China in the South China Sea, specifically as it relates to the building up of defensive forces surrounding the “islands, islets, reefs, and shoals contested by the Philippines.”²⁸ Duterte struggles to find a balance between the desire to continue his ties to the United States²⁹ and his desire to court Xi amidst the ongoing conflict in this region.³⁰ The ties between Xi and Duterte continue to grow, however:

Beijing and Manila have agreed to a joint oil and gas exploration deal – one of 29 deals that were signed on Tuesday as Chinese President Xi Jinping began a two-day state visit to the Philippines.

The two nations also signed a memorandum of understanding to cooperate on Beijing’s vast trade and infrastructure strategy, the “Belt and Road Initiative”, and agreed to boost ties.

After meeting Philippine President Rodrigo Duterte for talks, Xi described the visit as a “milestone” in the countries’ relations. Xi is the first Chinese leader to visit Manila in 13 years. . . . “China and the Philippines have a lot of common interests in the South China Sea,” Xi said after the talks. “We will continue to manage contentious issues and promote maritime cooperation through friendly consultation.”³¹

The ongoing conflict between the United States and China has given way to the possibility of a greater Chinese interest in the Philippines as China chooses to move toward greater influence within this area of the world. Yet, Trump continues to court Duterte, even boasting, “We’ve had a great relationship.”³² According to the *Washington Post*, however,

At an Asian summit last week, Vice President Pence and Chinese President Xi Jinping traded barbs and delivered dueling visions of an Asia-Pacific region tilted toward one of two poles: the United States or China.

Hours later, the Chinese leader hit the road on a Southeast Asian charm offensive.

Xi swept into the Philippines on Tuesday as the first Chinese leader to make a state visit in 13 years. . . .

Xi’s visit to the Philippines — once an unshakable U.S. ally with deep historical and cultural ties to the United States — encapsulates how Southeast Asia and the Pacific have become ground zero in the accelerating contest for global influence between Beijing and Washington.³³

So, while the United States may wish to move forward with its ties, both Duterte and Xi increasingly choose to push back against America and move closer together. As the Philippines chooses which relationship to strengthen, both nations will likely continue to have influence.

Should another catastrophic event such as a category 5 typhoon reach its shores,³⁴ the Philippines will need to act fast but may call upon assistance from both of its powerful trade partners, the United States and China. The South China Sea³⁵, the East China Sea³⁶, and seas globally³⁷ have been trending warmer, directly impacting China, Japan, and the Philippines through stronger and more powerful typhoons. Each nation benefits most by remaining in close relationship with the other nations to survive as a viable economic entity; therefore, all four countries should be prepared to work with each other as well as other nations, should a catastrophic natural disaster occur.

A CHANGING WORLD

The year 2018 saw some of the most extreme weather since records began being recorded.³⁸ A recent report by the *World Meteorological Organization* paints a picture of steadily increasing extreme weather,³⁹ including increased rainfall and droughts that have led to flooding and wildfires⁴⁰ globally;⁴¹ in the United States, Hurricanes Florence and Michael;⁴² in Asia,

typhoons *Mangkhut* (Philippines and China), *Yutu* (Mariana Islands), and *Jebi* (Japan).⁴³ All told, natural disasters affected approximately 62 million people,⁴⁴ which explains the United Nations’ assertion:

Climate Change is the defining issue of our time and we are at a defining moment. From shifting weather patterns that threaten food production, to rising sea levels that increase the risk of catastrophic flooding, the impacts of climate change are global in scope and unprecedented in scale. Without drastic action today, adapting to these impacts in the future will be more difficult and costly.⁴⁵

With global temperatures rising, the impact of the changing environment has become more apparent with each passing year.⁴⁶ For the first time, in 2019 “the concentration of carbon dioxide in the atmosphere eclipsed 415 parts per million. . . . Saturday’s carbon dioxide measurement of 415 parts per million at Hawaii’s Mauna Loa Observatory is the highest in at least 800,000 years and probably over 3 million years. Carbon dioxide levels have risen by nearly 50 percent since the Industrial Revolution.”⁴⁷ Climate change thus presents a “threat multiplier”:⁴⁸ climate change will continue to increase the power and scope of natural disasters, which will increasingly affect a population that may reach 8 billion by 2025.⁴⁹ Even as leaders in the United States refuse to address how it impacts humans during major events such as flooding, this paper urges world leaders to begin determining how best to address the changing environment’s impact on a population during catastrophic events.⁵⁰

Current acknowledgment of and preparation for climate change remains insufficient. The leaders of the United States, China, Japan, and the Philippines have addressed climate change in drastically different ways. Trump has always been a sceptic of climate change. In a *Washington Post* article,

President Trump on Tuesday dismissed a landmark report⁵¹ compiled by 13 federal agencies detailing how damage from global warming is intensifying throughout the country, . . .

The comments were the president’s most extensive yet on why he disagrees with his own government’s analysis, which found that climate change poses a severe threat to the health of Americans, as well as to the country’s infrastructure, economy and natural resources. The findings — unequivocal, urgent and alarming — are at odds with the Trump administration’s rollback of environmental regulations and absence of any climate action policy.

“One of the problems that a lot of people like myself, we have very high levels of intelligence but we’re not necessarily such believers. . . . As to whether or not it’s man-made and whether or not the effects that you’re talking about are there, I don’t see it.”⁵²

Trump has continued to regard climate change skeptically, even as more floods, hurricanes, and tornadoes ravage the United States. In contrast to Trump, Xi has been a vocal supporter of issues concerning climate change and has been a world leader when it comes to pollution and alternate forms of energy, such as solar panels, wind energy.⁵³ Xi stated in 2016,

I have said for many times that green mountains and clear water are as good as mountains of gold and silver. To protect the environment is to protect productivity, and to improve the environment is to boost productivity. This simple fact is increasingly recognized by people.

We will unwaveringly pursue a strategy of sustainable development and stay committed to green, low-carbon and circular development and China's fundamental policy of conserving resources and protecting the environment. In promoting green development, we also aim to address climate change and overcapacity. In the next five years, China's water and energy consumption as well as CO2 emission per unit of GDP will be cut down by 23%, 15% and 18% respectively. We will make China a beautiful country with blue sky, green vegetation and clear rivers, so that the people will enjoy life in a livable environment and the ecological benefits created by economic development.⁵⁴

The contrast between Trump and Xi's outlook on the environment could not differ further. Both leaders will need to address the changes that are taking place in the environment as more catastrophic events caused by climate change such as category 5 typhoons and hurricanes, along with the flooding that occurs as a result, only increases in the future. How each comes to terms with this change may well determine the fate that each may bring to countless people.

Both Abe of Japan and Duterte of the Philippines have supported counteracting climate change. Japan and the Philippines have faced extreme weather systems that have forced countless people from their homes and communities, making disaster management the key to survival.⁵⁵ Abe and Duterte each have come to a better understanding of the impact of global warming and have stated their desire to address the changes that are taking place. In Japan, where experience with climate change has been dramatic, each passing year requires further changes. As noted by Abe in an op-ed on September 23, 2018,

Unprecedented torrential rain and landslides ravaged the residents of western Japan this summer, killing more than 200 people, and ruining hundreds of thousands of livelihoods. Meanwhile, severe scorching heatwaves struck the country and resulted in approximately 160 deaths. Fierce heat also gripped North America and Europe, and hurricanes and typhoons hit the US and Philippines. . . .

Climate change can be life-threatening to all generations, be it the elderly or the young and in developed and developing countries alike. The problem is exacerbating more quickly than we expected. We must take more robust actions. And swiftly.

The way forward is clear. We must save both the green of the earth and the blue of its oceans. . . .

Addressing climate change, marine pollution, and disaster risk reduction are critical pillars for achieving the UN's Sustainable Development Goals.⁵⁶

Abe has chosen to address climate change head-on: "Almost immediately after winning another term at the helm of Japan's ruling party, Prime Minister Shinzo Abe signaled that he intended to show more leadership on climate change."⁵⁷ For him, the reality of the recent changes in climate is reason for concern, as Japan has faced massive mudslides caused by increasing rain patterns and typhoons.⁵⁸ Therefore, the necessity of preparing for the next major catastrophic event to face Japan from a natural disaster perspective is critical, which requires considering how the military will be used when such events take place.

For Duterte, the Philippines faces a similar scenario regarding climate change⁵⁹ and the necessity to address it. Duterte has stated recently, "Climate change is not a typhoon that visits your country once or twice a year. Climate change is a day-to-day problem."⁶⁰ In regards to the withdrawal of the United States from the Paris Agreement on Climate Change, Duterte has stated, "I have to fathom the reason or even the rationale of the withdrawal. Is it because it cannot work hand in hand with other nations? Or is it because Trump would like to do it alone?"⁶¹ Duterte signed the Paris agreement in 2017, even with his misgivings that it favors industrial countries.⁶² His support, however, has been strong for the need to address climate change and its impact on the environment. Given the recent catastrophic events – from heavy rains, to flooding, and typhoons – that have hit the Philippines⁶³ and other parts of Asia,⁶⁴ such support should continue not only from him but also from other leaders around the world. Duterte preaches that cooperation is necessary:

President Rodrigo Duterte has called on different countries to have a "collective action" on climate change amid the concerning impacts of weather disturbances on developing countries.

During the Belt and Road Forum for International Cooperation in China, Duterte thanked countries that helped the Philippines in times of calamities and called for a more "proactive measures" on climate change.

"President Duterte expressed grave concern over the impact of more frequent and more intense disruptive weather on developing countries like the Philippines, and called for greater principled, concerted and

collective action on climate change,” Malacañang⁶⁵ said in a statement released Sunday.⁶⁶

It is apparent that Duterte has grasped the significance of climate’s impact on his country, as have Xi and Abe to a lesser extent. Trump, for his part, should also come to realize the significance of climate change on natural disasters in the United States. Collectively, these nations represent a relatively small sector of the global impact of climate change. Other regions of Asia, Africa, Latin America, and Europe should all be taken into account, with the leader of each country addressing how climate change will affect the weather patterns within their respective leadership when it comes to catastrophic natural disasters. In turn, laws will need to change to allow the military more streamlined access to the areas most affected when such events occur. It is this area – the legal side of assistance – that this paper now turns.

GLOBAL LEGAL SITUATIONS IN ADDRESSING NATURAL DISASTERS VIA THE MILITARY

Perhaps few other issues have dominated the issue of climate change in relation to natural disasters as the impact on human lives: Hurricane Michael,⁶⁷ Maria,⁶⁸ or Katrina⁶⁹ in the United States; the 2008 Sichuan earthquake⁷⁰ and the 2018 Super Typhoon Mangkhut⁷¹ in China; the Great East Japan Earthquake in 2011 that caused the Fukushima Daiichi Accident⁷² and the 2018 Typhoon Jebi in Japan⁷³; or the super typhoon Yolanda/Haiyan in 2013⁷⁴ as well as Super Typhoon Mangkhut that first came ashore in the Philippines before moving on to China.⁷⁵ The military of each of these countries played some role, and the government in each country had to account for its actions during the devastating consequences of each event. Laws need to change to allow regular militaries to be used proactively and effectively during natural disasters rather than in the haphazard, often limited manner currently used, and certainly not as a last resort.

The main problem most established nations face in dealing with natural disasters is the sovereignty for the local area’s leadership being overshadowed by national leadership bringing troops to a given area. The legal challenges may be immense; however, by changing or reinterpreting laws, such massive use of military support in times of national crisis will ensure the more effective use of the armed forces during natural disasters, potentially saving whole communities.

THE UNITED STATES OF AMERICA

Perhaps few other issues stand in the way of an effective use of America’s regular military (Army, Air Force, Marines, and Navy) as much as the Posse Comitatus Act⁷⁶ (PCA) of 1878⁷⁷ that forbids the use of federal troops for enforcement purposes.⁷⁸ While any number of exceptions⁷⁹ are currently allowed, the Insurrection Act of 1807⁸⁰ presents the best opportunity. The Insurrection Act allows troops (beyond the National Guard) to be deployed in the United States for peace-keeping duties⁸¹. McGrane states,

When the Insurrection Act has been invoked, the PCA’s restrictions are lifted and members of the military, under the command of the president, are free to arrest U.S. citizens for violations of state and federal law. . . . The Insurrection Act, as an exception to the PCA, recognizes that in certain circumstances the national interest is best promoted by the federal military performing law enforcement functions within the states.⁸²

An Executive Order⁸³ concerning the interpretation of the Insurrection Act, however, could allow for the regular military to be used at the immediate and massive scale for catastrophic natural disasters as well as an exception to the PCA that needs to be signed by Trump to ensure that when another Hurricane Katrina level event occurs the necessary legal framework will be in place to ensure the survival and wellbeing of those involved. The use of the regular military will assist the Federal Emergency Management Agency (FEMA) but should also be the first major force to arrive once a catastrophic natural disaster occurs.

The use of this executive order to use the regular military as armed police in addition to the National Guard in this capacity would most likely be upheld by the courts if it is given as an exception to the Insurrection Act. Executive orders and other forms of unilateral actions have been upheld by the courts⁸⁴ and have the power of those signed into law by Congress,⁸⁵ including the use of executive agreements as a unilateral action⁸⁶ to provide assistance to an ally like Japan or the Philippines, should a catastrophic event occur there or elsewhere outside the borders of the United States.⁸⁷

U.S. presidents throughout history have chosen to use executive orders for purposes of unilateral actions. Gallagher and Blackstone have stated, “While Congress is understood to be the primary institution in the policy-making process, ambiguity about the meaning of ‘executive power’ and ‘faithfully execute’ has opened the door for many influential policy decisions to be made by presidents acting unilaterally.”⁸⁸ Trump has made extensive use of executive orders⁸⁹ since coming into office,⁹⁰ and those orders have been given deference⁹¹ – especially given the conservative nature of the current U.S. Supreme Court, with conservative justices holding a 5-4 lead. As with previous presidents, personality traits may determine the course of action and in what circumstances such orders are given.⁹²

Once a catastrophic natural disaster event takes place – domestically or internationally – the president must address it, which will impact the public’s perception of the president as a leader.⁹³ Therefore, it is critical to understand the use of such unilateral actions from the perspective of the executive.⁹⁴ Presidents have used the armed forces without Congressional authorization through the use of unilateral action,⁹⁵ typically sending troops on military missions overseas, without informing Congress until after the action was initiated.⁹⁶ Therefore, the president can point to precedent to take a unilateral action after first giving an executive order (privately or otherwise) that will allow the president to commit troops to a part of the United

States threatened by a hurricane, earthquake, etc. The PCA failed to assist President George W. Bush [hereafter “Bush”] with Hurricane Katrina in 2005 because troops were not deployed until much later than was necessary,⁹⁷ and even then they were not used effectively.⁹⁸

Had an executive order been given previously regarding the Insurrection Act, troops could have been provided during Hurricane Katrina at the onset, thereby saving lives and property.⁹⁹ Yet it was federalism that “substantially motivated President Bush’s decision not to invoke the Insurrection Act after Katrina.”¹⁰⁰ He goes on later to state,

Katrina exposed a failure in the United States’ disaster relief system. The storm made landfall on Monday morning; it wasn’t until Saturday that the federal government made up its mind about whether or not to use the military for law enforcement purposes inside New Orleans. Because of the objections of Governor [Kathleen] Blanco and the overriding state sovereignty concerns, the Bush Administration decided against invoking the Insurrection Act and using military as police.¹⁰¹

The Office of Legal Counsel under the Department of Justice stated that Bush had legal authority to use the Insurrection Act over the objection of Governor Kathleen Blanco to justify the presence of active-duty federal troops.¹⁰² In this sense, the Insurrection Act has proven to constitute an exception to the PCA in the time of Hurricane Katrina, and, as a consequence, may be used again and legally upheld. Through an executive order signed in the near future, Trump and future presidents may find such a written order useful at a moment’s notice to assist in times of catastrophic natural disasters such as Hurricane Katrina¹⁰³ whether or not the governor(s) chooses to accept such help. Therefore, Trump should consider drafting or signing the order so that when future catastrophic natural disasters occur, assistance may be given without dispute over his power to make such an order. Neglecting to do so puts him at risk of earning the same reputation for indecision that Bush earned with Hurricane Katrina.

America had no direct plan in place at the time of Hurricane Katrina that would have allowed Bush to make a simple call to the 82nd Airborne or other special operations’ units within the armed forces to mobilize. Lipton, Schmitt and Shanker, *New York Times* correspondents covering political issues for a cumulative 30+ years, state that in the aftermath of Hurricane Katrina, “one senior Army officer expressed puzzlement that active-duty troops were not summoned sooner, saying 82nd Airborne troops were ready to move out from Fort Bragg, N.C., on Sunday, the day before the hurricane hit.”¹⁰⁴ The reality is that Bush chose not to use the regular military, which could have been used legally as noted above, for fear of usurping Blanco’s objections and authority. Naim Kapucu, Director of the School of Public Administration at the University of Central Florida, states,

The main problem was that the request for government assistance by the governors of impacted states was not made clear. Even though the need for military assistance was included in request letters, the explicit types and numbers of military units were not specified in the first few days. Another challenge was the complexity of legal statuses and command and control structures. The separation in the command structure of both the National Guard and the active-duty military resulted in slower operations and overall military response.¹⁰⁵

Kapucu continues, stating the governor had no way to request active-duty Army and Marine land forces.¹⁰⁶ The author concludes by stating,

The military currently is governed by a lengthy, complex authorization process. Considering the lesson learned from Hurricane Katrina about the failures in establishing effective military engagement, emphasis should be put on addressing procedural obstacles, legal complexities, cost factors, political complications, . . . and other factors that contribute to the timeliness of a military response.¹⁰⁷

As Kapucu has clearly indicated, local governments also need a clear path to request the Army, Navy, Marines, and Air Force in times of catastrophic natural disaster. An executive order before or after a disaster declaration¹⁰⁸ by the president as an interpretation of the Insurrection Act could reduce this logistical burden from national and local leadership, who should instead concern themselves with the other rigors of leading through a crisis. This executive order may be created either as an immediate use just before such action is required or be signed in the near future and put in place so that the use of the military can be given quickly. Yet, as Banks, currently a College of Law Board of Advisors Distinguished Professor at the peak of his 30 years at Syracuse University, points out, “As the Katrina experience demonstrated, however, the lack of a clear blueprint for a shared state and federal response to a major disaster greatly complicated the response to the storm, and even adroitness would have been too little too late to prevent some of the worst effects of Katrina.”¹⁰⁹ The continued failure to have such a plan in place to use active-duty military in times of major natural disasters will likely mean only continued pain and suffering for those involved once such events take place in the future.

THE PEOPLE’S REPUBLIC OF CHINA

China has had a long history of disaster management¹¹⁰ but still needs to improve.¹¹¹ Xi will need to consider how to deal with catastrophic natural disasters¹¹² that are likely to increase due to climate change,¹¹³ and his handling of the military during such crises should be direct, immediate, and scalable. Like the United States, China needs a general interpretation of the 1947 Constitution under Chapter IV Article 43 in such a way as to allow this action to occur directly from Xi, without the need to go through other formal steps.¹¹⁴ Xi has stated that there

needs to be “better integration between the military and civilian sectors.”¹¹⁵ Through the process of modernization of its military with a focus on better relations with the civilian sectors,¹¹⁶ direct use of China’s massive armed forces during a natural disaster needs to be further streamlined. As with the proposal for the United States, Xi’s determination, much like Trump’s, is critical in the process of assistance for natural disasters: “China’s disaster management system contains no law-based presidential disaster declarations; however, the national leader’s instruction (*pishi in Chinese*) play a similar role in disaster declarations.”¹¹⁷ China’s leader should be able to put large numbers of military personnel¹¹⁸ very quickly into a given area. Under Xi’s leadership, it is imperative that such actions are taken sooner than later, given the global climate changes that are causing far more dramatic events to take place.¹¹⁹

Xi’s legacy and reputation depend in part on how he manages future disasters. As with the 2008 Sichuan earthquake, the legitimacy of China’s government and its elites’ response should not be questioned after such an event.¹²⁰ Xi is the chairman of the Central Military Commission and one of the most powerful leaders in Modern Chinese history; therefore, as he continues to change and update the constitution and modernize the military, dramatic changes need to be made to the way to which natural disasters are responded.¹²¹

Supplies – bedding material, canvas, water, medical and other basic needs – remain vital to the military in combat and aid situations. The Chinese military mobilized during the 2008 Wenchuan earthquake,¹²² but they faced a general lack of coordination in getting the necessary supplies to those who needed them most.¹²³ To prevent this haphazard distribution of aid, China needs to implement a policy¹²⁴ that allows for the pre-positioning of food, water, tarps, and medical supplies so that once a catastrophic natural disaster takes place, the supplies are easily available to give to those most in need. This policy should allow for the immediate use of those materials once they are called upon by Xi, members of his cabinet, or other top-ranking party members. Zhang and Chen state, “At present, there is no complete emergency material reserve system in China, and although the central reserve system is established, local reserve system is seriously insufficient. Therefore, in order to bring the materials reserve into the orbit of legalization material reserve rules and regulations should be improved.”¹²⁵ Given the number, magnitude, and lack of preparedness for earthquakes throughout China,¹²⁶ this author recommends that every nation should have large quantities of reserve material such as water, food, medicine, etc. that can be quickly distributed with the assistance of the active-duty military to those who need those supplies. Such changes to each nation’s laws should allow this to occur smoothly and with the direct use of the military.¹²⁷

As Xi moves toward a likely reelection in 2023¹²⁸ and the continued centralization of his power,¹²⁹ he must consider the ramifications of catastrophic natural disasters and the need to use the military as first responders when they occur. He has come into office with a goal of being far more assertive when it comes to foreign policy,¹³⁰ thus he should be willing to use this

same assertiveness to reshape the military for better domestic responses to earthquakes, floods, typhoons, and other natural disasters.¹³¹ In the process, China will need to streamline getting these resources to those who need it most. For this policy to have the highest impact, China must include a willingness to forge bonds with other nations,¹³² allowing alliances and necessary resources both to flow into China during these events and to allow resources to be given to other nations when catastrophic natural disasters affect them. In this way, Xi’s goal of having a globalist view may be furthered as he champions the broader use of his military and other assistance to countries around the world in a show of good will and transparency in friendship during times of natural disasters affecting other countries. Both Japan and the Philippines, which are regularly hit with such disasters, could benefit with stronger pledges from China regarding these resources, as could the United States. Therefore, for the benefit of everyone involved, Chinese leadership under Xi needs to make changes to its laws¹³³ to allow a greater and more direct response to natural disasters that ensures the more effective use of its military.¹³⁴

JAPAN

Japan continues to be struck by natural disasters, with the 9.0 earthquake and tsunami that caused the Fukushima Daiichi Accident¹³⁵ being the worst in its modern history. Yet, with this natural disaster and the accident at the nuclear power plant that followed, the military could have done a better job with supplying aid to those who needed it most.¹³⁶ The leadership under Abe should modify its existing laws to accommodate a changing reality that more typhoons, earthquakes, tsunamis, and other catastrophic natural disasters will occur globally, and, as a direct result, nations need a more streamlined chain of command structure in place to allow for large-scale domestic military responses to these disasters.

Japan’s constitution, which was formulated after the end of World War II in 1947, had a pacifist clause: Chapter 2, Article 9 “Renunciation of War” states,

Aspiring sincerely to an international peace based on justice and order, the Japanese people forever renounce war as a sovereign right of the nation and the threat or use of force as means of settling international disputes.

In order to accomplish the aim of the preceding paragraph, land, sea, and air forces, as well as other war potential, will never be maintained. The right of belligerency of the state will not be recognized.¹³⁷

Abe’s recent actions regarding the use of the military as it relates to Article 9 suggests a more aggressive reinterpretation of the use of Japan’s armed forces.¹³⁸ This reinterpretation should extend to allow the military to be used for more domestic and international aid purposes, shifting to allow them to be used effectively when natural disasters strike. This “collective security”¹³⁹ will ensure a better chance of survival during the next disaster. Such assistance – while not required – will ensure

a safer world in which countries put lives ahead of nationalistic views to form a greater level of cooperation in which countless lives around the world could benefit.

Given the sheer volume of U.S. troops in Japan, the allied nations need clearer laws governing when and how to use these joint forces to assist those most in need during natural disasters. The 2011 earthquake and resulting tsunami proved how vital such assistance can be in promoting peace through mutual aid. Talmadge explains,

Just one year after tensions over American military bases forced out a prime minister, a U.S. relief mission after the earthquake and tsunami is remaking Japanese opinions.

Roughly 20,000 U.S. troops have been mobilized in “Operation Tomodachi,” or “Friend.” It is the biggest bilateral humanitarian mission the U.S. has conducted in Japan, its most important ally in Asia.

As logistics gradually improve, U.S. troops have been moving farther into hard-hit zones and providing tons of relief supplies and badly needed manpower to help the hundreds of thousands of Japanese whose lives were shattered in the March 11 disaster. . . .

About 50,000 U.S. troops are stationed throughout Japan under a mutual security treaty signed in the 1960s. Tokyo strongly supports the alliance, because it saves Japan money on defense and serves as a powerful deterrent force in the region, particularly as China’s military strength and economic clout rise.¹⁴⁰

The bi-lateral agreement between the United States and Japan¹⁴¹ should include an updated version to allow for disaster relief during times of natural disasters.

Such agreements should exist with other nations¹⁴² allied with Japan so that when disaster strikes assistance may be given from the militaries around the world. In recent times, Japan has forged a stronger relationship with the Philippines over issues concerning China’s access to the South China Sea.¹⁴³ As this relationship grows, the two nations need to include a formal resolution of bilateral assistance for each country in the event of a natural disaster. While such partnership is important regarding the use of militaries and other resources to combat China’s rise in the region, it should also be modified to include the use of the military to assist in times of crises so that each country may benefit. At the same time, Japan needs to have a “balancing strategy”¹⁴⁴ between itself and China regarding its defense, going beyond matters concerning the Senkaku islands¹⁴⁵ and the ongoing issues in the South China Sea¹⁴⁶ to focus on issues concerning bilateral relations during major natural disasters.¹⁴⁷ For example, China gave Japan significant amounts of aid following the 2011 earthquake, including assistance from its military forces: “It’s sending \$4.5 million worth of rescue materials, including blankets and flashlights. Beijing has promised more, if necessary.”¹⁴⁸ Such agreements

should include the mutual transfer of aid during natural disasters, thereby forging relationships based upon mutual respect and need.

Japan is moving forward with a stronger defense policy regarding China and other nations, which in and of itself may be mutually beneficial given the need for a stronger military to address any number of issues it now faces. Singh argues that “a strong Japan is actually a source of regional stability. Its democratic identity, the resilient pacifism within Japanese society, and the continued robustness of the U.S.-Japan alliance support this conclusion.”¹⁴⁹ Therefore, as Japan moves forward with its goals of modernizing its military and securing strategic ties to other nations, support from these nations should never be far behind as it deals with issues concerning natural disasters.

With current policies unchanged, assistance from Japan’s and other nations’ militaries (for example during the 2011 earthquake) was incomplete and inadequate in many respects.¹⁵⁰ Japan needs to reinterpret Article 9 of its constitution to allow for the direct and immediate use of its armed forces (even over the objections of local politicians¹⁵¹) so that in cases of catastrophic natural disasters, as illustrated by an article highlighting a recent drill¹⁵², such reinterpretation should allow for Abe or future prime ministers to have ground forces in the areas affected immediately, to-scale, and under a command-and-control person who wields the power to use the military in conjunction with other forms of assistance, including the acceptance of aid from other nations’ militaries.¹⁵³ To aid this effort, Japan’s role as leader in cell phone use should consider better implementation of social media¹⁵⁴ to help coordinate its military, to inform the local population of where and when to expect assistance, and to direct the leadership of Japan through various applications on the overall needs during the crises. Leveraging relationships with developed allies and its technological superiority, Abe could increase his nation’s ability to respond to the pending disasters arising from global warming.

THE REPUBLIC OF THE PHILIPPINES

Few other areas have been hit with as many typhoons in recent history as the Philippines.¹⁵⁵ A nation with over 7,000 islands,¹⁵⁶ the Philippines continues to face this trend of increasingly intense typhoon landfalls with a growing population, resulting in additional problems when natural disasters strike. Under the leadership of Duterte, the Philippines has moved politically further away from the United States and toward China and other countries in Asia. One major change has come from refocusing its military role from fighting the growing drug problems that have plagued the island nation to improved military assistance during natural disasters, just like the other countries discussed so far. Disaster aid has come from many countries, often in the form of assistance from nongovernmental agencies.¹⁵⁷ Such assistance should be accepted but coordinated by the president, who should also coordinate the military during such disasters. The 1987 Constitution¹⁵⁸ establishes the president as the Commander in Chief and mandates that the military remain under civilian control.¹⁵⁹ Duterte has continued

to remain close to his military,¹⁶⁰ and therefore the greater use of it during natural disasters should not constitute a major reform of the policies put into place. The goal here, as with other nations addressed, would be to streamline control of the military during natural disasters by Duterte to ensure a better and more effective use of it with the ultimate goal of saving lives and ensuring a quicker return to normal after a catastrophic natural disaster.

The Philippines has been faced with the devastating effects of typhoons that regularly come ashore along with the impacts that the storm surges bring with them.¹⁶¹ The struggle to coordinate aid is often centered on how best to streamline the command-and-control operations of its military during those catastrophic natural disasters. Similarly to the Insurrection Act allowing the U.S. president to order military troops to devastated areas following a natural disaster, the Philippine President has power under the constitution that addresses the use of the military during times of declared martial law.¹⁶² Such use will allow for the immediate, direct, and sustained use of its own military during times of typhoons, storm surges, and other natural disasters.

Military assistance may also come from other nations, too. As Yamada points out, “In November 2013, in the aftermath of Typhoon Yolanda/Haiyan, humanitarian aid and disaster response (HADR) were delivered by the U.S. military.”¹⁶³ According a collection of international military leaders and scholars, regarding Typhoon Yolanda/Haiyan,

With over \$86 million in total U.S. assistance, the U.S. military response efforts comprised more than 13,400 military personnel, 66 aircraft, and 12 naval vessels, which delivered over 2,495 tons of relief supplies and evacuated more than 21,000 people ...

Many humanitarian aid experts and military leaders noted that civil-military coordination was some of the best they had seen during the response to Super Typhoon Haiyan in the Philippines from November to December 2013. In total, the United States participated in relief efforts together with 57 other nations and 29 foreign militaries. Specifically, the USAID Office of Foreign Disaster Assistance (OFDA), U.S. Pacific Command (USPACOM), and the U.S. Embassy in Manila demonstrated clear understanding of their roles and responsibilities as evidenced by their effective coordination. Moreover, U.S. Government entities provided assistance that reflected their unique capabilities appropriately scaled throughout the response phase.¹⁶⁴

In the case of Typhoon Yolanda/Haiyan, U.S. assistance and coordination played a pivotal role ensuring the security and wellbeing of those affected by the storm’s damage.¹⁶⁵ The Philippine military, however, has been criticized for its slow response to such disasters,¹⁶⁶ and therefore the improved use of its military through a streamlined process will benefit the president’s regime as well as the citizens’ livelihoods.

While the Philippines may always struggle distributing assistance from other nations, Duterte must address preparations for the yearly typhoon season as quickly as possible. Duterte has chosen the path of moving away from economic and military assistance from the United States and toward other nations like China,¹⁶⁷ even while multiple nations within the Pacific region struggle over how best to contain the perceived threat of an increasingly aggressive Chinese military in the South China Sea.¹⁶⁸ Duterte should consider maintaining the balance his nation needs between their available alliances – including his close relationships to China, the United States, Japan, and Australia, to name a few – in an effort to improve disaster assistance when typhoons and other natural disasters strike his country.

Part of the issues for those affected by a natural disaster is how soon they are informed about the event in question¹⁶⁹ and how quickly that information is relayed to those running the emergency management side.¹⁷⁰ Working at the local level through community leadership¹⁷¹ as well as the continued assistance from abroad¹⁷² matters during times of natural disasters. The Philippines’ leadership continues to struggle with and adapt to ongoing disaster response. Salazar points out,

In response to the frequency of natural and man-made disasters in the country, in February 2010 Congress passed Republic Act 10121 (RA 10121) which aimed to strengthen the Philippine Disaster Risk Reduction and Management System. The new law is important in that it signaled a paradigm shift from emphasizing disaster response to risk reduction, a principle which experts unanimously agree to be the best way to prepare for disaster and reduce its impact.¹⁷³

The reality is that the Philippines needs to address the preparation for upcoming typhoons, storm surges, and other natural disasters. Scholars from the Philippine’s university system, point out that “The government’s problem of how to coordinate and manage the distribution of relief goods and the provision of much needed services underscores the significant role other agencies play in disaster response.”¹⁷⁴ What is needed are clearer plans and laws for how best to use those involved, especially response teams comprised of the military and those coordinating the teams.

Duterte faces further complications preparing for natural disasters in areas of the Philippines where armed conflicts continue. The continued insurgency¹⁷⁵ that has plagued areas throughout the Philippines may cast doubt on how effectively aid can be given in those areas most affected. The Armed Forces of the Philippines (AFP) are the best equipped to handle natural disasters in areas affected by unrest due to their size and readiness, but they should do so in a manner that is streamlined and effective so that the greatest amount of food¹⁷⁶ and other forms of aid can be given quickly to those most in need. The reality is that such events affect women,¹⁷⁷ children,¹⁷⁸ and the poor¹⁷⁹ disproportionately. It is important to understand the wellbeing of those affected by the typhoons¹⁸⁰ and other natural

disasters. Such aid can be given not only by the AFP but by other nations under the doctrine of “Responsibility to Protect” (“R2P”) ¹⁸¹ in the Association of Southeast Asian Nations (“ASEAN”). ¹⁸² As Puspita points out,

Indonesia, Myanmar, and the Philippines are the most vulnerable countries to natural disaster with internal conflict in Southeast Asia. These countries should not only maintain state sovereignty, but also recognize the humanitarian aid to the natural disaster. In order to apply the R2P doctrine to the victims of natural disaster in an armed conflict area, the role and capability of the ASEAN should be strengthened in the local, national, regional, and international level. ¹⁸³

Such assistance should allow for closer bonds between the Philippines and other nations regarding the giving of assistance to those areas most susceptible to insurgency and armed conflict. The use of the AFP in coordination with other nations’ militaries must play an important role with advanced preparation so that assistance can be given more quickly. Eastin adds that “the military’s role in distributing relief supplies and providing security escorts to humanitarian agencies can legitimize military presence in conflict zones, facilitate trust-building in local communities, and enhance intelligence gathering, the impact of which can assist counterinsurgency efforts.” ¹⁸⁴ Cooperation between the AFP and locals may allow coordination within each group during times of crisis. ¹⁸⁵ Such cooperation will allow the aid to get to those most in need, while setting aside issues related to ideology and politics.

Assistance under the ASEAN Agreement on Disaster Management and Emergency Response (“AADMER”) signed in July of 2005 provides a framework for assistance for countries throughout Southeast Asia including the Philippines during times of disasters. ¹⁸⁶ As the ASEAN web site points out,

AADMER serves as a common platform and regional policy backbone for disaster management in the ASEAN region. The AADMER Work Programme outlines a detailed structure of activities of the region’s disaster management priorities over five-year periods. The ASEAN Committee on Disaster Management (ACDM) provides oversight to the implementation of the Work Programme and reports directly to the Ministers in charge of Disaster Management, who also serve as Conference of the Parties (COP). ¹⁸⁷

ASEAN Agreement on Disaster Management and Emergency Response (AADMER) ¹⁸⁸ addresses the use of foreign military personnel but limits those outside of ASEAN. ¹⁸⁹ Simm notes that “AADMER may well not be the most appropriate instrument to address the role of military assistance in disaster response. . . .” ¹⁹⁰ Therefore, the Philippine government should make laws to clarify how and when domestic and foreign

military troops can be used in times of natural disasters so that assistance can be given quickly, to scale, and in coordination with other nations. The smaller nations in the ASEAN will more clearly see “the need for a strong and firm cooperative ASEAN effort in developing resilience against disasters – vulnerability is high, disasters are getting stronger and more frequent, and uniting small countries is prudent in pooling resources.” ¹⁹¹ The Philippines and others ASEAN nations need to coordinate better reactions to natural disasters and to use their militaries and different forms of assistance in a more streamlined manner. Unity is key to this goal’s success.

What remains to be seen is whether the government of the Philippines has sufficiently addressed the climate change ¹⁹² that continues to affect its country through more devastating typhoons whose potency will likely only increase in the future. As Pauline Eadie, Assistant Professor of Social Sciences at the University of Nottingham, points out in regards to resilience in the face of increasing typhoons and other disasters, “Leadership is . . . an important issue for resilience. Resilience is about building both stability and the conditions necessary for successful adaptation; therefore, it is important that systems of command and control are visionary and efficient.” ¹⁹³ Such preparations must include the use of the foreign and domestic militaries and a streamlining of such use during times of crises caused by natural disasters. It must also include the leadership of Duterte.

President Duterte faces a changing world in which the environment will likely play a decisive role in balancing political alliances. The best option is to streamline the use of the military, alongside the National Disaster Risk Reduction and Management Council, to ensure that assistance is given in a quick, efficient, and abundant level. The assistance from the military can come under provisions in the Constitution concerning Martial Law. The AFP should be able to be mobilized with short notice to give aid from a pre-arranged site to ensure the continued survival of those most affected by a natural disaster. While the military has been active in establishing peace through Duterte’s fight against illegal drugs, they should also be given the additional task of keeping peace in the case of natural disasters. Such use would ensure that Duterte’s legacy be marked by the love and care that he gave to his people in times of need rather than just a brutal fight against drugs.

CONCLUSION

Perhaps few other issues should be more important to a nation’s leaders than keeping the citizens of their countries safe from harm. In today’s environment, where climate change is affecting the very fabric of society, events around the increasingly globalized world are affecting nations in ways never seen before in isolation. Climate change is affecting the environment to the point where typhoons, hurricanes, and cyclones will increase globally. In addition to the damage from global warming, earthquakes have also devastated these countries. To overcome the current lack of coordination during these disasters, regular militaries for each country should be more actively engaged in

and used during these emergencies to ensure the survivability of those in many countries in the world. Such assistance should be streamlined so that access can be immediate and pre-positioned aid (such as water, food, and canvas) can be given with little or no delay. While this paper has looked at four specific developed countries as examples, the basic argument of using active duty military more aggressively during times of catastrophic natural disasters can be more broadly interpreted to apply to militaries and the countries they assist at a global scale.

The leadership of Trump, Xi, Abe, and Duterte should look to their laws to examine ways that will best allow for the streamlined usage of their armed forces during catastrophic events caused by climate change. With a simple phone call, the leader of any nation should be able to put large numbers of men and women in the armed forces to use during natural disasters when people's lives are at risk. Such changes will require modifications to or reinterpretations of their laws. This paper suggests specific interventions that pave the way to such

streamlining: that the United States interpret the Insurrection Act through an executive order allowing federal troops to be armed and used during national disasters, allowing FEMA a more stable environment to work within.

China should look to its own constitution for guidance as should Abe, as both leaders have chosen to move more aggressively in the usage of their respective militaries and the interpretation of their respective roles as allowed within their constitutions. The new changes should allow for using their militaries for domestic purposes under the direct leadership of Xi and Abe, respectively. Finally, Duterte should use an interpretation of his constitution regarding martial law to allow for direct and immediate usage of his military as it relates to national disasters. Based on these actionable items, other nations can also determine how best to modify their laws to join an international community concerned with mutual aid during the coming days of increasing natural disasters for the benefit of all. 🌐

ENDNOTES

¹ James R. Holmes, *Everything You Know About Clausewitz Is Wrong*, THE DIPLOMAT (Nov. 12, 2014), <https://thediplomat.com/2014/11/everything-you-know-about-clausewitz-is-wrong/> (explaining the nexus between war and politics).

² See generally Dakota L. Wood (editor), *2019 Index of U.S. Military Strength*, THE HERITAGE FOUND. (2019), http://thf-graphics.s3.amazonaws.com/2018/2019%20Index%20of%20Military%20Strength/Section%20PDFs/2019_IndexOfUSMilitaryStrength.pdf (reporting on the increase in military spending since 2016).

³ See generally Sam Goldsmith, *U.S. Conventional Access Strategy: Denying China a Conventional First-Strike Capability*, 72 NAVAL WAR COLL. REV. 41, 41-71 (Spring 2019) (analyzing China's military capacity compared to the United States); *China Military Power*, Defense Intelligence Agency (2019), https://www.dia.mil/Portals/27/Documents/News/Military%20Power%20Publications/China_Military_Power_FINAL_5MB_20190103.pdf (discussing China's growing military capabilities).

⁴ Weizhen Tan, *China's Military and Economic Power 'Cannot Be Denied' and US 'Has to Make Room'*, CNBC (Sept. 17, 2018), <https://www.cnbc.com/2018/09/18/china-military-is-growing-us-must-make-room-eurasia-groups-kaplan.html> (discussing China's growing military power).

⁵ U.S. Department of Defense, *Annual Report to Congress: Military and Security Developments Involving the People's Republic of China 2019*, i (May 2, 2019), https://media.defense.gov/2019/May/02/2002127082/-1/-1/1/2019_CHINA_MILITARY_POWER_REPORT.pdf (discussing shifting global military powers).

⁶ *Id.* at i.

⁷ Alex Lockie, *How the World's Largest Military Stacks Up to the US Armed Forces*, BUS. INSIDER (Aug. 5, 2016), <https://www.newstimes.com/technology/businessinsider/article/How-the-world-s-largest-military-stacks-up-to-the-7218456.php>; See generally *Our Story*, U.S. Department of Defense (last visited May 14, 2019) <https://www.defense.gov/Our-Story/> (addressing the size of Chinese military personnel in comparison to American forces).

⁸ See generally Renato Cruz De Castro, *21st Century Japan-Philippines Strategic Partnership: Constraining China's Expansion in the South China Sea*, 44 ASIAN AFFAIRS: AN AMERICAN REVIEW 31, 31-41 (May 2017) (discussing the size of the militaries of the Philippines and Japan).

⁹ See generally Bjørn E.M. Grønning, *Operational and Industrial Military Integration: Extending the Frontiers of the Japan-US Alliance*, 94 INT'L AFFAIRS 755, 755-72 (July 2018) (explaining the changing alliance between the US and Japan).

¹⁰ See generally Rosemary Foot, *Power Transitions and Great Power Management: Three Decades of China-Japan-US Relations*, 30 PACIFIC REV.

829, 829-42 (Nov. 2017) (assessing the relationships between China, Japan, and the US).

¹¹ See Titli Basu, *Debating Security in Japan*, 30 KOREAN J. OF DEF. ANALYSIS 545, 545-47 (Dec. 2018).

¹² See World War II History (updated May 16, 2019), <https://www.history.com/topics/world-war-ii/world-war-ii-history> (last accessed Oct. 21, 2019).

¹³ See Hyun-Wook Kim, *Substantiating the Cohesion of the Post-Cold War US-Japan Alliance*, 65 AUST. J. OF INT'L AFFAIRS 340, 340-59 (June 2011) (explaining the US-Japan alliance).

¹⁴ See Lee Hudson Teslik, *Backgrounder - Japan and Its Military*, COUNCIL ON FOREIGN RELATIONS, (April 13, 2006), <https://www.cfr.org/backgrounder/japan-and-its-military>. See also Brad Lendon, *Resurgent Japan military 'can stand toe to toe with anybody'*, CNN, (Dec. 7, 2016), <https://www.cnn.com/2016/12/06/asia/japan-military-pearl-harbor-anniversary/index.html> (explaining Japanese military capabilities).

¹⁵ See generally, Richard J. Samuels and Corey Wallace, *Introduction: Japan's Pivot in Asia*, 94 INT'L AFFAIRS (July 1, 2018), 703-04 (explaining how Trump's demonization of Japan is alienating).

¹⁶ See *U.S. Forces, Japan The Cornerstone of Peace and Security in the Pacific*, Department of Defense, <https://www.usfj.mil/About-USFJ/> (last visited May 19, 2019) (showing large U.S. military presence in Japan).

¹⁷ William Pesek, *How Abe Is Outsmarting Trump on Trade*, POLITICO (May 02, 2019), <https://www.politico.com/magazine/story/2019/05/02/donald-trump-trade-shinzo-abe-226764>.

¹⁸ Wang Xiaokui, *Historical Shifts in Remembering China's "Nanjing Massacre"*, 50 CHINESE STUDIES IN HISTORY 324 (2017).

¹⁹ Editors, *Nanjing Massacre*, ENCYCLOPEDIA BRITANNICA, <https://www.britannica.com/event/Nanjing-Massacre> (last visited May 20, 2019) (defining the Massacre as the "mass killing and ravaging of Chinese citizens and capitulated soldiers by soldiers of the Japanese Imperial Army after its seizure of Nanjing, China, on December 13, 1937, during the Sino-Japanese War that preceded World War II").

²⁰ *China Marks Nanking Massacre's 80th Anniversary*, USA TODAY (Dec. 13, 2017), <https://www.usatoday.com/story/news/world/2017/12/13/china-marks-nanking-massacres-80th-anniversary/949629001/>.

²¹ See James J. Przystup, *Japan-China Relations: Happy 40th Anniversary: "Fuggetaboutit!"*, 14 COMPARATIVE CONNECTIONS 119 (May 2012) (describing increasing tensions between China and Japan).

²² Ryotaro Nakamaru, *Abe Eyes Diplomatic Win with Xi Jinping Visit but Faces Balancing Act Between China and*

continued on page 33

LAKE ERIE BILL OF RIGHTS GETS THE AX: IS LEGAL PERSONHOOD FOR NATURE DEAD IN THE WATER?

By Devon Alexandra Berman*

“W*e must no longer view the natural world as a mere warehouse of commodities for humans to exploit, but rather a remarkable community to which we belong to and to whom we owe responsibilities.”*¹

On February 26, 2019, the citizens of Toledo voted to amend the city’s charter to grant the Lake Erie ecosystem the legally enforceable “right to exist, flourish and naturally evolve,” establishing the Lake Erie Bill of Rights (LEBOR).² Seeking to protect the watershed from further degradation, the LEBOR gave citizens standing to sue polluters on its behalf.³ The LEBOR deemed invalid any existing or future permit issued to a corporation by any federal or state entity that would violate Lake Erie’s rights.⁴ The LEBOR is just one example of the developing trend of communities taking a rights-based approach to protect local resources.⁵

Less than twenty-four hours after the citizens of Toledo voted to adopt LEBOR, a local farm partnership filed a complaint in the North District Court of Ohio claiming that LEBOR’s enactment exceeded the city’s authority and was preempted by state and federal law.⁶ The case was ultimately rendered moot in July 2019, when Governor Mike DeWine delivered a fatal blow to LEBOR by signing into law a provision stating that an ecosystem does not have standing in Ohio court.⁷

The legislature’s swift preemption of LEBOR illustrates the inherent shortcomings of a municipal approach.⁸ This Article surveys the legal barriers to extending personhood to nature in the United States and concludes that they are likely insurmountable. The Supreme Court’s narrow interpretation of constitutional standing requirements precludes citizens from bringing an action alleging direct injury to an ecosystem itself, irrespective of citizen suit language like that contained in LEBOR and other environmental legislation.⁹ These institutional barriers support arguments for a state-level approach to environmental protection.

BACKGROUND: GRANTING RIGHTS TO NATURE HAS INTERNATIONAL PRECEDENT

There is a growing trend of countries adopting rights of nature legislation.¹⁰ In 2008, Ecuador became the first country to pass a constitutional amendment enabling any “natural or legal person” to bring an action seeking for the government to comply with its duty to “respect and actualize” nature’s right to “legal restoration.”¹¹ When the provincial government widened a road without conducting an impact study, resulting in flooding, two landowners successfully invoked constitutional rights of

nature and sued on behalf of the river, and the government was ordered to “restore the riparian ecosystems.”¹² In 2015, the Constitutional Court of Columbia upheld standing for plaintiffs opposing mining operations in their communities on the grounds that “standing existed in terms of legitimate representation,” and that the right to a healthy environment permeated all other constitutional rights.¹³

LEGAL STANDING FOR NATURE IN THE U.S. IS FRUSTRATED BY CONSTITUTIONAL STANDING REQUIREMENTS

Article III, § 2 of the Constitution provides that “[t]he judicial Power” of the federal courts of the United States only extends to specified “cases” and “controversies.”¹⁴ The Article III standing doctrine limits the category of litigants empowered to sue in federal court to seek redress for a legal wrong. The Supreme Court has held the “irreducible constitutional minimum of standing” requires the plaintiff to “allege personal injury fairly traceable to defendant’s allegedly unlawful conduct and likely to be redressed by the requested relief.”¹⁵ In environmental enforcement actions, general grievances based on harm to the environment do not meet standing requirements unless the plaintiff can establish a concrete, personal injury that will likely be redressed by a court remedy.¹⁶ For example, environmental groups in *Lujan v. Defenders of Wildlife* claimed that the government’s funding of overseas projects threatened the plaintiffs’ ability to observe endangered species. The court rejected the “ecosystem nexus” argument, precluding generalized adverse environmental effects as a basis for standing to challenge the activity.¹⁷ As a result, citizen suit provisions of environmental statutes empower people to seek enforcement of environmental laws, but they cannot be used to circumvent Article III requirements. Based on the narrow interpretation of standing requirements, it is unlikely that the Supreme Court will recognize standing for injuries alleged on nature’s behalf.¹⁸

SECURING A CONSTITUTIONAL RIGHT TO A HEALTHY ENVIRONMENT AT THE STATE LEVEL

Several states are taking a rights-based approach to preventing environmental degradation by amending their constitutions to include a right to a healthy environment.¹⁹ By framing environmental degradation as a violation of citizens’ rights, these amendments require governments to prioritize environmental protection when regulating industrial activity. In

*Joint J.D./J.D. Candidate, American University Washington College of Law and University of Ottawa, Common Law Section 2020

1972, Pennsylvanians voted to amend the state constitution and became the first state to enshrine environmental rights to clean air and water through the Environmental Rights Amendment (ERA).²⁰ The amendment states that the Commonwealth is the trustee of the state's natural resources, "common property of all people, including generations yet to come."²¹ In 2013, the ERA was successfully invoked to defeat key provisions of a bill that would have afforded the fracking industry broad powers and exemptions.²² The Court held that the provisions violated the ERA by preempting local regulation of oil and gas activities and precluding local governments from fulfilling their trustee obligations.²³

This landmark Pennsylvania Supreme Court ruling demonstrated the legal potency of enshrining citizens' right to a healthy environment in state constitutions. In 2017, a landmark case was brought under the ERA against the legislature for allegedly misappropriating environmental protection funds for other uses.²⁴ In ruling against the legislature, the Court expanded its interpretation of the ERA and held that laws are unconstitutional if they "unreasonably impair" a citizen's ability to exercise their constitutional rights to "clean air, pure water and environmental preservation."²⁵ The Court reaffirmed that

the ERA commits the government to two duties: (1) to prohibit state or private action that results in the depletion of public natural resources; and (2) to take affirmative legislative action towards environmental concerns.²⁶

Drawing on Pennsylvania's experience, a constitutional amendment to the Ohio Constitution that secures its citizens' right to clean water is a more practical approach for protecting Lake Erie than attempting to confer legal standing through municipal legislation that has limited enforceability.²⁷

CONCLUSION

Extreme environmental degradation presents an unprecedented threat to human existence.²⁸ Environmental policy rollbacks under the Trump Administration have decreased environmental regulation and stripped clean water protections.²⁹ The Supreme Court of Pennsylvania's interpretation of the ERA compels the state government to take positive legislative to prioritize environmental protection. In the meantime, it is becoming increasingly clear that society needs to undergo a radical shift in values in order to effectively mitigate the human impact on the environment.



ENDNOTES

¹ Anna V. Smith, *The Klamath River Now Has the Legal Rights of a Person*, HIGH COUNTRY NEWS (Sept. 24, 2019) (David R. Boyd, United Nations Special Rapporteur on human rights and the environment, commenting on a resolution passed by the Yurok Tribe in California to allow cases to be brought in the name of the Klamath River in tribal court).

² Runoff pollution from direct dumping of farm waste and fertilizers has caused toxic algae blooms that threaten local species as well as the city's drinking water. See Lake Erie Bill of Rights, Beyond Pesticides, <https://beyondpesticides.org/assets/media/documents/LakeErieBillofRights.pdf>; see also Timothy Williams, *Legal Rights for Lake Erie? Voters in Ohio City Will Decide*, N.Y. TIMES (Feb. 17, 2019), <https://www.nytimes.com/2019/02/17/us/lake-erie-legal-rights.html>.

³ See Lake Erie Bill, § 3(b).

⁴ *Id.* at § 5.

⁵ In 2006, Tamaqua Borough in rural Pennsylvania became the first city in the United States to declare an ecosystem a "person" to enforce an ordinance. A slew of municipalities followed similar legislation conferring legal status to the environment. See David R. Boyd, *Recognizing the Rights of Nature: Lofty Rhetoric or Legal Revolution?* 32 NAT. RESOURCES & ENV'T 13, 1 (2018). Furthermore, the Community Environmental Legal Defense Fund has been instrumental in assisting communities to draft rights of nature legislation both nationally and globally. See *Champions of the Rights of Nature Timeline*, Community Environmental Legal Defense Fund (Aug. 4, 2015), <https://celfd.org/advancing-community-rights/rights-of-nature/>.

⁶ The complaint alleged that LEBOR exceeded the city of Toledo's limited legislative authority and unlawfully intruded on federal and state power by invalidating permits, altering the rights of corporations, and creating new causes of action in state courts." The plaintiff also claimed LEBOR violated its constitutional rights and would result in irreparable injury to the plaintiff's business. See *Drewes Farms v. Toledo*, No. 31:19 CV 434, 2019 WCL 125401 (N.D. Ohio, Mar. 18, 2019); see also *Drewes Farms v. Toledo*, No. 31:19 CV 434, 2019 WCL 1 (N.D. Ohio, Feb. 27, 2018) (granting preliminary injunction to halt LEBOR from taking effect until case is decided on the merits).

⁷ The 2020-2021 Fiscal Year State Budget provides: "Nature or any ecosystem does not have standing to participate in or bring an action in any court of common pleas." H.B. 166, 133rd Gen. Assemb., Reg. Sess. (Ohio 2019).

⁸ Local ordinances are vulnerable to court challenges and changes in political will. See *Pa. Gen. Energy Co. v. Grant Twp.*, 139 F. Supp. 3d 706 (W.D. Pa. 2015) (holding that ordinance did not provide a right to intervene in federal litigation directly); *Seneca Resources Corp. v. Highland Twp.* (W.D. Pa. 2017) (regarding a challenge to local ordinance banning fracking rendered moot by repeal of the environmental bill of rights).

⁹ See *Friends of the Earth, Inc. v. Laidlaw Envtl Servs. Inc.*, 528 U.S. 167, 183 (2000) (holding that environmental plaintiffs adequately alleged injury in fact because they are persons who use the affected area and "for whom the aesthetic and recreational values of the area will be lessened" by the challenged activity).

¹⁰ In 2017, New Zealand granted legal personhood to the Whanganui River. The legislation created human representatives entrusted with managing the relationships with various stakeholders while "promot[ing] and protect[ing]" the River's well-being." Te Awa Tupua (Whanganui River Claims Settlement) Act 2017, cl 3, § 18 (N.Z.); see e.g., the Ganges and Yamuna Rivers were granted legal personhood.

¹¹ CONSTITUCIÓN DE 2008 Oct. 20, 2008, Ch. 7, art. 71-74 (Ecuador); see also Cristy Clark et al., *Can You Hear the Rivers Sing: Legal Personhood, Ontology, and the Nitty-Gritty of Governance*, 45 ECOLOGY L.Q. 787, 795 (2016).

¹² *Id.* at 797.

¹³ *Id.* at 806-07.

¹⁴ U.S. Const. art III, § 2, cl. 1.

¹⁵ See *Allen v. Wright*, 468 U.S. 737, 738 (1984) (establishing the three elements required to meet constitutional standing requirements).

¹⁶ See *Friends of the Earth, Inc. v. Laidlaw Envtl Servs. Inc.*, 528 U.S. 167, 181 (2000) (holding that Article III standing requires injury to the plaintiff, not injury to the environment).

¹⁷ *Lujan v. Defenders of Wildlife*, 504 U.S. 555, 566 (1992) (holding that conservation organizations lacked standing under the Endangered Species Act to challenge a federal regulation because the groups failed to assert a sufficiently imminent, direct injury that would likely be redressable by a judicial remedy).

¹⁸ See, e.g., *Colorado River v. Colorado*, (holding that alleged injuries to the Colorado River ecosystem could not be fairly traced sufficiently concrete

continued on page 38

AN ACE UP THEIR SLEEVE OR A HOUSE OF CARDS: CAN THE EPA'S AFFORDABLE CLEAN ENERGY RULE WITHSTAND CHEVRON DEFERENCE?

By Shannon Zaret*

The U.S. Court of Appeals for the District of Columbia (D.C. Circuit) is poised to become a prime battleground in a fight over the scope of the Environmental Protection Agency's (EPA) authority to regulate greenhouse gas emissions (GHGs) from the power sector under the Clean Air Act (CAA). The dispute stems from the EPA's recent efforts to replace the Obama-era Clean Power Plan (CPP) with the Affordable Clean Energy Rule (ACE Rule).¹ This move was quickly challenged by a coalition of twenty-nine cities and states as well as several prominent American health associations.² The two rules reflect very different views in regards to the role the federal government should play in combatting climate change, yet the core legal questions they pose are quite similar. To address pending litigation directed towards the ACE Rule, the D.C. Circuit will likely engage in a two-step inquiry. First, the court must examine whether the regulation of power plants under Section 112 of the CAA precludes their regulation under Section 111(d).³ If the court answers in the negative, they must then determine if the CAA sets limits on the EPA's statutory authority to regulate power plant GHG emissions. This Article will argue that the EPA's obligation under Section 112 does not displace their Section 111(d) authority and that the newly finalized ACE Rule represents a much narrower interpretation of Section 111(d) that is inconsistent with the congressional intent of the CAA.

BACKGROUND

Untangling this knot requires a careful study of the CAA's history and its impact on EPA's regulatory authority under Section 111(d). As amended in 1990, the CAA included conflicting language in Section 111(d).⁴ Due to an oversight, both the House and Senate passed versions that ended up in the final act.⁵ The House version of the bill precluded the use of Section 111(d) to regulate pollutants "emitted from a source category ... regulated" by Section 112.⁶ The Senate's version, on the other hand, barred the use of Section 111(d) to regulate air pollutants covered under 112.⁷ In other words, the Senate version focused on barring the duplicative regulation of pollutants and did not preclude the regulation of the same source for different classes of pollutants.⁸ Although the House version was eventually codified,⁹ this discrepancy would spark major contention fifteen years later after the CPP was finalized on October 23, 2015.¹⁰

In *West Virginia v. EPA* opponents of the CPP argued that the administration impermissibly relied upon the Senate version of the amended CAA, rather than the codified House version.¹¹ They contend that the text of Section 111(d)(1) has only one

permissible interpretation and must be read as barring the regulation of any "source" regulated under Section 112, even if in regard to an entirely different class of pollutants.¹² To win on the merits, opponents would have to demonstrate that the text is unambiguous and that no other reading of Section 111(d)(1) could possibly be reasonable.¹³ This is unlikely, as the EPA's authority to regulate GHGs from existing power plants under 111(d) rests on extensive judicial precedent and is consistent with a long history of CAA precedents from both party's administrations.¹⁴ The argument also finds no support in the CAA's text, structure, or legislative history.¹⁵

ANALYSIS

To this day, the issue has never been fully litigated.¹⁶ It is unclear whether it will be raised in the pending ACE Rule litigation, but the court will likely address the greater ambiguity of Section 111(d) before tackling the current conflict. If it does, the court should examine the legislative history and statutory context which suggests that the EPA's authority to regulate GHGs under Section 111(d) does not stand in contention with their Section 112 authority.

The second critical question is whether the EPA's authority to regulate power plant GHG emissions stops at the fence line. The answer is contingent upon the definition of "best system for emissions reduction" (BSER).¹⁷ Section 111 of the CAA directs the EPA to establish emission standards for air pollutants based on what is achievable under EPA's determination of BSER.¹⁸ The Obama-era CPP interpreted BSER broadly and encouraged states to go beyond the power-plant fence-line to reduce GHG emissions.¹⁹ The Trump administration contends that the CPP exceeded the EPA's CAA authority and that Section 111 should be interpreted to apply to emissions reductions that can be achieved only by mandating controls, "applicable," or capable of being implemented at, the individual power plant.²⁰ A federal court will often accept an agency's construction of an ambiguous statute they administer (i.e., Chevron deference).²¹ If the court determines the statute unambiguously grants EPA the authority to determine BSER as it did in ACE, then future administrations will be tied to this narrower interpretation of Section 111(d). Alternatively, if the courts find that the statute is ambiguous, they must then examine whether the ACE Rule is a reasonable interpretation or whether, under the standard of review, is arbitrary and capricious.²²

*J.D. Candidate, American University Washington College of Law 2022

The ACE Rule contains inherent flaws, suggesting the EPA has not identified the BSER for the power sector but rather just a system of emissions reduction. For example, the EPA excludes many emissions reducing technologies and restricts the definition of BSER to on-site, heat-rate efficiency improvements (HRI).²³ This approach paradoxically prevents greater reductions inside the fence and would actually raise emissions at some plants.²⁴ Data from the EPA's own Regulatory Impact Analysis (RIA) projected that emissions under ACE would increase at eighteen-percent of coal plants.²⁵

Further, the rule allows states to decide how significantly to cut emissions, if at all, rather than providing numeric targets for them.²⁶ This would enable states to set weaker standards and prevents the EPA from measuring state progress towards an established goal. Lastly, EPA's RIA indicates that replacing the CPP with ACE will result in an increase in sulfur dioxide and nitrogen oxide emissions and an additional 470-1,400 premature deaths compared to the CPP baseline.²⁷ The RIA also concluded that the ACE rule would result in billions of dollars of net

“foregone benefits” and projected that GHG emissions would be 3% higher in 2030 under every scenario analyzed.²⁸

CONCLUSION

Cumulatively, these issues restrict ACE from achieving maximum emission reductions both when compared to the more flexible CPP and even within their rigid inside the fence interpretation. This suggests that the EPA has not identified the BSER in the power sector and that there is room for the rule to be substantially broader. Whether the rule is arbitrary is something that the courts will ultimately resolve. However, courts should carefully evaluate these inconsistencies to determine whether ACE really represents the upper level of the EPA's authority to regulate GHGs or simply the bare minimum. If courts go with the latter option, they must reconcile how this could be a permissible interpretation of “best systems” or a sufficient regulatory response given that the legislative intent of the CAA is to achieve targeted air quality standards to protect public health nationwide.



ENDNOTES

¹ Carbon Pollution Emission Guidelines for Existing Stationary Sources: Electric Utility Generating Units, Final Rule, 80 Fed. Reg. 64,661, 64,663 (October 23, 2015) [hereinafter CPP]; Repeal of the Clean Power Plan; Emission Guidelines for Greenhouse Gas Emissions from Existing Electric Utility Generating Units; Revisions to Emission Guidelines Implementing Regulations, 84 Fed. Reg. 32,520 (July 8, 2019). [hereinafter ACE Rule] (to be codified at 40 C.F.R. pt. 60).

² Petition for Review at 1-2, *American Lung Association v. EPA*, No. 19-1140 (D.C. Cir. July 8, 2019).

³ Section 112 of the Clean Air Act governs the federal control program for hazardous air pollutants for major sources. Section 111 establishes mechanisms for controlling emissions of air pollutants from stationary sources. Under Section 111(b) the EPA identifies the “best system of emission reduction” (BSER) that has been adequately demonstrated to control emissions from a particular type of pollutant from a particular type of source, and EPA sets performance standards based on the application of BSER. Clean Air Act, 42 U.S.C. §§ 7411-12 (2012). The ACE Rule is being proposed under Section 111(d), which addresses emissions from existing sources. It sets a framework for states to develop performance plans for existing sources based on BSER but allows the states to set their own performance goals. ACE Rule, *supra* note 1, at 32,520.

⁴ Clean Air Act Amendments of 1990, Pub. L. No. 101-549, 104 Stat. 2399 (1990) [hereinafter 1990 CAA].

⁵ *Id.* at 2467, 2574.

⁶ *Id.* § 108(g) at 2465.

⁷ *Id.* § 302(a) at 2574.

⁸ *Id.*

⁹ Clean Air Act, 42 U.S.C. §§ 7411-12 (2012). Attempting to reconcile § 108(g) and § 302(a) as written proved challenging. Both provisions called for a strikethrough of “112(b)(1)(A)”. Section 108(g) called for 112(b)(1)(A) to be replaced by “or emitted from a source category which is regulated under Section 112” while § 302(a) called for 112(b)(1)(A) to be replaced by “in lieu thereof 112(b).” Attempting to effectuate both would have resulted in a completely unintelligible sentence. Ultimately the sentence was made operative by adhering to the language of the amendment that came first, § 108(g).

¹⁰ *West Virginia v. EPA*, No. 15-01363, 2019 U.S. App. LEXIS 29593 (D.C. Cir. Sep. 17, 2019) (dismissal of a consolidated proceeding against the EPA).

¹¹ Reply Brief of Petitioners on Core Legal Issues at 32-36, *West Virginia v. EPA* No. 15-1363, (D.C. Cir. Apr. 15, 2016).

¹² *Id.* at 32. Since the EPA regulated emissions of hazardous pollutants from power plants in the 2012 MATS Rule, the argument follows that they cannot set forth a Section 111 rule (i.e., the CPP) addressing power plant GHG emissions. *id.*

¹³ See *Chevron, U.S.A., Inc. v. NRDC, Inc.*, 467 U.S. 837, 843-44 (1984) (explaining that if the text of a regulatory enabling-statute is ambiguous and can be read multiple ways than courts should allow for reasonable Agency interpretation).

¹⁴ See *American Electric Power Company, Inc. v. Connecticut* 564 U.S. 410, 411 (2011) (holding that Section 111(d) “speaks directly” to addressing the issue of carbon emissions from existing power plants). See also *EPA v. EME Homer City Generation*, 134 S. Ct. 1584 (2014) (upholding the Cross-State Air Pollution Rule as a “permissible, workable and equitable” interpretation of the Clean Air Act and upholding a regional emission credits trading program).

¹⁵ See 42 U.S.C. § 7412(d)(7). When Congress first enacted Section 111(d) in 1970, it made clear that this section plays a critical “gap-filling” role for greenhouse gases that are not subject to national ambient air quality standards (Sections 108–110) or hazardous air pollutant standards (Section 112). Gregory E. Wannier, Et Al., Inst. For Policy Integrity, Discussion Paper No. 2011/2, *Prevailing Academic View On Compliance Flexibility Under § 111 Of The Clean Air Act* (2011), https://policyintegrity.org/files/publications/Prevailing_Academic_View_on_Compliance_Flexibility.pdf. The 1990 amendment did not abandon this framework as Section 112(d)(7) expressly provides that no standard under Section 112 “shall be interpreted, construed or applied to diminish or replace the requirements . . . established pursuant to Section 7411 of this title.” 42 U.S.C. § 7412(d)(7). In fact, there is no mention in the legislative history that Congress intended to alter Section 111 to such dramatic affect. Brief for Respondent at 28-40, *West Virginia v. EPA*, No. 14-1146 (D.C. Cir. Jan. 23, 2015). The text of Section 111(d)(1) is ripe with ambiguities. The EPA laid out a number of different equally reasonable interpretations of the text in their response brief in *West Virginia v. EPA*. For example, the word “regulated” and the what that is being regulated is ambiguous here. The Supreme Court has directed the EPA to assign a “reasonable, context-appropriate meaning” to what is being regulated when the text of a statute is ambiguous. See *Util. Air Regulatory Grp. v. EPA*, 134 S. Ct. 2427, 2440 (2014). Thus EPA could reasonably conclude given the context and purpose of the CAA that what is being regulated was in fact the pollutant and not the source category. See *id.*; see also *U.S. Nat. Bank of Oregon v. Indep. Ins. Agents of Am., Inc.*, 508 U.S. 439, 448 (1993) (holding that the U.S. Code is considered dispositive only for those provisions enacted

continued on page 39

THE RIGHT TO LEGALLY SOURCED LUMBER?

HOW THE EFFECTIVE ENFORCEMENT OF THE LACEY ACT IS A U.S. HUMAN RIGHTS OBLIGATION AND CRITICAL TO PREVENTING ABUSE IN THE ILLEGAL LOGGING INDUSTRY

*By Melanie Hess**

INTRODUCTION: THE RIGHT TO LEGALLY SOURCED LUMBER?

A World Bank study estimated that eighty percent of wood coming out of Peru's Amazonian forests is illegally logged.¹ Illegal logging is perpetrated through a widespread system of fraud, deception, and corruption committed by local authorities, government agencies, and lumber suppliers. Some of Peru's environmental agencies and other organizations, including environmental NGO Environmental Investigation Agency (EIA) work to enforce Peru's laws regarding legal harvesting of lumber.² Many others turn the other way—or worse, actively aid timber suppliers bypass legal means of logging.³

The United States instituted a significant binding treaty, the United States-Peru Trade Promotion Agreement (TPA), in 2009, which was aimed to remove certain barriers to U.S. services and provide a stable framework for investors for both countries. Significantly, the agreement incorporates important provisions for the protection of environmental and human rights.⁴ This bilateral agreement is important because it represents the two countries' commitments to healthy economies and strong international relations, but also to address the serious environmental and human rights violations occurring in Peru, with the encouragement of corporations based in the United States.

Illegal logging practices uphold a system of corruption in regulation and governance, which undermines the rule of law and destabilize the Peruvian government and its people's access to and faith in security and justice. It also depresses economic development of the country by reducing the profitability of the sector as a whole, and undermines sustainable, legal operations by undercutting those prices.⁵ Addressing illegal logging involves a high-stakes resource: the Peruvian Amazon forest. The Amazon is part of Peru's history, heritage, and legacy. However, it also plays an important global role as a precious natural resource with inestimable scientific, medicinal, and aesthetic value, with far-reaching effects in global issues like climate change.

The illegal logging industry engenders an environment where gross human rights violations occur pervasively and without consequence to the perpetrators. Illegal loggers in search of profitable forests forcibly and violently remove indigenous peoples from their land or deceive them into forfeiting land

rights.⁶ Protests to the government tend to fall on deaf ears, and the response by the loggers can be deadly.⁷ Unscrupulous lumber suppliers frequently exploit impoverished communities and individuals into forced labor systems through debt servitude and other means.⁸ These workers do dangerous tasks for little to no pay, through schedules exceeding legal limits of hours, without guarantee to medical attention or even proper habitation and nutrition.⁹ Finally, the environmental destruction that the illegal logging industry perpetuates is a global, as well as local, human rights issue that cannot be ignored.

Supporting and tacitly approving of these practices are huge transnational corporations in the business of purchasing or distributing illegal lumber from Peru, costing Peru an estimated \$250 million per year.¹⁰ These corporations are propping up the industry and creating powerful monetary incentives for timber suppliers.

These issues are attributable to the illegal nature of the industry; absent the oversight of the law, global corporations take advantage of cheap labor and more conveniently located forests to satisfy their timber needs. The timber suppliers are themselves desperate to obtain timber in any way that they can in order to be able to compete with the global market for lumber worldwide to ensure their own livelihoods.¹¹ These human rights violations are directly linked to the issue of illegal logging for the simple fact that they are not occurring in the same frequency or with the same gravity where lumber is being harvested legally.¹² A report conducted by the International Labour Organization (ILO) noted that the majority of those suppliers and companies that comply with the regulations around logging also comply with labor norms and are respectful of workers' rights.¹³ These legal enterprises have explicitly disapproved of and rejected the practices of the illegal logging industry.¹⁴

Despite the appearance of efforts to combat illegal logging, including international agreements and the creation of new agencies and laws, the industry is backed by timber laundering schemes, the indifference of local officials,¹⁵ and timber suppliers that have no qualms with maintaining their positions of power through corruption and violence. To illustrate the

* Melanie Hess, Juris Doctor Candidate, Notre Dame Law School 2020; Bachelor of Arts University of California, Berkeley, 2015. I would like to thank Dr. Michael K. Addo for his guidance and mentorship.

THE REGULATORY FRAMEWORK IN PERU'S LOGGING INDUSTRY

There are a number of places where timber may be legally harvested in Peru's forests. Lumber can be harvested from Permanent Production Forests,²⁴ granted by the Ministry of Agriculture in the form of concessions; timber may also be legally harvested in indigenous community forests through deals with the respective indigenous communities.²⁵ Logging is also increasingly authorized on private properties and local forests as well, granted by regional governments to organized community groups.²⁶

To get approval to sell and log the appropriate species and volume of timber in their forests, the individuals, communities, and organizations who act as managers of forests where lumber may be legally extracted must file *Planes de Operación* (POs).²⁷ The POs describe forest inventory using geographic maps and lists of the trees slated to be logged and those to be left, and are filed with a local corresponding authority in order to get approval for the volume and species proposed.²⁸ These local approving authorities are registered with *Colegio Forestal*, the national professional association of forestry consultants, and pre-approved by *Servicio Nacional Forestal y de Fauna Silvestre* (Serfor), the national forest authority in charge of enforcing Peru's forest and wildlife laws and regulating the forests and industries that rely on them.²⁹ Another government agency, *Organismo de Supervisión de los Recursos Forestales* (Osinfor), plays a major role in ascertaining the legitimacy of the paperwork used by timber suppliers by conducting post-harvest inspections of sites listed in POs to verify whether reported harvest sites are being used as reported.³⁰

According to the primary law governing the regulations of the forestry industry, *La Ley Forestal y de Fauna Silvestre*, no. 29763 (Ley Forestal 29763), any person trading, transporting, or possessing forest or wildlife products or species must be able to prove the legal origin of the product, and any illegally sourced products may be seized and the transporter subject to sanctions, regardless of their knowledge of the illegal origins.³¹

This is accomplished through the requirement that all lumber transports must be accompanied by a *Guía de Transporte Forestal* (GTF) that theoretically includes legitimate information about the lumber's source, traced back to the PO, which grants the authorization for harvesting activities in that region of the forest.³² GTFs may only be legally issued from sites that have been formally authorized for logging—those sites for which POs have been submitted and approved. The Ley Forestal 29763 requires that newly harvested lumber pass first through a sawmill, which is obligated to verify the source of the transport; thereafter, a series of GTFs must accompany a transport of lumber in every step of their journey.³³

TIMBER LAUNDERING AND FRAUD IN PERU

Despite this framework, rampant fraud is committed at the first stage through the creation of false POs. In some cases,

conduct of these corporate interests, during the 2015 detention of what turned out to be an illegal shipment of lumber to the US, the timber industry's reaction was fierce and alarming. Forest investigation officials became targets of death threats and violent protests, which included the burning of coffins with their names on them. One forest inspection office was set on fire.¹⁶ The head of the Peruvian forest registry, Ramon Navarro, received death threats, and as the investigation of that shipment progressed, he was abruptly fired by the Peruvian president. Absent the authority of his office, he fled the country and sought political asylum in the United States in 2016, where he is now working with the EIA.¹⁷

The United States is one of Peru's largest trading partners, second only to China in Peruvian exports which are valued at almost \$7 million in 2017, according to the World Bank.¹⁸ If U.S.-based business does not take care to avoid the illegal lumber industry, it inevitably contributes significantly to the problem of illegal logging and the gross human rights abuses that are tied to that industry. A 2012 report by the EIA indicated at least forty percent of official cedar exports to the United States include illegally logged timber.¹⁹

The United States has a state duty to protect human rights; under the UN Guiding Principles on Business and Human Rights (the UN Guiding Principles) this means preventing U.S. businesses from committing abuses extraterritorially.²⁰ This paper will address the obligations of both states, with particular focus on the United States, to protect human rights, which are adversely impacted by Peru's logging industry through the lens of the UN Guiding Principles. Parts II and III will describe the problem of the illegal logging industry in Peru and its impact on human rights.²¹ Part IV will discuss what the U.S. state duty to protect is with regards to human rights abuses occurring extraterritorially in Peru pursuant to the UN Guiding Principles, and how the United States is falling short of its duties.²² Parts V–VII will describe the Lacey Act as the legal remedy on the frontline of preventing businesses from committing human rights abuses, and examine its effectiveness at this task. It will suggest that the failure of the U.S. duty can be traced primarily to ineffective enforcement of laws which inadvertently allows the continued participation of U.S. corporations in the industry, whose business dealings in turn perpetuate systems of abuse and incentivize weak governance in Peru. Parts VIII–IX address remedies that attempt to fill the gaps left by the Lacey Act and its enforcement authorities. The lack of an effective legal mechanism to protect against these abuses reflects failures of both countries to uphold international human rights obligations.²³ They also threaten to make the commitments to environmental issues and human rights in the TPA mere verbiage, undermining that agreement and the goals it seeks to advance.

logging operators “invent” trees, creating false inventories of the trees in their forests that simply do not exist (a series of inspections by Osinfor found that twenty-six percent of reported trees in certain areas did not exist)³⁴ In others, logging operators create inventories based on the existence of real trees reported in false geographic locations, as the “real” trees are in forests too remote to be profitably logged.³⁵ These falsified POs are then submitted for approval to local authorities, many of which have neither the resources nor the will to properly verify the veracity of the documents, which would require intensive fieldwork.³⁶ Using these false POs, “legitimate” GTFs can then be created that correspond with the amount of lumber being taken.³⁷ It follows that these GTFs, based on false information, would not have otherwise been authorized based on the actual capacities of the forest being harvested. In some areas, POs and GTFs based on those POs continue to be used even if that concession of forest has been completely used up—documents are simply altered to create the appearance of legality for timber that was in fact harvested from somewhere else.³⁸

This practice not only enables the laundering of almost 28,000 square acres of trees in the Peruvian Amazon every year, but it creates a black market for false documents, which are traded and sold, perpetuating this illegal economy.³⁹ It creates a complicated problem of enforcement where determining the legitimacy of a lumber transport requires returning to the original PO that authorized the harvest and a physical inspection of the forest to determine whether the PO accurately reported the forest’s inventory.⁴⁰ One of the only ways to have confidence in a document’s legitimacy would require the verifier to visit the geographic location and check for a tree stump, proving that that site had indeed been harvested (though this would not preclude the possibility that the PO was being falsely used multiple times).⁴¹

Another significant result of this practice is the way that it complicates enforcement of logging laws, as traders may claim—or truly believe—that their purchase of illegal transports was “in good faith” and based off what appeared to be legitimate documentation, despite widespread knowledge of the laundering practices.⁴² The ability to claim ignorance poses a significant problem in the enforcement of foreign laws against international corporations and providing justice to those harmed by the illegal logging industry.

THE HUMAN RIGHTS IMPACT OF THE ILLEGAL LOGGING INDUSTRY

INDIGENOUS COMMUNITIES

In September 2014, Peruvian authorities announced the murders of four Ashéninka tribal leaders, including Edwin Chota, a renowned anti-logging protestor and indigenous community advocate.⁴³ According to witnesses and local indigenous leader, illegal loggers bound and shot the four community leaders on a sports field, in front of the village’s inhabitants. The loggers’ motivation was to exact revenge on Chota and his companions for reporting them to authorities, and in all likelihood, to send a

message to anyone that might have stepped up to carry on their legacy.⁴⁴

The Ashéninka are Peru’s largest group of indigenous population, at 92,000, and have increasingly become the victims of violence as they begin pushing back against loggers who illegally enter and destroy their land.⁴⁵ For almost a decade, Chota and other community leaders had been writing letters to Peruvian authorities, protesting against wrongful seizures of indigenous land rights, and defending their ancestral lands.⁴⁶ The tragedy of their murder was made worse by the fact that local law enforcement and judiciary knew that these community leaders were the targets of violence, and yet failed to do anything about it. Peru’s Director for the EIA noted that: “It was widely known that Edwin Chota and other leaders from the Alto Tamaya-Saweto community were asking for protection from the Peruvian authorities because they were receiving death threats from the illegal loggers operating in their area.”⁴⁷

This infamous case is only one example of a pattern of exploitation and violence committed against indigenous communities occupying valuable forest lands.⁴⁸ Indigenous communities that have watched Peru’s historically apathetic response to illegal incursions on their land have developed distrust and taken to forming *Rondas campesinas*, or community groups that stand guard over land.⁴⁹ Illegal logging operations continue invading territories occupied by Peru’s estimated fifteen isolated indigenous tribes, or “uncontacted” peoples who live in voluntary isolation without significant contact from the global civilization.⁵⁰ Such groups not only have particular reverence for their land, but lack immunity to common diseases and are imperiled after even one contact with another person or unfamiliar disease-carrying agent.⁵¹ These groups have been documented fleeing their lands to escape the onslaught of illegal loggers, as they are doomed to adapt to new conditions or be killed by disease or at the hands of the invaders.⁵²

Violence and expulsion from land is not limited to indigenous tribes: violent conflicts that erupt over land use result in murders of other local inhabitants and farmers.⁵³ Authorities often stand by or are complicit in these crimes through granting falsified documents that allow the illegal loggers and land traffickers to continue their lucrative trade and ignoring complaints of illegality from those affected.⁵⁴

FORCED LABOR

In the TPA, the United States and Peru both explicitly reaffirmed the commitments they made as members of the ILO.⁵⁵ The ILO includes a declaration of workers’ rights, fundamental to which is the obligation to promote and realize “the elimination of all forms of forced or compulsory labor.”⁵⁶

Illegal logging operations exploit workers through poor pay, abysmal working conditions, and forced labor systems. Workers are coerced and then trapped into these systems of exploitation through economic traps and physical threats and violence. A 2005 study conducted by the ILO estimated that over 33,000 people worked under conditions of forced labor in labor camps.⁵⁷ Typically impoverished communities are targeted, where

workers are convinced to sign contracts that stipulate wages that are insufficient to cover the cost of lodging and living.⁵⁸ The result is the workers get trapped in a system of debt slavery where they are unable to recover enough money to save or pay off their debts.⁵⁹ Camp operators frequently use other means to coerce workers to stay, such as retaining their paperwork, or threatening to withhold pay. Workers often receive death threats if they try to escape.⁶⁰ While most of the workers are adult males, some bring their families, who may also be subject to degrading work or even forced prostitution.⁶¹

In other cases, patrons offer a generous incentive to a community that lives near a place with harvestable wood, in the form of money or even infrastructure, such as the building of a school, in exchange for the delivery of a certain quantity of wood.⁶² In written or oral agreements, the parties decide on a certain percentage of the profits or wood harvested. After the lumber has been harvested, the patron has little difficulty persuading the community that they have harvested poor quality trees or cut them incorrectly, or simply lie to them about the market value of the lumber.⁶³ After having completed a project and receiving far less compensation than was owed, the patron may offer an advance or to pay off workers' debts in exchange for a new harvesting job, or sending workers to a labor camp.⁶⁴

Conditions at labor camps are abysmal, consisting of back-breaking labor in long work days that far exceed legal limits.⁶⁵ The workers also experience hunger, as limited food is provided and what is provided comes out of their paychecks.⁶⁶ Despite the frequency of accidents, sickness, and exhausting labor, there are no medical services, adequate water or food, and work hours exorbitantly exceed the legal limit.⁶⁷

Furthermore, the work itself is dangerous to the point of deadly, as untrained workers learn on the job how to stay out of the way of falling trees, which can crush and kill multiple men if they inaccurately predict its trajectory. Because of the tools and nature of the work, one slip can sever a hand, and loss of limb is not uncommon.⁶⁸ One worker recounted his experience, saying: *"In a moment of carelessness I had opened my hand in two and three fingers hung off. So much blood was squirting out; I could not stand the pain. I screamed out of pain begging for help. . . They sent me to an emergency center in Puerto Maldonado, there they cut off my hand because otherwise it was going to be infected."*⁶⁹

However, despite the dangerous and degrading treatment, most workers have no choice but to stay and continue working in these conditions of forced labor because they are afraid for their lives.⁷⁰ As one victim described:

Thus, without realizing it we had worked for years and years for the loggers. . . . We did not have another option [than to stay] because the patron (boss) threatened us and told us that we had to pay the debts we acquired. But some young people my age escaped and others did not return to work in the second and third harvest; they ended up deserting. The two men that came with the

*patron had weapons and took shifts at night to ensure that no one fled from the camp."*⁷¹

ENVIRONMENTAL HARM

The excess in tree loss caused by illegal logging has devastating effects worldwide, causing it to be not only an issue of local human rights with the communities that directly confront the industry, but a human rights issue on a global scale. Peru, which contains the second largest region of the Amazon forest after Brazil, loses 600 square miles of forest every year, equivalent to approximately seventeen soccer fields an hour.⁷² Trees in forests typically act as carbon sinks, absorbing carbon from the atmosphere and reducing greenhouse gas emissions, but scientists estimate that tropical forests now emit more carbon than they capture as a result of forest degradation and disturbance, and that stopping deforestation is a critical step to combat global warming.⁷³ Furthermore, trees that were commonly found in the Amazon, like mahogany and cedar, have drastically and dangerously depleted, and experts have recommended adding a third tree species, the shihuahuaco, to the list of endangered tree species because of its depletion between 2000 and 2015.⁷⁴

THE STATE DUTY TO PROTECT

SET CLEAR EXPECTATIONS FOR U.S. BUSINESSES' PARTICIPATION IN PERU'S LOGGING INDUSTRY

Given the pervasiveness of the problem and the significant involvement of U.S. corporations in the industry, the United States is implicated in the human rights issues connected with this industry. Because international human rights norms are only binding on states, not private actors, the UN Guiding Principles on Business and Human Rights (the UN Guiding Principles) were adopted in 2011 to address the problem of human rights violations by business enterprises.⁷⁵ These principles set out the *duties* of the States to *protect* human rights, and the *responsibility* of business to *respect* human rights. The Guiding Principles thus provide a framework wherein States fulfill their duty to protect human rights by policing corporations that may be violating them through the course of their operations.⁷⁶ According to the UN Guiding Principles, "States' international human rights law obligations require that they respect, protect and fulfil the human rights of individuals within their territory and/or jurisdiction. This includes the duty to protect against human rights abuse by third parties, including business enterprises."⁷⁷

The Guiding Principles provide that the United States has a duty to "set out clearly the expectation" that all business enterprises, including those operating extraterritorially, respect human rights *"throughout their operations."*⁷⁸ This includes the recommendation that States *"take steps to prevent abuse abroad* by business enterprises within their jurisdiction."⁷⁹ Thus, under the UN Guiding Principles, the United States should protect human rights violated extraterritorially by corporations within their jurisdiction; this is tied to the implementation and enforcement of laws and policies that prevent U.S. businesses from participating in Peru's illegal logging industry.⁸⁰ One clear

way to achieve this is to take steps to more actively eradicate the industry, where the human rights violations are occurring. At the very least, the United States must ensure that it is doing what it can to refrain from participating in the industry where it is thereby tacitly sponsoring these human rights abuses.

DEMONSTRATING COMMITMENT TO COMBATTING ILLEGAL LOGGING THROUGH THE U.S.-PERU TRADE PROMOTION AGREEMENT

Both States collaborated on combatting the issues of the logging industry through the creation of the U.S.-Peru Trade Promotion Agreement (TPA). This partnership reflects a step forward in implementing a more effective forest governance system in Peru through the creation of several agencies charged with enforcement and regulation of trafficking and laundering of lumber. It also includes efforts to establish technical support in the form of monitoring technologies that have the potential to make the industry more transparent and easier to police⁸¹

The TPA establishes a framework for forest governance and affirms the two countries' commitment as members to ILO Declaration on Fundamental Principles and Rights at Work.⁸² As members of the ILO, these countries have an obligation to uphold the principles of the ILO Declaration⁸³ For purposes of international law, treaties between countries create binding and enforceable obligations between those countries.⁸⁴ By incorporating the ILO Declaration into the U.S.-Peru TPA, the United States and Peru made the ILO Declaration, which has principles that are not enforceable on their own, binding obligations between their two States. Since the TPA requires both Peru and the United States to ensure that ILO principles are upheld, the agreement requires both countries to address the culprits of these human rights violations—particularly the dangerous forced labor. This necessarily implicates the illegal logging industry, where these violations are rampant.⁸⁵

Significantly, the TPA includes an entire Annex on Forest Sector Governance to develop, implement, and strengthen the legal and regulatory framework and enforcement bodies for the sustainable management of forest resources.⁸⁶ This section of the agreement commits both parties to effectively enforce existing domestic environmental laws as well as adopt and implement any laws necessary to fulfill environmental and human rights obligations.⁸⁷

The TPA requires Peru to “develop systems to verify the legal origin and chain of custody of CITES-listed tree species and develop systems, including requirements for management oversight and record keeping, to reliably track specimens from harvest through transport, processing and export.”⁸⁸ As a potential market for Peru's illegally sourced timber, the United States has a duty under the TPA to “deny entry to a shipment that was the subject of verification” and deny entry to products where an enterprise “knowingly provided false information to Peruvian or United States officials” regarding the contents of the shipment.⁸⁹ In 2015, for example, a shipment of lumber was red-flagged after Peruvian officials said it lacked the proper paperwork. U.S. enforcement authorities seized the shipment,

originally destined for an Oregon-based corporation Popp Forest Products, Inc., and destroyed it in a settlement agreement.⁹⁰ In short, the TPA makes explicit both states' commitment to addressing the problem of stolen wood, and the intricately linked human rights abuses, perpetuated by Peru's logging industry by outlining and strengthening enforcement systems for corporations that violate laws around legally sourced lumber.

OVERVIEW OF UNITED STATES' EFFORTS TO FULFILL OBLIGATIONS UNDER THE TPA

In December 2016, the United States adopted a National Action Plan (NAP) to strengthen public and private actors' abilities to attain responsible business conduct goals.⁹¹ The UN Working Group on Business and Human Rights strongly encouraged States to develop these NAPs in order to help implement the UN Guiding Principles, and to date, twenty-two countries have adopted NAPs to address responsible business conduct, with thirty-one other countries committed to or in the process of developing NAPs.⁹² The U.S. NAP specifically acknowledges and reinforces its ongoing commitment to the capacity-building and technical support to combat illegal logging.⁹³ In doing so, the NAP affirms partnerships with several States that are high-risk for illegal logging, which along with Peru, also include Colombia and Cameroon.⁹⁴ Without explicitly acknowledging commitments like the U.S.-Peru TPA, the NAP complements it by affirming its commitments. This is particularly true in the commitment to preventing violations through enforcement actions: the TPA requires the parties to “ensure that judicial, quasi-judicial, or administrative proceedings are available under its law to provide sanctions or remedies for violations of its environmental laws,”⁹⁵ and the NAP commits the United States to investigating and prosecuting illegal logging cases.⁹⁶

The NAP “encourages businesses to treat tools like the OECD Guidelines and the UN Guiding Principles as a floor rather than a ceiling for implementing responsible business practices...”⁹⁷ The United States commits resources and tools, including research and data, to allow businesses to more effectively conduct due diligence necessary to describe the state of human rights.⁹⁸ One such resource in development is a database service for international company profiles that allows companies to search foreign suppliers for past history and risk assessment purposes.⁹⁹ A reliable database would allow U.S. corporations to vet potential partners for risk for human rights abuses, and would make ignorance of a risky partnership less easy to claim.¹⁰⁰

In line with the commitments expressed in the NAP and the TPA, the U.S. Agency of International Development (USAID) has been involved in several development programs with the goal of strengthening Peru's forestry governance and providing technology to help with some of the issues that the industry faces. Since 2009, the U.S. government has dedicated over \$90 million to develop forest governance procedures, both in technical assistance and capacity building.¹⁰¹

One of the programs being supported by USAID has the potential to get at the root of the problem: providing technical and technological capabilities that will allow officials to better monitor and track Peru's Amazonian forests so that fraudulent GTFs are not so easy to create, buy, and sell. USAID is working with Serfor to develop systems that will allow the agencies to develop, utilize, and analyze geospatial data from the new technologies.¹⁰² Digitizing the tracking systems for lumber transports would go a long way in obstructing the current ease of illegal logging activity. USAID donated a new satellite monitoring system for deforestation, and the United States has worked with Peru's agencies to develop a digital timber tracking system that has the potential to create transparency and traceability.¹⁰³

In theory, the United States has in place laws and programs that have the potential to support the eradication of the illegal logging industry through preventative means and have reinforced their commitments to international human rights norms. One important law in place purports to address the human rights at stake by establishing a legal remedy criminalizing participation in the illegal logging industry: the Lacey Act.

REMEDIES: THE U.S. LACEY ACT

THE EFFECTIVENESS OF THE U.S. LACEY ACT PURSUANT TO THE UN GUIDING PRINCIPLES

Pursuant to the UN Guiding Principles, "[s]tates should take appropriate steps to ensure the effectiveness of domestic judicial mechanisms when addressing business-related human rights abuses."¹⁰⁴ This goes beyond having an effective law in place that purports to address abusive conduct; it is additionally necessary to "take appropriate steps to investigate, punish, and redress business-related human rights abuses when they do occur, [or else] the State duty to protect can be rendered weak or even meaningless."¹⁰⁵

The U.S. Lacey Act was passed in 1900 to protect endangered wildlife by imposing civil and criminal penalties for those that violate rules and regulations around the illegal trade and possession of primarily endangered wildlife.¹⁰⁶ The Act was amended in 2008 to include plant products and has been the primary enforcement tool in the United States addressing the importation or exploitation of illegally-sourced plants and animals.¹⁰⁷ The 2008 amendment that expanded the law to include illegal timber requires due care to be exercised by importers/purchasers to ascertain the legality of wood they have purchased.¹⁰⁸ Unfortunately, this could be (and has been, in some cases) interpreted to mean simply requiring documentation that verifies the legality of the timber import, which as established, does not guarantee the legality of the wood.¹⁰⁹

Under the Lacey Act, it is unlawful to "import, export, transport, sell, receive, acquire, or purchase in interstate or foreign commerce" any plant "taken, possessed, transported, or sold" in violation of any State or foreign laws and regulations that regulate "the taking of plants without, or contrary to, required authorization."¹¹⁰ Thus, a felony-level Lacey Act

violation requires an actor to violate an existing U.S. or foreign law. An actor that "knowingly" engages in importing or exporting plants or wildlife in violation of the Act can be criminally prosecuted and fined up to \$250,000 for individuals (\$500,000 for an organization) and be sentenced to five years' imprisonment.¹¹¹ A lower criminal sanction, however, allows a defendant to be charged where she, "in the exercise of due care," should have known that she was violating foreign or State laws and regulations. This misdemeanor-level criminal offense can result in up to \$100,000 in fines for individuals (\$200,000 for an organization) and one year's imprisonment.¹¹²

In application to the topic at hand, this means that to violate the Lacey Act at a felony violation, a company must have had knowledge of Peru's local laws regarding timber sourcing. However, companies can be prosecuted for misdemeanor-level violations under the Act by the failure to exercise due care in sourcing lumber and following Peru's laws.¹¹³ Thus, a company found to have imported illegally logged lumber from Peru, according to Peru's local laws, would result in at least a misdemeanor-level violation of the Lacey Act. As described above, the relevant regulations require any timber supplier to have sourced the timber from a legal origin and be able to verify that origin through a legitimate paper trail.¹¹⁴

As is the case in many industries involving transnational corporations and human rights, the involvement of business enterprises in supporting and promulgating the existence of illegal logging undermines any efforts that Peru and the United States might take to try to eradicate it through legal means. Effective and diligent enforcement of the Lacey Act sets the precedent that businesses are expected to follow the law, even where it may be possible to circumvent because of the nature of the illegal timber trade makes it easy to claim that the company had a "good faith" belief in the legality of their supply.

THE LACEY ACT'S POTENTIAL TO ADDRESS AND PREVENT EXTRATERRITORIAL HUMAN RIGHTS VIOLATIONS

Effective enforcement of the Lacey Act, pursuant to provisions of the U.S.-Peru TPA that require the prosecution and investigation of environmental laws, has the potential to not only have welcome environmental consequences, but also to address the human rights violations rampant in the illegal logging industry. The strong connection between the illegal logging industry and the human rights violations cannot be overstated. Illegal loggers directly take advantage of indigenous communities by persuading them to sign contracts that are illegal, abusive, or not approved by legitimate community procedures.¹¹⁵ As described above, indigenous leaders or defenders of the land are often targeted with threats or even killed.¹¹⁶

However, the true source of the problem is much more complicated than the behavior of the illegal loggers themselves. Rather, the true source of the problem is the economic demand and incentives to deliver the low-cost lumber to a global market. Thus, closer to the root of the problem is the powerful transnational corporations that feed the industry through its patronage. In a prominent case where several Ashaninka

community leaders, including Edwin Chota, were murdered for their activism in protecting land from illegal logging, the community knew that “the murderers were paid by powerful businessmen.”¹¹⁷ This implicates the effective enforcement of statutes that prevent businesses from profiting from these illegal endeavors, such as the Lacey Act.

Effectively enforcing the Lacey Act also has the potential to have a strong impact on the inhumane labor conditions that workers in the illegal logging industry are subjected to. By ignoring decent wages and engaging in exploitative labor and environmental practices, the illegal logging industry can be lucrative because of profit margins and the ability to undercut prices of lumber, which makes it appealing to lumber purchasers.¹¹⁸ The debt slavery that victimizes workers in the illegal logging industry is largely a result of the lack of formal financing mechanisms available to logging activities.¹¹⁹ An anecdotal investigation by the EIA “conservatively” estimated that the quantity and quality of a batch of wood produced by one of the forced labor camps could be worth almost \$493,000 on the international market, but had been produced by that camp for approximately \$20,000.¹²⁰ Even adding in any bribes that might have been paid to enforcement authorities, it is a “very profitable business and, unfortunately, one which carries very little risk.”¹²¹ The combination of the lack of traditional financing and the fact that illegal logging undercuts the price of the lumber causes the industry to be “trapped in a vicious cycle of illegality, informality and abuse.”¹²² Contributing to the pervasive abuses is the auspicious lack of any governmental and regulatory oversight.¹²³ This allows the loggers to abuse labor rights, enact and perpetuate horrific working conditions, and violate labor laws, such as minimum wage and hourly working requirements.¹²⁴

In short, the industry’s illegality itself creates and sustains conditions where vulnerable communities and individuals are targeted and trapped in these abusive working conditions; the pressure to compete with the prices of illegally harvested lumber incentivizes these practices and the lack of regulatory or governmental oversight enables them. Without the demand for illegal lumber from the ultimate consumers (the transnational corporations), the incentives for the illegal logging industry, along with all of the human rights harms it implicates, would disappear.¹²⁵ An EIA report from 2012 concludes: “[A]n effective fight against this scourge has to look beyond the poor loggers in the forest or the petty criminals, and focus on those who are truly enriched by this illicit activity.”¹²⁶ In other words, simply coming down on the illegal loggers themselves would not represent a sustainable solution to these labor and human rights violations.

Thus, there is a close relationship between what is at its root an environmental law and the protection of human rights. The stronger the Lacey Act is as an enforcement mechanism, the more effective the United States will be at addressing the extraterritorial violations of human rights occurring as a result of the actions of U.S. corporations. On the other hand, if the Lacey Act is weak and ineffective as an enforcement mechanism, U.S.

and other transnational corporations may weigh the cost-cutting benefits of purchasing illegally harvested timber against the risk of liability, and find that it makes business sense to take the risk.

THE LACEY ACT IN ACTION

FALLING SHORT: THE CASE OF GIBSON GUITARS (2012)

One of the most touted successes of the Lacey Act in recent years was the crackdown on Gibson Guitars, a popular guitar manufacturer and distributor that was investigated for criminal violations of the Lacey Act in 2012. Gibson Guitar reached a settlement agreement with the Department of Justice (DOJ), where the government agreed not to press charges against the corporation for illegal purchases of ebony and wood in from Madagascar and India.¹²⁷ In exchange, the corporation paid a penalty of \$300,000, made a community service payment of \$50,000 to the National Fish and Wildlife Foundation, and agreed to relinquish civil claims to wood seized by the government, which valued at a little over \$260,000. It also agreed to implement a detailed compliance program to strengthen compliance protocols and procedures.¹²⁸

A statement from the DOJ regarding the criminal enforcement agreement noted that “Gibson has acknowledged that it failed to act on information that the Madagascar ebony it was purchasing may have violated laws intended to limit overharvesting and conserve valuable wood species from Madagascar.”¹²⁹ The criminal charges that Gibson Guitars narrowly avoided were largely premised on evidence that the corporation was aware of their contribution to import and export of illegal lumber. An employee visiting one of their suppliers was explicitly told that their lumber was harvested illegally. Upon his return, he told superiors at Gibson, who declined to do anything about it. Despite knowing the illegality of their actions, these individuals continued to order shipments from the same supplier.¹³⁰

As part of their criminal enforcement agreement, Gibson agreed to implement compliance procedures to strengthen their systems and procedures for executing “due care.” Relevant procedures include training for staff, communication with suppliers, verification of foreign laws and review of the necessary documentation for wood procurement.¹³¹

In order to prevent and deter participation in the illegal logging industry, the enforcement mechanism employed must be effective. As a general compliance principle, effective enforcement schemes includes the cost-benefit of committing a crime, and must balance deterrence, detection, reporting, and cooperation in such a way that companies have an incentive to turn around misconduct at all of these stages.¹³² Thus, evaluating whether a sanction is effective depends partially on that calculus and the incentives to engage in the illegal business, including the company’s revenue and the scope of their illegal business, the volume of illegal timber, and length of time that they imported the illegal timber. Gibson Brands, Inc., which manufactures Gibson Guitars, is a massive transnational corporation, netting \$1.2 billion in revenue annually according to numbers reported

in 2017.¹³³ The company was sanctioned a mere \$350,000. To put this number into perspective, the single shipment of illegal lumber they agreed to release claims to also as part of the settlement was worth over \$260,000.¹³⁴ Gibson had been knowingly trading illegal ebony from Madagascar since before 2006, when this material was prohibited from trade in that country.¹³⁵ Gibson had been profiting off illegal shipments such as the one seized in 2011 for at least five years.¹³⁶

The weakness of the ultimate sanction when compared to the company's profits off their illegal activities in the many years prior, creates a seemingly pessimistic incentive: it is worthwhile to game the system while you can, because the stakes are not that high, even if you are caught. In fact, until the evidence was stacked against them, this seems to have been Gibson's strategy: the company denied wrongdoing following the raid in 2011 and throughout the year-long investigation, but ultimately acknowledged the company's wrongdoing as part of the criminal settlement agreement in 2012.¹³⁷

On the other hand, imposing the requirement for Gibson to acknowledge its actions publicly and implement a strong compliance program has the potential to influence the company's attitude and actions into the future. The merits of having an official compliance program for due care cannot be ignored. Having such policies in place not only expresses a company's commitment for good practices, but it also changes that company's culture internally, and sets a good example for the business community. To illustrate, in 2012 following the settlement, Gibson's CEO expressed support of the Lacey Act, affirmed the need for such a law, and encouraged the government to "make it stronger."¹³⁸ Such declarations regarding compliance and due diligence can also be used as tools to hold a company accountable to its own professed policies and statements.

A MILD SUCCESS: THE CASE OF LUMBER LIQUIDATORS (2015)

The largest Lacey Act Penalty to date was imposed on Lumber Liquidators Holdings Inc., a discount wood floorings corporation¹³⁹—and purports to be one of the nation's largest specialty retailers of hardwood flooring.¹⁴⁰ In that case, Lumber Liquidators pled guilty to charges under the Lacey Act of illegal importation of hardwood flooring from China, made from wood that had been illegally logged in Russia and paid \$13.15 million in criminal fines, criminal forfeiture, community service payments, and civil forfeiture.¹⁴¹

Importantly, this case illustrates the relevance of doing business with high-risk countries and industries. In a press release describing the indictment, the Department of Justice noted that:

Lumber Liquidators employees were aware that timber from the Russian Far East was considered, within the flooring industry and within Lumber Liquidators, to carry a high risk of being illegally sourced due to corruption and illegal harvesting in that remote region. Despite the risk of illegality, Lumber Liquidators increased its purchases from Chinese

manufacturers using timber sourced in the Russian Far East.¹⁴²

Still, Lumber Liquidators was guilty of more than simply knowingly purchasing timber from high-risk regions—the company also imported high-risk tree species, conducted business with partners who were unable to provide documentation for their lumber, and engaged in fraudulent reporting of the species of wood imported.¹⁴³ The investigation also revealed that Lumber Liquidators may have participated directly in a form of timber laundering similar to the practices rampant in Peru's illegal logging industry, where criminal activity along the supply chain utilizes a seemingly valid government-issued permit too many times or in areas outside those designated by the permit.¹⁴⁴

This penalty is much harsher than the one imposed on Gibson Guitars, even considering Lumber Liquidators.¹⁴⁵ The company also collaborated with the DOJ to develop an Environmental Compliance Plan, described by the company's Chief Compliance and Legal Officer, when implemented, "[to] be one of the strongest and most comprehensive in the industry."¹⁴⁶

There are several lessons from these two cases. First, successful Lacey Act investigations and prosecutions are few and far between. Lumber Liquidators was the first ever felony conviction under the Lacey Act related to the import of illegal timber and there have not been many other cases that have even been brought under the Lacey Act since 2008 when the law was amended to include plants.¹⁴⁷ Second, the Lacey Act is not enforced consistently. Gibson Guitars was at least similarly culpable in its knowledge of the illegality of its conduct.¹⁴⁸ In that case, however, Gibson Guitars was able to reach a settlement agreement and was never even prosecuted, and the penalties imposed on the two corporations differed significantly.¹⁴⁹ It is also possible that timing played a role; prosecutions of environmental crimes such as the Lacey Act increased under the Obama administration, either because of prior successes, the greater maturity of the law, or increased zealotry for environmental policies by the time Lumber Liquidators was prosecuted.¹⁵⁰ These are some of several factors that may have contributed to the vastly different treatment of these two cases. However, the true explanation is less important than the fact of the Lacey Act's inconsistency as an enforcement mechanism, which means that businesses are less likely to take it seriously or even understand how to best comply.

The Lumber Liquidators' case is particularly relevant because Peru, whose illegal logging industry accounts for around eighty percent of the timber exports from the country, could also be considered to be a high-risk country for business partnerships.¹⁵¹ Without more effective enforcement of the timber laundering, even careful review of origin documentation will not ensure that the Peruvian timber was legally sourced—the documentation may appear legal, but could still be fraudulent.¹⁵² While the lumber industry has long been aware of the scope and pervasiveness of this problem, recent exposures, including EIA's 2012 report, the *Laundering Machine* and Al Jazeera's

2015 documentary “Rotten Wood” make one conclusion inescapable: if a corporation’s ignorance before these exposés was inexcusable, a corporation’s ignorance now is implausible, if not downright absurd.¹⁵³ Yet where one of the most successful cases had direct evidence of the corporation’s awareness of the illegality of their supplier’s lumber and still avoided criminal prosecution, it begs the question: what can be prosecuted under the “due care” standard of the Lacey Act? Is the law really as effective a remedy as it purports to be?

A TEST FOR LACEY ACT AS A REMEDY FOR ILLEGAL LOGGING IN PERU: GLOBAL PLYWOOD AND LA OROZA

In October 2015, a freighter called Yacu Kallpa steamed into the port of Houston and was detained by Homeland Security on intelligence that it contained illegally harvested lumber.¹⁵⁴ The ship contained 1,770 metric tons of Amazonian timber, and after several weeks of investigation, authorities found that over ninety percent of it was illegal.¹⁵⁵

The timber came from La Oroza Inversiones (La Oroza), a massive Peruvian exporter of Amazonian timber. In 2010, an investigation by the Peruvian Forest Service revealed that La Oroza had been harvesting cedar illegally.¹⁵⁶ Eighty-five percent of the delivery was for Global Plywood and Lumber, a California-based, Las Vegas-incorporated corporation that had imported more than 9,700 metric tons of wood from La Oroza between 2012 and 2015, when the seizure took place.¹⁵⁷ By 2015, Global Plywood’s business with La Oroza had increased to \$2 million in imports per year.¹⁵⁸

Over a period of four years, the EIA had been conducting on-the-ground investigations to verify the existence (or lack thereof) of the logged trees that were being reported in La Oroza’s GTFs.¹⁵⁹ In 2015, Osinfor’s executive at the time, Ramon Navarro, proved to be helpful and willing to cooperate with the investigations, genuinely wishing to solve the issue.¹⁶⁰ In attempt to get better enforcement procedures in place, Navarro pressed field agents to get GTFs from exporters earlier so that his field agents would be able to conduct checks with time enough to stop shipments of illegally logged timber.¹⁶¹

The day before Yacu Kallpa’s last trip to Houston, agents had been scrambling through forests, checking for supposedly harvested trees that were still there in attempt to present evidence sufficient to stop the ship from leaving Peruvian ports.¹⁶² By the time the ship was leaving Peru, they had discovered that fifteen percent of the shipment aboard was falsified.¹⁶³ By January 8, updated intelligence showed that number was seventy-two percent—and final reports would show that ninety-two percent of the shipment was illegal.¹⁶⁴

THE CASE AGAINST GLOBAL PLYWOOD

Because the Lacey Act is a strict liability statute, violators can face criminal and civil sanctions for dealing with illegally harvested products, even if they had no knowledge of the illegality of their actions.¹⁶⁵ This clearly puts Global Plywood in direct violation of the Lacey Act for the majority of their

\$2 million purchases made from La Oroza every year; if they knew about the violations, the violations would be even more severe.¹⁶⁶ Courtesy of exposés like Rotten Wood and the EIA Report, the illegal logging industry is arguably common industry knowledge. Thus, the corporations that are receiving illegal imports from Peru should arguably be presumed to be knowingly perpetuating the problem. Given the scope and reality of the laundering issue, a quick review of documentation should not be sufficient to satisfy the reasonable due care required by the Lacey Act. Still, given the evidence of knowledge that was required in the Gibson Guitars and Lumber Liquidators cases, whether Global Plywood can be prosecuted successfully under the Lacey Act would require proving knowledge of its business partner’s illegal activities.

There is ample evidence that Global Plywood was fully aware of La Oroza’s illegal dealings. In 2010, years after Global Plywood began their business relationship with the Peruvian supplier, La Oroza was publicly sanctioned.¹⁶⁷ Al Jazeera’s “Rotten Wood” investigated and reported on the illegal timber coming out of Peru, detailing the corruption and fraud of the illegal sourcing practices and identifying the major players in the industry. The documentary directly implicated Global Plywood, which made an appearance on camera.¹⁶⁸ A reporter approached Kenneth Peabody, the general manager of Global Plywood in San Diego, California. In the scene, the reporter stops Peabody outside his house and asks him if he knows that the paperwork documenting Global Plywood’s shipments from La Oroza are illegal.¹⁶⁹ Peabody denied knowledge of the illegality of the documents and assured the reporter that they complied with the Lacey Act, including the due care provision.¹⁷⁰

In mid-January 2016, Navarro met with the CEO of Global Plywood and told them their recent findings: that shipments with apparently legal documents were coming from illegal sources. (Navarro was abruptly fired from his duties and forced to flee to the United States shortly thereafter.)¹⁷¹

Finally, in May 2016, a potential timber buyer called Peabody regarding his interest in purchasing the shipment that was being detained in the Houston harbor and selling it into the Chinese market.¹⁷² Technically, the wood could potentially still be sold into other states’ markets, even if it was illegal to do so in the United States. Peabody flew to Vancouver, Canada, to meet the potential buyer and try to arrange a deal to get the jeopardizing shipment off his hands.¹⁷³ When the buyer sought affirmation that the suppliers in Peru were trustworthy, Peabody put the nail in the coffin. His calculated response (“We trust them to do what they need to do to get by in Peru”) served as confirmation, or at least a strong insinuation of his familiarity with his business partners’ disreputable practices.¹⁷⁴

Thus, there are strong indications that Global Plywood was well aware of the illegality of the timber it was receiving from its business partner La Oroza, and Global Plywood had been aware for years.¹⁷⁵

This glaring evidence of misconduct was vindicated in June 2016 when the Department of Homeland Security obtained and executed a search warrant on Global Plywood for probable

cause that the corporation violated the Lacey Act.¹⁷⁶ There have been no formal charges brought against Global Plywood, but the investigation is ongoing. However, shortly after the publishing of an investigative piece in WIRED detailing the final shipments on the Yacu Kallpa, the U.S. government blocked future timber imports from La Oroza for up to three years.¹⁷⁷

BUSINESS RESPONSIBILITY TO RESPECT

GLOBAL PLYWOOD'S FAILURE OF DUE CARE

Effective enforcement of the Lacey Act represents part of the U.S. state duty to protect human rights under the UN Guiding Principles and the TPA; thus, the question of Global Plywood's culpability under the Lacey Act is highly relevant. However, it also bears examining whether, regardless of any potential liability pursuant to the Lacey Act, Global Plywood nonetheless violated the UN Guiding Principles. Under the UN Guiding Principles on the business responsibility to respect, companies have a duty to survey for and address potential human rights impacts through due diligence. Principle 18 provides that:

In order to gauge human rights risks, business enterprises should identify and assess any actual or potential adverse human rights impacts with which they may be involved either through their own activities or as a result of their business relationships. This process should: a) draw on internal and/or independent external human rights expertise b) involve meaningful consultation with potentially affected groups and other relevant stakeholders, as appropriate to the size of the business enterprise and the nature and context of the operation.¹⁷⁸

By the letter, the Lacey Act has a "due care" component analogous to the due diligence responsibility in the UN Guiding Principles, but the Lacey Act's due care requirement has not proven to be particularly strong or consistent. In contrast, the diligence required by the UN Guiding Principles, such as consultation with affected communities, are designed to result in engagement and understanding and certainly represent a more robust and specific set of actions for compliance. Due diligence requires understanding the "specific impacts on specific people, given a specific context of operations."¹⁷⁹ In this case, this required Global Plywood to make a reasonable effort to identify and understand the nature of the logging industry in Peru and how it affects communities and individuals that are directly involved or impacted by those operations.

Global Plywood did not need to conduct its own investigation to be aware of the risks of its business partnerships in Peru's lumber industry. Huge industry-wide exposés in 2010 and 2012, not to mention the "Rotten Wood" documentary that directly interviewed one of Global Plywood's executive managers, made the pervasiveness of illegal logging in Peru at least industry common knowledge, if not general common knowledge.¹⁸⁰

The World Business Council's report on the practical implementation of the UN Guiding Principles noted that "[t]he

UN Guiding Principles recognize that where there are limited resources or an overwhelming number of business relationships in the value chain, it may be necessary for companies to prioritize certain human rights impacts for attention."¹⁸¹ Given the specific business that Global Plywood was engaging in, the corporation's responsibility to human rights was to prioritize obtaining wood through legal means to avoid the human rights abuses perpetuated by La Oroza and its illegal supplier peers¹⁸²—to say nothing of the corporation's legal obligations to avoid purchasing illegal lumber under the Lacey Act.

Even if there is not sufficient evidence of Global Plywood's knowledge of the illegal operations of its business partner necessary to be convicted under the Lacey Act, Global Plywood should have been aware of the illegal logging issues in Peru as part of their responsibility to avoid violating human rights through their extraterritorial operations.¹⁸³ Because of the corruption and the ubiquity of the illegal logging industry in Peru, Global Plywood might have best covered its tracks by choosing to invest in business partnerships elsewhere. However, at the very least, a Google search of Global Plywood's primary supplier (a relationship representing \$2 million in annual business by the time the La Oroza shipment was detained), would have quickly revealed that supplier's particular risk, given the report revealing its illegal activities that came out in 2010.¹⁸⁴

Global Plywood's violations of the Lacey Act and the UN Guiding Principles are so blatant that it is difficult to imagine a situation where they would not have been sanctioned in a criminal settlement agreement similar to Gibson Guitars.

WHAT HAPPENED TO GLOBAL PLYWOOD?

The world will never know how the case against Global Plywood would have turned out, because Global Plywood was dissolved in December 31, 2017.¹⁸⁵ Combined with the fact that La Oroza has been banned from exporting timber to the United States,¹⁸⁶ this portrays the initial happy picture that in this instance, the bad guys were defeated. In reality, it is unsatisfying that no one was held liable for this gross violation of domestic laws and international agreement, not to mention for the human rights abuses indirectly committed by this American company.

There is still one avenue for justice left against Global Plywood: the DOJ could prosecute some or all of the executives of the corporation, such as Jose Ceballos Gallardo, Patricia Moran Lopez, or Kenneth Peabody under the Lacey Act.¹⁸⁷ The likelihood of this is unlikely, as discussed further below.¹⁸⁸

In analyzing the effectiveness of the Lacey Act as a remedy, one of the most important questions remains: who and what defeated Global Plywood? Was it the United States, carrying out its duty to protect human rights by enforcing relevant laws? Or was it a few dedicated individuals with the EIA and the power of the media?

AN UNOFFICIAL REMEDY

MEDIA, PUBLIC OPINION, AND REPUTATION AS REMEDY

Compliance with legal and ethical standards is important in today's climate where consumers expect and demand human

rights to be a priority in a corporation's business model.¹⁸⁹ As a result, businesses are making efforts to avoid the reputational harm that comes with being associated with human rights violations and tragedies.¹⁹⁰

Such efforts increasingly have less to do with simple corporate social responsibility (CSR) projects and more to do with making responsible decisions that take long-term impact into consideration, whether this means making responsible investments or forming responsible partnerships.¹⁹¹ The "naming and shaming" form of liability can often fill the gaps where judicial and non-judicial remedy mechanism fail.¹⁹² Active human rights groups, tenacious reporters, and socially conscious individuals therefore can sometimes have as much power as the legal system in addressing the worst human rights abuses.

THE COURT OF LAW AND THE COURT OF PUBLIC OPINION

The Lacey Act did not prove to have strong teeth with its rather moderate response to Gibson Guitars and the low number of prosecutions that have occurred under the Act, despite the high probability of rampant illegal importation of timber from Peru alone. The Lumber Liquidators case presents a more optimistic example of effective enforcement, including valuable guidelines for what is considered to be irresponsible business practices according to the act, such as investing in business partnerships in high-risk areas known to be rife with illegal logging activity.¹⁹³

The victory of the detainment of La Oroza's shipment and the Yacu Kallpa was the culmination of four years of dedicated, thorough, and at times, dangerous, investigation by the EIA and Peruvian environmental agencies.¹⁹⁴ These individuals spent years poring through fraudulent paperwork and physically entering remote forests to track down specific geographic locations to check for tree stumps—the only way to be confident of the veracity of the paperwork.¹⁹⁵ Only after all this effort, done in large part on the initiative of an environmental/human rights organization, were U.S. authorities willing and able to step in to detain the shipment in Houston. By then it was already established that the majority of the shipment was illegal and there was almost fatal evidence that both the supplier and the buyer had knowledge of this fact.

Still, while the EIA and the media may have done the work, the Lacey Act and the TPA provided the legal framework and authority that backed their findings and made them significant. The public exposure of the wrongdoing, combined with the threat of investigation and potential litigation, seem to have worked in tandem to destroy Global Plywood altogether.

CHALLENGES TO OVERCOME

Given the current ease of laundering timber, one of the best solutions to the problem of illegal logging would be improve the transparency and traceability of the timber coming from Peru so that illegal operations can be more easily detected and stopped.¹⁹⁶ Experts at the Peruvian Amazon Research Institute believe that implementing a DNA-tracking technology system

could permit trees to be easily and efficiently traced back to their origin, making fraud impossible.¹⁹⁷

However, the idea of improving transparency and traceability is currently receiving some push-back from these same Peruvian agencies that USAID has worked with in the past.¹⁹⁸ In response to proposals for systems that would make transparency and traceability easier and more effective, Serfor seems to be resisting, claiming true traceability is impossible.¹⁹⁹ This presents an obstacle to moving forward as well as an implicit recognition of the years of fraud based on claims of traceability.²⁰⁰ Peru's logging industry, a chief opponent to these reforms, further argues that "(1) tracking a physical wood product back to origin is impossible, (2) products of 'secondary transformation' are not subject to traceability documentation requirements anyway, and (3) everything beyond rough sawn timber is a product of secondary transformation and thus does not need to be traced."²⁰¹

In short, since processing facilities combine wood from many different origins, the argument goes that there cannot be responsibility to identify the origins of any of the wood. This new declaration of impossibility contradicts the terms of the TPA: on the legal side, the agreement obligates Peru to "develop systems, including requirements for management oversight and record keeping, to reliably track specimens from harvest through transport, processing and export."²⁰²

Still, it would be inaccurate to say that the primary solution would be for Peru to "step it up," because monetary interests generated by transnational corporations have created powerful entities in the logging industry that do not shy away from violence and corruption in order to bend the system to their will.²⁰³ The story of Osinfor's former executive Ramon Navarro, who fled for his life after being fired and is now residing in Washington D.C., illustrates this point. Navarro's wife and children remain in Peru, but he cannot return because powerful lumber interests surely influenced his being fired and absent the support or protection of the government, his life would be in danger.²⁰⁴ Shortly after Navarro left the country, his wife was approached at a traffic light in Lima and sinisterly told, "Your children are going to pay for the wood."²⁰⁵ These actions and threats are indicative of an organized and lethal crime collective, supported by corporations that are accepting lower prices and turning a blind eye to the corruption.

Almost two years after the search warrant was executed on the California office of Global Plywood, the Department of Justice has remained conspicuously silent on the issue. Richard Conniff, the writer of the investigative piece in WIRED that seemed to have catalyzed at least some of the action against Global Plywood, found it puzzling that no indictment had been forthcoming, and is of the opinion that the effectiveness of the Lacey Act may depend on the incumbent executive and his priorities.²⁰⁶ This author reached out to the Department of Justice, Environment and Natural Resources Division to seek an update regarding the ongoing investigation against Global Plywood, but the Department declined to share further information.²⁰⁷

Between Gibson Guitars in 2012 and Lumber Liquidators in 2015, under the Obama administration, the Lacey Act was starting to gain momentum in terms of prosecution of illegal logging and imposition of more substantial penalties.²⁰⁸ However, based on professed policies and emerging patterns, the Trump administration appears unlikely to prioritize the prosecution of environmental crimes as resolutely—in fact, environmental prosecutions of at least certain environmental violations under the Trump administration are projected to be the lowest in two decades.²⁰⁹

CONCLUSION

The effect of rampant illegal logging on Peru's timber trade has created a culture of fraud, bribery, human rights violations, and serious environmental impacts on forest ecosystems.

In order to fulfill the State duty to protect human rights pursuant to the UN Guiding Principles, both the United States and Peru must be more effective and diligent at abating the illegal logging industry by discouraging its existence. There is a legal system in place to penalize companies that contribute to the illegal logging problem with the Lacey Act, however, inconsistent to nonexistent enforcement with regards to this problem have not rendered the law particularly effective in the past decade.

At the same time, businesses have a responsibility to conduct proper due diligence, particularly when confronting a high-risk region and industry such as that found in Peru, where almost all of the exported timber is illegally sourced. Companies like Global Plywood, Lumber Liquidators, and Gibson Guitars should work harder to mitigate their impact on human rights abuses by ensuring that they are not entering into business arrangements with suppliers that buoy up industries committing gross human rights violations.

ENDNOTES

¹ THE WORLD BANK, STRENGTHENING FOREST LAW ENFORCEMENT AND GOVERNANCE: ADDRESSING A SYSTEMIC CONSTRAINT TO SUSTAINABLE DEVELOPMENT 9 (The World Bank, 2006), http://siteresources.worldbank.org/INTFORESTS/Resources/ForestLawFINAL_HI_RES_9_27_06_FINAL_web.pdf.

² See e.g. Juliana Urrunaga et al., MOMENT OF TRUTH: PROMISE OR PERIL FOR THE AMAZON AS PERU CONFRONTS ITS ILLEGAL TIMBER TRADE, 8 (Environmental Investigation Agency, 2018) (reviewing the status of lumber laws in Peru and the enforcement of these laws in practice).

³ *Id.* at 12.

⁴ United States-Peru Trade Promotion Agreement, Peru-U.S., Apr. 12, 2006, Chapter 18, Annex 18.3.4, (stating the shared goals between the two countries on Forest Governance. [hereinafter Peru Trade Promotion Agreement]).

⁵ THE WORLD BANK, *supra* note 1, at xii.

⁶ URRUNAGA ET AL., *supra* note 2, at 12.

⁷ *Id.*

⁸ See *infra* notes 55–56.

⁹ *Id.*

¹⁰ Press Release, *Operation Amazonas Targets Illegal Timber Trade in Peru*, ENVIRONMENTAL INVESTIGATION AGENCY, Nov. 7, 2014, <https://eia-global.org/press-releases/operation-amazonas-targets-illegal-timber-trade-in-peru>.

¹¹ THE WORLD BANK, *supra* note 1, at 12.

Getting justice against Global Plywood and other companies under the Lacey Act, while important, represents only a fraction of the challenge that is protecting human rights from abuse by businesses. The UN Guiding Principles provide a framework for how States can fulfill their duty to protect human rights by effectively policing the corporations under their jurisdiction. However, the treatment of businesses participating in Peru's illegal logging industry, by both Peru and the United States, demonstrates that effectuating that framework remains a significant obstacle.

GLOSSARY OF ACRONYMS

PO(s): *Planes de Operación*

Serfor: *Servicio Nacional Forestal y de Fauna Silvestre*

Osinfor: *Organismo de Supervisión de los Recursos Forestales*

GTF: *Guía de Transporte Forestal*

ILO: International Labour Organization

TPA: U.S.-Peru Trade Protection Agreement

NAP: National Action Plan

USAID: U.S. Agency of International Development

EIA: Environmental Investigation Agency

¹² BEDOYA GARLAND, E. & A. BEDOYA SILVA-SANTISTEBAN, EL TRABAJO FORZOSO EN LA EXTRACCIÓN DE LA MADERA EN LA AMAZONÍA PERUANA, xi (International Labour Organization, 2005), https://www.ilo.org/wcmsp5/groups/public/---ed_norm/---declaration/documents/publication/wcms_082056.pdf (“Resulta importante recalcar que durante el proceso de investigación se comprobó que la mayoría de los empleadores formales (no ilegales) de la madera, cumplen las normas laborales, son respetuosas con los derechos de los trabajadores y no atentan contra la dignidad de ellos.” [It is important to emphasize that throughout the investigation process it was verified that the majority of the formal (not illegal) employers in the wood industry complied with labor laws, are respectful of the workers' rights, and do not violate their dignity]).

¹³ *Id.*

¹⁴ *Id.*

¹⁵ David Hill, *Illegal Logging 'Plagues' The Peruvian Amazon*, *Says New Research*, THE GUARDIAN (Apr. 17, 2014), <https://www.theguardian.com/environment/andes-to-the-amazon/2014/apr/17/illegal-logging-plagues-peruvian-amazon>.

¹⁶ Richard Conniff, *Chasing the Illegal Loggers Looting the Amazon Forest*, WIRED (Oct. 24, 2017), <https://www.wired.com/story/on-the-trail-of-the-amazonian-lumber-thieves/>.

continued on page 39

STATE PREEMPTION AND SINGLE USE PLASTICS: IS NATIONAL INTERVENTION NECESSARY?

By Ethan D. King*

Climate change and plastic waste are systemic issues facing our world today.¹ States have divergent practices concerning the regulation of single use plastic; some states have passed preemption statutes preventing municipalities from making single use plastic regulations while others are enacting laws banning types of single use plastics.² Single use plastic materials are goods that are distributed, sold, and utilized across state lines. As a result, Congress has the ability to regulate single use plastics. In doing so, Congress performs a valuable service to protect the public health and the environment.

STATE REGULATIONS AND MUNICIPAL REGULATIONS OF SINGLE USE PLASTICS

There are massive environmental and economic repercussions stemming from our reliance of single use plastics.³ In an attempt to recognize the need for recycling, Colorado passed a law in 1993, stipulating that “No unit of local government shall require or prohibit the use or sale of specific types of plastic materials or products or restrict or mandate containers, packaging, or labeling for any consumer product”.⁴ Notably, Colorado’s law does not mention single use plastic bags.⁵ However more recently, states like Oklahoma, North Dakota, Texas, Idaho, and Florida, have passed laws preempting municipalities’ ability to regulate plastics, preventing such them from enacting plastic bans, fees, or recycling programs not otherwise issued by the state.⁶ Other states such as New York and Maine have passed laws requiring stores that use plastic bags to have plastic bag recycling centers outside of the places of business.⁷ Currently, there are fourteen states that have preemption laws regarding plastic regulation, and eight states have statewide legislation furthering a goal of plastic reduction and recycling efforts.⁸ This still leaves the majority of the United States without a law on the books favoring state preemption or plastic waste reduction.⁹

Unsurprisingly, then, municipalities in states that have not adopted such preemption statutes are now experiencing greater success in regulating single use plastics.¹⁰ Take, for example, Santa Cruz, California, the first city to ban the use of mini-hotel shampoos bottles.¹¹ Other such municipalities’ have instituted plastic bag fees or plastic straw bans to cut down waste.¹² Responding to environmental and economic pressures, the legislatures of New York and California are pushing for statewide prohibitions on certain types of plastic materials.¹³ California recently passed a bill which will prohibit hotels in the state from providing mini shampoo and lotion bottles, and the ban shall take effect beginning in 2023.¹⁴

COURTS ARE AWAITING A LEGISLATIVE CHANGE

Courts in Florida and Texas have ruled against municipal plastic bag bans, specifically citing to the preemption statutes.¹⁵ Even with Colorado’s preemption statute, the city of Aspen has continued to operate a plastic bag fee.¹⁶ In court, the petitioners argued that the bag fee was a tax, and the citizens of the city were not allowed to vote; therefore, a tax could not be enforced.¹⁷ The Supreme Court of Colorado disagreed, and ruled that the bag fee was a fee, not a tax, which is how the fee has survived and is still in practice today.¹⁸ The preemption law in Colorado has never been formerly challenged and environmental activists have been weary to ask for more regarding plastic regulations until the state legislation repeals the preemption law.¹⁹

WHY CAN CONGRESS STEP IN, AND WHEN IT HAS DONE SO IT BEFORE

States preemption laws are preventing groups that want to protect the health of their citizens and the environment.²⁰ By advancing bans of single use plastics, states are inviting interstate commerce issues.²¹ Congress can step in and enact federal legislation of single use plastics due to its Commerce Clause powers.²² Congress has minimized environmental discrepancies among the states before and passed acts like the Safe Drinking Water Act (SDWA) and the Microbeads Free Water Act (MFWA).²³

The development of the SDWA stemmed a realization of the need for water quality and from states relaxing their laws on water quality after getting rid of certain waterborne diseases like cholera and typhoid.²⁴ As a result, some states who found their water quality sufficiently safe did not closely monitor water quality, while others continued to invest in their water quality infrastructure.²⁵ Without uniform standard for states water quality, the public health of citizens was jeopardized.²⁶ The SDWA came in to set minimum nation-wide contaminant levels to solve the gap of water quality and safety.²⁷

The MFWA began as a state issue, with a number of states electing to ban the sale of microbead products.²⁸ Recognizing the lack of uniformity in the laws regulating microbead products, Congress stepped in in to create uniformity through its Commerce Clause power.²⁹ The MFWA is a great example of Congress addressing disparities in state public health protections by utilizing its power granted by the Commerce clause.³⁰

*Joint J.D./M.B.A Candidate, American University Washington College of Law 2020

CONCLUSION

Regulation of single use plastics also falls under the purview of the Commerce Clause. Congress can and should step in to protect public health by creating federal legislation to ban single use plastics. Such a bill would create a floor of minimum plastic

standards and give states the ability to make improved laws to combat climate change and reduce plastic waste. While such a ban would not solve the plastic problem in its entirety, it is a step in the right direction helping the United States phase out its reliance on single use plastic materials.



ENDNOTES

¹ See generally *Our planet is drowning in plastic pollution*, UN ENV'T PROGRAMME <https://www.unenvironment.org/interactive/beat-plastic-pollution/> (Last visited Oct. 27, 2019) (explaining that the proliferation of plastics is due to societies increased dependence on them).

² See *Infra*, note 6.

³ See *Fact Sheet: Single-Use Plastics*, EARTH DAY NETWORK (Mar. 29, 2018), <https://www.earthday.org/2018/03/29/fact-sheet-single-use-plastics/> (examining the impact that single-use plastics have on the environment); Danielle Chiriguayo, *The Single Use Plastic Pollution Problem*, MARKETPLACE (Apr. 22, 2019), <https://www.marketplace.org/2019/04/22/single-use-plastic-pollution-problem/> (exploring the economic impact that single-use plastics have); Kyle Kuphal, *Plastic Bags No Longer Allowed in Recycling*, PIPESTONE CTY. STAR (Oct. 2, 2019), <https://www.pipestonestar.com/articles/plastic-bags-no-longer-allowed-in-recycling/> (examining the lack of market for plastic bags in recycling).

⁴ COLO. REV. STAT. § 25-17-104 (2017); see also Tamara Chuang, *Colorado's Ban on Banning Plastics has Cities' Plans to Outlaw Single-Use Bags and Straws in Limbo*, COLO. SUN (Mar. 7, 2019), <https://coloradosun.com/2019/03/07/colorado-plastic-ban-law-cities/>.

⁵ See § 25-17-104 (2017).

⁶ See OKLA. STAT. ANN. tit. 27A § 2-11-504 (West 2019); FLA. STAT. § 403.7033 (2008); N.D. CENT. CODE § 23.1-08-06.1 (2019); IDAHO CODE § 67-2340 (2016); TEX. HEALTH & SAFETY CODE ANN. § 361.0961(a)(1) (West 1993); Julia Ingram, *Cities are Stymied in Banning Plastics — and the State is Doing Nothing About It, They Say*, MIAMI HERALD, (Aug. 22, 2019), <https://www.miamiherald.com/news/local/environment/article234158642.html>.

⁷ See *State Plastic and Paper Bag Legislation*, NAT'L CONF. ST. LEGISLATURES, (Nov. 1, 2019) <http://www.ncsl.org/research/environment-and-natural-resources/plastic-bag-legislation.aspx> (bulleting acts the various acts passed around the nation regarding this issue).

⁸ See *State Plastic and Paper Bag Legislation*, NAT'L CONF. ST. LEGISLATURES, (Nov. 1, 2019) <http://www.ncsl.org/research/environment-and-natural-resources/plastic-bag-legislation.aspx> (outlining the various acts passed around the nation regarding this issue).

⁹ See *id.* (showing that more than 28 states do not have laws about plastic bags).

¹⁰ See *id.* (providing an overview of the various cities and counties with laws about plastic bags).

¹¹ See Nick Ibarra, *Santa Cruz County Set to Ban Little Plastic Toiletry Bottles in Hotels*, TIMES STANDARD (Nov. 27, 2018), <https://www.times-standard.com/2018/11/27/santa-cruz-county-set-to-ban-little-plastic-toiletry-bottles-in-hotels/>; see also Jeremy Hobson & Allison Hagan, *Marriott CEO Says Cutting Out Single-Use Toiletries Will Save 500 Million Plastic Bottles Per Year*, WBUR (Sept. 23, 2019), <https://www.wbur.org/hereandnow/2019/09/23/marriott-hotel-cut-plastic-bottles> (examining the positive economic impacts of moving away from smaller single-use toiletries).

¹² See David Funkhouser, *Banning Plastic Bags, Town By Town: A Guide*, COLUM. U. EARTH INST.: ST. PLANET (Feb. 20, 2019), <https://blogs.ei.columbia.edu/2019/02/20/banning-plastic-bags-town-guide/> (giving an overview of the various measures employed by localities to fight plastic bag usage).

¹³ See David Lombardo, *New York Lawmakers Propose End to Single-Use Plastic Hotel Toiletries*, TIMES UNION (Sept. 18, 2019), <https://www.timesunion.com/news/article/New-York-Lawmakers-propose-end-to-single-use-14449589.php>.

¹⁴ See Jared Paben, *Here's What Is (and Isn't) Becoming Law in California*, PLASTICS RECYCLING UPDATE (Oct. 16, 2019), <https://resource-recycling.com/plastics/2019/10/16/heres-what-is-and-isnt-becoming-law-in-california/> (summarizing the new law in California).

¹⁵ See *City of Laredo v. Laredo Merchs. Ass'n*, 550 S.W.3d 586, 595, 598 (Tex. 2018) (finding that an attempt by the Laredo county government would have been an attempt to regulate solid waste in the county which was preempted by the Solid Waste statute); *Fla. Retail Fed'n, Inc. v. City of Coral Gables*, No. 3D17-0562, 2019 Fla. Dist. Ct. App. WL 3807999, at *7 (finding local governments were preempted by state statute from instituting laws concerning plastic materials).

¹⁶ See *Colo. Union of Taxpayers Found. v. City of Aspen*, 418 P.3d 506, 515–16 (Colo. 2018).

¹⁷ See *id.*

¹⁸ See *id.*

¹⁹ See COLO. REV. STAT. § 25-17-104 (2017); see also Tamara Chuang, *Colorado's Ban on Banning Plastics has Cities' Plans to Outlaw Single-Use Bags and Straws in Limbo*, COLO. SUN (Mar. 7, 2019), <https://coloradosun.com/2019/03/07/colorado-plastic-ban-law-cities/>.

²⁰ See § 25-17-104; Kyle Kuphal, *Plastic Bags No Longer Allowed in Recycling*, PIPESTONE CTY. STAR (Oct. 2, 2019), <https://www.pipestonestar.com/articles/plastic-bags-no-longer-allowed-in-recycling/> (examining the lack of market for plastic bags in recycling); see also Chuang *supra* note 18; See generally Sandra Laville, *Single-Use Plastics a Serious Climate Change Hazard, Study Warns*, GUARDIAN (May 15, 2019) <https://www.theguardian.com/environment/2019/may/15/single-use-plastics-a-serious-climate-change-hazard-study-warns> (detailing the dangers of single-use plastics).

²¹ See *Wickard v. Filburn*, 317 U.S. 111, 124 (1942) (extending interstate commerce).

²² See U.S. CONST. art. 1, § 8, cl. 3.

²³ See Microbead-Free Waters Act, Pub. L. No. 114-114, § 2(c), 129 Stat. 3129 (2015); Safe Drinking Water Act, 42 U.S.C. §300f et seq. (1974).

²⁴ *Early Implementation of the Safe Drinking Water Act of 1974, Chapter 1: The Major Elements of the Legislation and their Historical Context*, 1, 3, <https://www.epa.alumni.org/userdata/pdf/6014106B36AE81EB.pdf#page=3> (covering the history behind the Safe Drinking Water Act).

²⁵ See *id.* at 4.

²⁶ See *id.*

²⁷ See 40 CFR §141 (2003).

²⁸ See Sarah Kettenmann, *Nationwide Ban on Plastic Microbeads in Cosmetics*, 31 NAT. RESOURCES & ENV'T 58, 59 (2016).

²⁹ See *id.* at 58–59.

³⁰ See *id.*

ENDNOTES: THE USE OF THE REGULAR MILITARIES FOR NATURAL DISASTER ASSISTANCE: CLIMATE CHANGE AND THE INCREASING NEED FOR CHANGES TO THE LAWS IN THE UNITED STATES, CHINA, JAPAN, THE PHILIPPINES, AND OTHER COUNTRIES

continued from page 14

- U.S., JAPAN TIMES (April 16, 2019), available at <https://www.japantimes.co.jp/news/2019/04/16/national/politics-diplomacy/abe-eyes-diplomatic-win-xi-jinping-visit-faces-balancing-act-china-u-s/>.
- ²³ *Philippines Military Strength*, GLOBAL FIREPOWER, https://www.globalfirepower.com/country-military-strength-detail.asp?country_id=philippines (last visited May 18, 2019).
- ²⁴ See Renato Cruz De Castro, *The Role of Middle Powers in the Modernization of the Armed Forces of the Philippines (AFP): The Case of the Special Japan–Australia Strategic Partnership and the Philippines*, 31 KOREAN J. OF DEF. ANALYSIS 145 (2019).
- ²⁵ See Charmaine G. Misalucha & Julio S. Amador III, *U.S.- Philippines Security Ties: Building New Foundations?*, 8 ASIAN POL. & POL'Y, 55 (2016); see also Merlin M. Magallona, *A Critical Review of the Enhanced Defense Cooperation Agreement Between the Republic of the Philippines and the United States of America*, 59 ATENEO L.J. 453 (2016).
- ²⁶ Alfred W. McCoy, *A Rupture in Philippine-U.S. Relations: Geopolitical Implications*, 75 J. ASIAN STUDIES 1049 (2016).
- ²⁷ De Castro, *supra* note 25, at 153.
- ²⁸ Mohammad Z. Ahmad and Mohd A.M. Sani, *China's Assertive Posture in Reinforcing its Territorial and Sovereignty Claims in the South China Sea: An Insight into Malaysia's Stance*, 18 JAPANESE J. POL. SCI. 70 (2017).
- ²⁹ See USAID, *Dollars to Results: U.S. Aid Investments and Illustrative Results*, available at <https://results.usaid.gov/results/country/philippines?fiscalYear=2017> (last visited May 18, 2019) (stating that in 2017, the Philippines received nearly \$134 million in U.S. Assistance).
- ³⁰ David Wilson, *Philippines Security at Risk Over Escalating Tensions Between US and China in South China Sea*, PUB. RADIO INT'L (April 26, 2019), available at <https://www.pri.org/stories/2019-04-26/philippines-security-risk-over-escalating-tensions-between-us-and-china-south>.
- ³¹ Teddy Ng & Liu Zhen, *China and Philippines Sign Oil and Gas Exploration Deal as Xi Jinping Meets Rodrigo Duterte*, S. CHINA MORNING POST (Nov. 20, 2018), <https://www.scmp.com/news/china/diplomacy/article/2174213/china-philippines-sign-oil-and-gas-exploration-deal-xi-jinping>.
- ³² David Nakamura & Emily Rauha, *Trump Boasts of 'Great Relationship' with Philippines' Duterte at First Formal Meeting*, WASH. POST (Nov. 13, 2017), https://www.washingtonpost.com/politics/trump-boasts-of-great-relationship-with-philippines-duterte-at-first-formal-meeting/2017/11/13/e6612f14-c813-11e7-b0cf-7689a9f2d84e_story.html?noredirect=on&utm_term=.03c0c9939dda (quoting Trump addressing reporters while seated by Duterte at an economic summit).
- ³³ Shibani Mahtani & Gerry Shih, *Xi Launches Philippine Charm Offensive as China Looks to Dislodge U.S. Influence*, WASH. POST (Nov. 20, 2018), https://www.washingtonpost.com/world/asia_pacific/xi-launches-philippine-charm-offensive-as-china-looks-to-dislodge-us-influence/2018/11/20/40413c10-ec92-11e8-96d4-0d23f2aaad09_story.html?utm_term=.78b97b8c97fb.
- ³⁴ See generally Digital Typhoon: *The Intensity and Size of Typhoons - Units of Pressure and Wind*, National Institute of Informatics, <http://agora.ex.nii.ac.jp/digital-typhoon/help/unit.html.en> (last visited Nov. 18, 2019) (explaining different classifications of typhoons and how their intensities compare); Wei Mei & Shang-Ping Xie, *Intensification of landfalling typhoons over the northwest Pacific since the late 1970s*, 9 NAT. GEOSCI. 753, 756 (October 2016), <https://www.nature.com/articles/ngeo2792> (showing the intensification of typhoons that make landfall due to warming); Kelvin S. Rodolfo et al., *The December 2012 Mayo River Debris Flow Triggered by Super Typhoon Bopha in Mindanao, Philippines: Lessons Learned and Questions Raised*, 16 NAT. HAZARDS EARTH SYST. SCI. 2691 (Dec. 15 2016), <https://www.nat-hazards-earth-syst-sci.net/16/2683/2016/> (showing the impact of El Niñas on Philippine typhoon landfall and discussing that the number of typhoons may fall this century, but the intensity of typhoons will rise).
- ³⁵ See Jingru Sun et al., *Sea Level Rise, Surface Warming, and the Weakened Buffering Ability of South China Sea to Strong Typhoons in Recent Decades*, 7 SCI. REP. 7418 (2017), <https://www.nature.com/articles/s41598-017-07572-3> (showing the correlation between surface warming, rising sea levels, and typhoon intensity in the South China Sea).
- ³⁶ Qingyuan Wang et al., *Changes in Means and Extreme Events of Sea Surface Temperature in the East China Seas Based on Satellite Data from 1982 to 2017*, 10 ATMOSPHERE 140, 149 (Mar. 14, 2019) (showing warming trends in the East China Sea is greater than average sea warming trends).
- ³⁷ Lijing Cheng et al., *How Fast are the Oceans Warming?*, 363 SCI. 128 (2019), <https://science.sciencemag.org/content/363/6423/128> (observing warming trends of oceans over time).
- ³⁸ See World Meteorological Org., *WMO Statement on the State of Global Climate in 2018*, 2, 3 (March 2019), https://library.wmo.int/doc_num.php?explnum_id=5789 (reporting on the increase in global temperature, carbon emissions, and global extreme weather).
- ³⁹ *Id.* at 25–28 (providing a global overview of extreme and often record-breaking weather events that occurred in 2018).
- ⁴⁰ *Id.* at 29.
- ⁴¹ *Id.* at 23, 25–28, 30.
- ⁴² *Id.* at 24.
- ⁴³ *Id.* at 23.
- ⁴⁴ *Id.* at 30 (analyzing 281 weather events that occurred in 2018).
- ⁴⁵ *Climate Change*, United Nations, <https://www.un.org/en/sections/issues-depth/climate-change/> (last visited Nov. 18, 2019) (introducing information about climate change causes and effects).
- ⁴⁶ See SOTC: *Introduction: Are Global Temperatures Rising?* Nat'l Snow & Ice Data Ctr. (last updated: Feb. 10 2017), <https://nsidc.org/cryosphere/sotc/intro.html> (demonstrating global warming trends by observing temperature and ice patterns); see also Wei Mei & Shang-Ping Xie *supra* note 35 at 756 (sea-surface temperatures connected to increased intensity of typhoons with continued temperature rising).
- ⁴⁷ Jason Samenow, *It was 84 Degrees near the Arctic Ocean This Weekend as Carbon Dioxide Hit its Highest Level in Human History*, WASH. POST (May 14, 2019), https://www.washingtonpost.com/weather/2019/05/14/it-was-degrees-near-arctic-ocean-this-weekend-carbon-dioxide-hit-its-highest-level-human-history/?utm_term=.cbe9ceb73208.
- ⁴⁸ Joe Bryan, *Climate Change as a Threat Multiplier*, ATL. COUNCIL (Nov. 16, 2017), <https://www.atlanticcouncil.org/blogs/new-atlanticist/climate-change-as-a-threat-multiplier>; Michael Mason, *Climate Change, Securitisation and the Israeli-Palestinian Conflict*, 179 THE GEOGRAPHICAL J. 298, 298 (2013).
- ⁴⁹ U.S. CENSUS BUREAU, *WORLD POPULATION DAY: JULY 11, 2018* (2018), <https://www.census.gov/newsroom/stories/2018/world-population.html>.
- ⁵⁰ See Mitch Smith & John Schwartz, *In Flood-Hit Midwest, Mayors See Climate Change as a Subject Best Avoided*, N.Y. TIMES (May 15, 2019), <https://www.nytimes.com/2019/05/15/us/midwest-flooding-climate-change.html?acton=click&module=News&pgtype=Homepage> (detailing U.S. mayor refusing to address climate change impacts in his community).
- ⁵¹ U.S. GLOBAL CHANGE RESEARCH PROGRAM, *CLIMATE CHANGE IMPACTS IN THE UNITED STATES: THE THIRD NATIONAL CLIMATE ASSESSMENT* (2014), http://s3.amazonaws.com/nca2014/high/NCA3_Climate_Change_Impacts_in_the_United%20States_HighRes.pdf?download=1 (detailing the sweeping impacts of climate change).
- ⁵² Josh Dawsey, Philip Rucker, Brady Dennis, & Chris Mooney, *Trump on Climate Change: 'People Like Myself, We Have Very High Levels of Intelligence but We're Not Necessarily Such Believers.'*, WASH. POST (Nov. 27, 2018), https://www.washingtonpost.com/politics/trump-on-climate-change-people-like-myself-we-have-very-high-levels-of-intelligence-but-were-not-necessarily-such-believers/2018/11/27/722f0184-f27e-11e8-aeaa-b85fd44449f5_story.html?noredirect=on&utm_term=.42c8f1317703.
- ⁵³ See Fred Pearce, *With China in the Lead, New Obstacles to Climate Progress Are Emerging*, YALE ENV'T 360 (May 24, 2018), <https://e360.yale.edu/features/with-china-in-the-lead-new-obstacles-to-climate-progress-emerge> (describing China's investments in solar energy and decrease in coal consumption).
- ⁵⁴ Ministry of Foreign Aff. of China, *Keynote Speech by H.E. Xi Jinping, President of the People's Republic of China, at the Opening Ceremony of the B20 Summit*, (Sept. 3 2016), https://www.fmprc.gov.cn/mfa_eng/wjdt_665385/zjyh_665391/t1396112.shtml.
- ⁵⁵ See Christopher Edmonds & Ilan Noy, *The Economics of Disaster Risks and Impacts in the Pacific*, 27 DISASTER PREVENTION & MGMT. 478, 494 (June

26, 2018) (stating that countries in the Pacific are among the vulnerable to the effects of climate change management).

⁵⁶ Shinzo Abe, *Join Japan and Act Now to Save our Planet*, FIN. TIMES (Sept. 23, 2018), <https://www.ft.com/content/c97b1458-ba5e-11e8-8dfd-2f1cbe7ee27c>.

⁵⁷ Daniel Hurst, *Can Japan Be a Climate Change Leader? Prime Minister Shinzo Abe certainly thinks so.*, THE DIPLOMAT (Oct. 5, 2018), <https://thediplomat.com/2018/10/can-japan-be-a-climate-change-leader/>.

⁵⁸ See *Despite Precautions, Geographic Vulnerabilities Raise Risks for Japan during Deadly Downpours*, JAPAN TIMES (July 10, 2018), <https://www.japantimes.co.jp/news/2018/07/10/national/vulnerable-geography-seen-keeping-well-prepared-japan-prone-deadly-downpours/> (describing how unprecedented rainfall in Japan is putting homes in the paths of landslides and flooding).

⁵⁹ See Rizalito M. Mercado, *People's Risk Perceptions and Responses to Climate Change and Natural Disasters in BASECO Compound, Manila, Philippines*, 34 *PROCEDIA ENV'L SCI.* 490, 505 (2016) (showing that climate change has directly affected people's lives in the Philippines in regards to natural disasters).

⁶⁰ Dharel Placido, *Climate Change a 'Day-to-Day Problem': Duterte*, ABS-CBN NEWS (July 25, 2018), <https://news.abs-cbn.com/news/07/25/18/climate-change-a-day-to-day-problem-duterte>.

⁶¹ *Id.*

⁶² See *Duterte Signs Paris Climate Change Deal*, ABS-CBN NEWS (March 1, 2017), <https://news.abs-cbn.com/news/03/01/17/duterte-signs-paris-climate-change-deal> (discussing Duterte's process in signing the Paris Climate Change Deal).

⁶³ William N. Holden, *Typhoons, Climate Change, and Climate Injustice in the Philippines*, 11 *AUST. J. OF SOUTH-EAST ASIAN STUDIES* 117-139 (2018).

⁶⁴ Linda Poon, *Climate Change Is Testing Asia's Megacities*, CITYLAB 1, 3 (Oct. 9, 2018), <https://www.citylab.com/environment/2018/10/asian-megacities-vs-tomorrows-typhoons/572062/>.

⁶⁵ *About Malacañan Palace*, Malacañan Palace Presidential Museum and Library (last visited Nov. 18, 2019), <http://malacanang.gov.ph/>. ("The Presidential Museum and Library is the primary office within the Office of the President responsible for preserving, managing, and promoting the history and heritage of the Philippine Presidency, and particularly of Malacañan Palace as its official seat. It is the principal historical and artistic repository in support of the institution of the Presidency and for the benefit of the Republic and the Filipino people.")

⁶⁶ Neil A. Mercado, *Duterte Calls for 'Collective Action' on Climate Change*, INQUIRER (April 28, 2019), <https://globalnation.inquirer.net/174946/duterte-calls-for-collective-action-on-climate-change>.

⁶⁷ Ray Sanchez, *Scientists now say Hurricane Michael was a Category 5 storm at the time of US landfall*, CNN 1, 3 (updated Apr. 19, 2019), <https://www.cnn.com/2019/04/19/weather/hurricane-michael-upgraded-category-5/index.html>.

⁶⁸ Katherine Eastman, *New Life, New Home, after the Storm*, AP 1, 6 (June 6, 2019), <https://www.apnews.com/09c6376443e0445ca2ad19b12a009b27>.

⁶⁹ *Hurricane Katrina Statistics Fast Facts*, CNN 1, 2 (updated Aug. 8, 2019), <https://www.cnn.com/2013/08/23/us/hurricane-katrina-statistics-fast-facts/index.html>.

⁷⁰ Kenneth Pletcher & John P. Rafferty, *Sichuan earthquake of 2008*, ENCYCLOPEDIA BRITANNICA (May 5, 2019), <https://www.britannica.com/event/Sichuan-earthquake-of-2008>.

⁷¹ Sheena McKenzie & Joshua Berlinger, *Typhoon Mangkhut hits mainland China, lashes Hong Kong, dozens dead in Philippines*, CNN (updated Sept. 17, 2018), <https://www.cnn.com/2018/09/16/asia/typhoon-mangkhut-china-hong-kong-intl/index.html>.

⁷² *Fukushima Daiichi Accident*, World Nuclear Association (updated Oct. 2018), <http://www.world-nuclear.org/information-library/safety-and-security/safety-of-plants/fukushima-accident.aspx>.

⁷³ *Japan's Strongest Typhoon in 25 Years Kills at Least Six*, BBC (Sept. 5, 2018), <https://www.bbc.com/news/world-asia-45406857>.

⁷⁴ Cecil Morella, *Why super typhoon Yolanda was so deadly*, ABS-CBN NEWS (Nov. 05 2018), <https://news.abs-cbn.com/news/11/05/18/why-super-typhoon-yolanda-was-so-deadly>.

⁷⁵ Alan Taylor, *Photos: The Aftermath of Super Typhoon Mangkhut*, ATLANTIC (Sept. 17, 2018), <https://www.theatlantic.com/photo/2018/09/photos-the-aftermath-of-super-typhoon-mangkhut/570490/>.

⁷⁶ The PCA states that "Whoever, except in cases and under circumstances expressly authorized by the Constitution or Act of Congress, willfully uses any part of the Army or Air Force as a posse comitatus or otherwise to execute the laws shall be fined under this title or imprisoned not more than two years, or both." 18 U.S.C. § 1385. "The substantive prohibitions of the Posse Comitatus Act (PCA) were extended to all the services with the enactment of Title 10 USC, Section 375. As required by Title 10 USC, Section 375 the secretary of defense issued Department of Defense Directive 5525.5, which precludes members of the Army, Navy, Air Force, or Marine Corps from direct participation in a search, seizure, arrest, or other similar activity unless participation in such activity by such member is otherwise authorized by law" *The Posse Comitatus Act*, U.S. NORTHERN COMMAND (May 16, 2013), <https://www.northcom.mil/Newsroom/Fact-Sheets/Article-View/Article/563993/the-posse-comitatus-act/>; see also Jennifer Elsea, *The Posse Comitatus Act and Related Matters: A Sketch*, NAVAL HISTORY & HERITAGE COMMAND (Nov. 20, 2017), <https://www.history.navy.mil/research/library/online-reading-room/title-list-alphabetically/p/posse-comitatus-act-and-related-matters-a-sketch.html>. (showing additional exceptions).

⁷⁷ 18 U.S.C. § 1385 (1956).

⁷⁸ See Michael Greenberger & Katarzyna Fertala, *The Role of the Military and National Guard in Disaster Response* in HOMELAND SECURITY AND EMERGENCY MANAGEMENT: A LEGAL GUIDE FOR STATE AND LOCAL GOVERNMENTS, 25-42 (Ernest Abbott & Otto J. Hetzel eds., 2018).

⁷⁹ *Id.* at 31-41.

⁸⁰ 10 U.S.C. §§ 251-255 (1956).

⁸¹ *Id.*

⁸² Sean McGrane, Note, *Katrina, Federalism, and Military Law Enforcement: A New Exception to the Posse Comitatus Act*, 108 MICH. L. REV. 1309, 1310-11 (2010).

⁸³ Article II, Section 1 of the U.S. Constitution states, in part, "The executive Power shall be vested in a President of the United States of America. . . ." When the President takes office, this is the oath: "I do solemnly swear (or affirm) that I will faithfully execute the Office of President of the United States, and will to the best of my ability, preserve, protect, and defend the Constitution of the United States." This statement on executive power should allow the president to sign an executive order to use the military under the Insurrection Act in cases involving catastrophic natural disasters with a large – if not massive – armed assistance.

⁸⁴ While Courts have upheld executive orders, the exact limit of this power still is unknown. See William Hebe, *Executive Orders and the Development of Presidential Power*, 17 VILL. L. REV. 688, 698 (1972)

⁸⁵ Adam L. Warber, Yu Ouyang & Richard W. Waterman, *Landmark Executive Orders: Presidential Leadership Through Unilateral Action*, 48 PRESIDENTIAL STUDIES QUARTERLY, March 2018, 110-Tzoumis11. See also Kelly Tzoumis, Susan Bennett, Elizabeth Stoffel, *The Executive Order in the United States: a Policy Tool Used That Has Shaped Environmental Policy and Decisions from Presidents Franklin D. Roosevelt to Barack Obama*, 35 ENVTL. SYS. & DECISIONS 401, 402 (2015) ("Concern over presidential use of executive orders focuses on the extent to which it is a means of taking unilateral action by the president (or the executive branch more generally), often seen as usurping Congress's legislative prerogatives and thereby expanding the powers of the presidency. The potential importance of executive orders as a form of unilateral presidential action is bolstered by the infrequency with which either Congress or the courts have overturned executive orders.").

⁸⁶ Curtis A. Bradley & Jack L. Goldsmith, *Presidential Control over International Law*, 131 Harv. L. Rev. 1201, 1214-20 (2018).

⁸⁷ See Tzoumis *et al*, *supra* note 86.

⁸⁸ Mary Ann E. Gallagher & Bethany Blackstone, *Taking Matters into Their Own Hands: Presidents' Personality Traits and the Use of Executive Orders*, 45 PRESIDENTIAL STUDIES QUARTERLY 221 (2015).

⁸⁹ Nicole Brown and Rajvi Desai, *Trump's Executive Orders: Actions the President Can Take, Explained*, AM N.Y. (Updated Jan. 19, 2018), <https://www.amny.com/news/politics/trump-s-executive-orders-actions-the-president-can-take-explained-1.13008065>.

⁹⁰ For a complete list of President Donald J. Trump executive orders see: *Donald J. Trump*, Center for Homeland Security and Defense, <https://www.hsdl.org/?collection&id=2482&pid=dt> (last visited June 12, 2019); see also *Executive Orders*, Federal Register, <https://www.federalregister.gov/presidential-documents/executive-orders/> (last visited June 12, 2019).

- ⁹¹ See, e.g., Chishti et al., *In Upholding Travel Ban, Supreme Court Endorses Presidential Authority While Leaving Door Open for Future Challenges*, MIGRATION POLICY INSTITUTE (June 29, 2018), <https://www.migrationpolicy.org/article/upholding-travel-ban-supreme-court-endorses-presidential-authority-while-leaving-door-open> (discussing President Trump's travel ban order). A more detailed legal analysis can be found at *Trump v. Hawaii*, Oyez, <https://www.oyez.org/cases/2017/17-965>. Muzaffar Chishti, Sarah Pierce, and Laura Plata state, "In a 5-4 decision in *Trump v. Hawaii* [585 US __ (2018)] announced June 26 [2018], the Supreme Court endorsed the President's power to exercise broad authority in suspending the entry of foreign national groups—as Trump has done for most nationals from several majority-Muslim countries." See also *Trump v. Hawaii*, 138 S. Ct. 2392 (2018).
- ⁹² Gallagher & Blackstone *supra* note 89, at 221–46.
- ⁹³ Kenneth L. Ande & Thomas Gray, *Public Perception of the Presidential Toolkit*, 47 PRESIDENTIAL STUDIES QUARTERLY 432, 432–47 (2017).
- ⁹⁴ Gallagher & Blackstone *supra* note 89, at 221–46.
- ⁹⁵ William G. Howell, *Unilateral Powers: A Brief Overview*, 35 PRESIDENTIAL STUDIES QUARTERLY 417, 417–18 (2005).
- ⁹⁶ *Id.* at 425.
- ⁹⁷ Symposium, *Did the Founding Fathers Do "a Heckuva Job"?* *Constitutional Authorization for the Use of Federal Troops to Prevent the Loss of a Major American City*, 87 B.U. L. REV. 397, 397–425 (2007).
- ⁹⁸ See generally McGrane, *supra* note 83, at 1318 (arguing that the troops failed to restore order after Hurricane Katrina because they lacked the authority to work on a law enforcement capacity, instead reduced to relief and rescue efforts).
- ⁹⁹ See *id.* at 1326–28 (noting that President Bush had the legal authority to act in sending in troops (as do other presidents in the future), without authorization by Governor Blanco, but choose not to).
- ¹⁰⁰ *Id.* at 1312.
- ¹⁰¹ *Id.* at 1332.
- ¹⁰² *Id.* at 1319; see also Eric Lipton, Eric Schmitt, & Thom Shanker, *Political Issues Snarled Plans for Troop Aid*, N.Y. TIMES (Sept. 9, 2005), <https://www.nytimes.com/2005/09/09/us/nationalspecial/political-issues-snarled-plans-for-troop-aid.html>; Lieutenant Colonel Ted Martin & Maj. Corey E. Thomas et al., *2018 Domestic Operational Law Handbook: A Practitioner's Guide for Judge Advocates*, CENTER FOR L. & MILITARY OPERATIONS 106–08 (2018), available at https://www.loc.gov/rr/frd/Military_Law/pdf/domestic-law-handbook-2018.pdf; 2019 *Domestic Operations Law and Policy*, NATIONAL GUARD BUREAU OFFICE OF CHIEF COUNCIL, 66, 72 (2019), available at https://www.loc.gov/rr/frd/Military_Law/pdf/domestic-law-handbook-2018-old.pdf (providing additional evidence to support that that President had legal authority to invoke the Insurrection Act even over the objections of local officials).
- ¹⁰³ See generally Patrick Roberts, *An Unnatural Disaster*, 4 ADMIN. & SOC'Y. 763, 764–69 (2009) (noting that the response time was the most important explanation for the shortcomings in Katrina recovery, and thus a provision to streamline the process would be most helpful).
- ¹⁰⁴ Lipton, Schmitt, & Shanker, *supra* note 103.
- ¹⁰⁵ Naim Kapucu, *The Role of the Military in Disaster Response in the U.S.*, 4 EUR. J. ECON. POL. STUD. 7, 22 (2011).
- ¹⁰⁶ *Id.* at 24 (stating that the governor's request for active-duty Army and Marine land forces was delayed by the complexity of the process and ambiguous as to how the governor would be able to make such request; however, the governor could in fact make that request after passing through a series of bureaucratic agencies and channels.)
- ¹⁰⁷ *Id.* at 27.
- ¹⁰⁸ See Andrew Reeves, *Political Disaster: Unilateral Powers, Electoral Incentives, and Presidential Disaster Declarations*, 73 J. POL. 1142, 1143 (2011) (stating that "the unilateral power studied here is the presidential disaster declaration, a power that belongs to the president alone. By statute, he does not require the approval of Congress, nor does he need to explain or justify his decision.").
- ¹⁰⁹ William C. Banks, *Providing "Supplemental Security" – The Insurrection Act and the Military Role in Responding to Domestic Crises*, 3 J. NAT'L. SEC. L. & POL'Y. 39, 91 (2009).
- ¹¹⁰ See Lauri Paltermaa, *Research Disasters and Disaster Management in China: Persistent Questions and Emerging Trends*, 31 CHINA INFO. 277, 277–79 (2017); Pierre Fuller, *Disasters in Chinese History*, 31 CHINA INFO. 391, 392–94 (2017) (citing that the disaster management in China dates back to Western Zhou era (1046 – 771 BC)).
- ¹¹¹ See generally Qin-Ying Sun, Xiang-yang Li, and Feng Yu, *Designing an Emergency Continuity Plan for a Megacity Government: A Conceptual Framework for Coping with Natural Catastrophes*, 13 INT'L J. CRITICAL INFRASTRUCTURE PROT. 28–, 29–34 (2016).
- ¹¹² See generally Lanying Du and Ling Qian, *The Government's Mobilization Strategy Following a Disaster in the Chinese Context: An Evolutionary Game Theory Analysis*, 80 NAT. HAZARDS 1411, 1411–13 (2016) (noting that China's response to natural disasters has often been limited, as it relies in many cases on nonprofit organizations (NPOs) to assist in its natural disasters and thus will require significant improvements).
- ¹¹³ See Md S. Islam and Si H. Lim, *When "Nature" Strikes: A Sociology of Climate Change and Disaster Vulnerabilities in Asia*, 10 NAT. CULTURE 57, 58, 65 (2015) (asserting that climate change is responsible for increased occurrence of catastrophic natural disasters and as such, there is higher demand for the improvement of the disaster management system).
- ¹¹⁴ *Constitution of Republic of China and the Additional Articles*, USC US-CHINA INSTITUTE, (1947), <https://china.usc.edu/constitution-republic-china-and-additional-articles-1947>.
- ¹¹⁵ Minnie Chan, *China Has the World's Biggest Military Force. Now Xi Jinping Wants It to Be the Best*, S. CHINA MORNING POST (last updated July 20, 2018), <https://www.scmp.com/news/china/diplomacy-defence/article/2115968/xi-orders-massive-military-shake-meet-threats-worlds>.
- ¹¹⁶ Tongtong Li, Qi Wang, and Zheng Xie, *Disaster Response Knowledge and Its Social Determinants: A Cross-sectional Study in Beijing, China*, 14 PLOS ONE (Mar. 26, 2019), <https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0214367>. (explaining that the population's low knowledge of disaster preparation in Beijing may impact the city's ability to cope with a future disaster).
- ¹¹⁷ Peng Tao, *Towards a Politics of Disaster Response: Presidential Disaster Instructions in China, 1998-2012*, 42 DISASTERS 275–, 275 (2018). Also see *Id.* at 276. Natural disasters must be addressed by improvements to how they are first started by the leadership, and the military leadership must also play a role in this change. Xi should also have a hand in deciding how and when he will initiate both a disaster response and the use of the military in times of natural disasters. Tao later states, "Presidential instructions not only are a direct response to a disaster, but also they have symbolic significance with regard to such incidents, with far-reaching influence on preserving political legitimacy . . . Eliminating uncertainty from disaster politics will help to enhance the healthy and sustainable development of the emergency management system." See *Id.* at 290 – 291.
- ¹¹⁸ See Xuesong Guo and Naim Kapucu, *Examining Collaborative Disaster Response in China: Network Perspectives*, 79 NAT. HAZARDS 1773, 1774-75 (2015) (explaining China's recent changes in response to the catastrophic natural disasters).
- ¹¹⁹ See WeiLi Duan et al., *Floods and Associated Socioeconomic Damages in China over the Last Century*, 82 NAT. HAZARDS (2016) 401, 409, 411-12 (2016) (addressing the linkage between climate change and flooding in China); Xi Chen, Ning Li et al., *Change Features and Regional Distribution of Temperature Trend and Variability Joint Mode in Mainland China*, 132 THEORETICAL & APPLIED CLIMATOLOGY 1049, 1049 (2018) (noting the rising temperatures in China).
- ¹²⁰ Pichamon Yeophantong, *China and Disaster governance: Assessing the Domestic Sources of a Global Responsibility*, 21 J. OF CHINESE POL. SCI. 241, 248 (2016) ("The Sichuan Earthquake – or more precisely, the destruction wrought by it – worked to strengthen bonds of political and social obligation. . . . The Sichuan Earthquake arguably served to reawaken, on an unprecedented scale, powerful sentiments of national unity and solidarity.").
- ¹²¹ Chen et al. notes, "In recent years, natural disasters and extreme climate events occurred frequently in China; major natural disasters such as earthquakes, flood, drought and geological disasters have serious impact on economy and society, which makes the national disaster prevention and mitigation work in serious situation . . . Although the natural disaster loss is inevitable, we can avoid or reduce the risk by adjusting human activities, and disaster risk assessment in the premise and foundation to guard against and evade the risk of major disasters." Lu Chen, Yue-cheng Huang, Rui-zhen Bai, and An Chen, *Regional Disaster Risk Evaluation of China Based on the Universal Risk Model*, 89 NAT. HAZARDS 647 – 648., 647-48 (2017). Therefore, it is critical for the Chinese leadership to better prepare for upcoming natural disasters. As has been argued here, the military's role must be streamlined to

be used in such events. Wang and Wu have argued that “China needs a better emergency management system for the prevention and control of accidents and disasters.” Bing Wang and Chao Wu, *China: Establishing the Ministry of Emergency Management (MEM) of the People’s Republic China (PRC) to Effectively Prevent and Control Accidents and Disasters*, 111 SAFETY SCI. 324, 324 (2019). This author fully agrees, and such change should start at the top.

¹²² Jake Hooker, *Quake Revealed Deficiencies of China’s Military*, N.Y. TIMES (July 2, 2008), <https://www.nytimes.com/2008/07/02/world/asia/02china.html>.

¹²³ See id. (“James C. Mulvenon, a specialist on the Chinese military at the Center for Intelligence Research and Analysis, a government contractor in Washington that performs classified analyses on overseas military programs, said the earthquake showed the army’s best and worst sides. It mobilized quickly, but the troops were unprepared to save lives in the first seventy-two hours, when thousands were buried under toppled masonry and every minute mattered. ‘You basically had a bunch of guys humping through the mountains on foot and digging out people with their hands,’ Mr. Mulvenon said. ‘It was not a stellar example of a modern military.’”)

¹²⁴ See Li Peng, Lei Lin, Shaoquan Liu, and DingDe Xu, *Interaction Between Risk Perception and Sense of Place in Disaster-Prone Mountain Areas: A Case Study of China’s Three Gorges Reservoir Area*, 85 NAT. HAZARDS 777, 790 (2017); (discussing the issue facing the rural populations regarding the Three Gorges area in China); see also Donald D.A. Schaefer, *The Analysis of the Anticipated Effects on the Environment: Comparing Opinions Concerning the Central Versus Local Government’s Views on the Three Gorges Project in China as Well as U.S. Views on it From 1992 – 2006*, 7 LOY. U. CHI. INT’L L. REV. 31, 32, 34, 43 (2009).

¹²⁵ Yong-ling Zhang and Lu Chen, *Emergency Materials Reserve of Government for Natural Disasters*, 81 NAT. HAZARDS 41, 51 (2016).

¹²⁶ Guochun Wu et al., *Mapping Individuals’ Earthquake Preparedness in China*, 18 NATL HAZARDS & EARTH SYS. SCI. 1315, 1315 (2018); Hao Lei et al., *The Earthquake in Jiuzhaigou County of Northern Sichuan, China on August 8, 2017*, 90 NAT. HAZARDS 1021 (2018); Yinke Yang et al., *Status Quo and Existing Problems of Seismic Prevention Planning in Counties and Districts—A Case Study of Hongsibao District, Wuzhong City, Ningxia Hui Autonomous Region*, 17 AGRIC. SCI. & TECH. 1488, 1488 (2016).

¹²⁷ Juhan Vark, *China’s Dilemmas on the Road to Reforms under Xi Jinping*, 5 BALTIC J. OF EUROPEAN STUDIES 133, 142 (2015). (“President Xi Jinping, who is head of the leading group for deepening reform on national defense and the armed forces, stressed in the middle of April 2014 that the country’s military reform should be guided by the objective of building a strong army.”)

¹²⁸ Chris Buckley and Keith Bradsher, *China Moves to Let Xi Stay in Power by Abolishing Term Limit*, N.Y. TIMES (Feb. 25, 2018), <https://www.nytimes.com/2018/02/25/world/asia/china-xi-jinping.html>.

¹²⁹ Young N. Cho, *Continuity and Change in China’s Elite Politics at the 19th Party Congress: Is Xi Jinping’s “One-man Rule” Established?*, 30 KOREAN J. OF DEF. ANALYSIS 61, 62 (Mar. 2018).

¹³⁰ See Wenjuan Nie, *Xi Jinping’s Foreign Policy Dilemma: One Belt, One Road or the South China Sea?*, 38 CONTEMP. SOUTHEAST ASIA 422–23, 426, 435 (2016) (observing that Xi seeks to leave a “strong foreign policy legacy” by taking a more assertive stance in world affairs).

¹³¹ See Camila Domooske, *China’s Xi Jinping Defends Globalization In First-Ever Speech At World Economic Forum*, NPR (Jan. 17, 2017, 9:47 AM), <https://www.npr.org/sections/thetwo-way/2017/01/17/510219078/chinas-xi-jinping-defends-globalization-in-first-ever-speech-at-world-economic-f> (noting that Xi reaffirmed China’s commitment to the Paris climate accord and called on other states to do the same).

¹³² See Jinghan Zeng, *Narrating China’s belt and road initiative*, 10 GLOB. POLICY 207, 210 (2019) (pointing out that the Chinese government is leery of zero-sum geopolitical interpretations of its Belt and Road Initiative, preferring to focus on “inclusive cooperation” among states).

¹³³ Cf. *Xi Jinping: Keep Power Reined Within the Cage of Regulations*, 48 CHINESE L. & GOV’T 458 (Ted Wang trans., 2016) (noting that Xi Jinping has publicly stated that China needs to improve its laws in order to better benefit the people, albeit in regard to combatting corruption in this instance).

¹³⁴ See Brig Gurmeet Kanwal, *Brig Gurmeet Kanwal on China’s Xi Jinping who is In Complete Control!*, VAYU AEROSPACE & DEF. REV., Dec. 2017, at 10 (arguing that, while Xi has been largely successful in reforming the Chinese military as a fighting force, he needs to develop it as a force for regional stability in order to better realize Chinese interests).

¹³⁵ See *Fukushima Daiichi Accident*, *supra* note 73 (reiterating the particulars of the earthquake and tsunami that caused the Fukushima Daiichi nuclear disaster).

¹³⁶ See *Japan earthquake: Military rescue effort doubled*, BBC (March 13, 2011), <https://www.bbc.com/news/world-asia-pacific-12725736> (noting that, even as the Japanese military redoubled its efforts to assist victims of the disaster, millions of Japanese households were still without water or electricity, necessitating foreign military aid).

¹³⁷ NIHONKOKU KENPŌ [KENPŌ] [CONSTITUTION], Art. 9 (Japan).

¹³⁸ See Ian R. Gibson, *Actors and Action for Peace in Japan*, 28 PEACE REV.: J. OF SOC. JUST. 99, 105 (2016) (detailing how the Abe administration sought to change the Japanese constitution as part of its efforts to restore “national values”); see also Leif-Eric Easley, *How proactive? How pacifist? Charting Japan’s evolving defence posture*, 71 AUST. J. OF INT’L AFFAIRS 63, 73–75 (2017) (discussing how the Abe administration worked to permit Japanese participation in “collective self-defense”); John O. Haley, *Article 9 in the Post-Sunakawa World: Continuity and Deterrence within a Transforming Global Context*, 26 WASH. INT’L L.J. 1, 2–3 (2017) (retelling how the Abe administration implemented policies which reinterpreted Article 9 to allow a more assertive defense policy); Yasuo Hasebe, *The End of Constitutional Pacifism?*, 26 WASH. INT’L L.J. 125, 127–28 (2017) (arguing that the Abe administration has reinterpreted Article 9 to permit the use of military force in certain circumstances); Takako Hikotani, *The Japanese Diet and Defence Policy-making*, 94 INT’L AFFAIRS 791, 792 (2018) (contending that, despite the constitutional nature of Article 9 and the use of force, the Japanese Diet has largely deferred to executive authority in shaping defense policy); Jooyoun Lee, *Narrating War: Newspaper Editorials in Japan’s Defense and Security Policy Between Militarism and Peace*, 28 KOREAN J. OF DEF. ANALYSIS 365, 366 (2016) (noting that the Abe administration’s reinterpretation of Article 9 specifically allows for Japan to use force even when Japan is not under attack); Philippa Webb, *A British Perspective on the War and Military Forces Clause of the Japanese Constitution* 26 KING’S L.J. 299, 299–311 (2015), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2633932 (describing how the Abe administration sought to amend the Japanese constitution in response to ISIL killing two Japanese nationals).

¹³⁹ See Jaemin Lee, *Collective Self-Defense or Collective Security? Japan’s Reinterpretation of Article 9 of the Constitution*, 8 J. OF EAST ASIA & INT’L L. 373, 374–75 (2015) (asserting that self-defense and collective security are distinct, if sometimes overlapping, concepts in international law, and that an “over-fixation on enhanced military cooperation” needlessly equates the two).

¹⁴⁰ Eric Talmadge, *Disaster Aid Puts New Face on US Military in Japan: 20,000 Troops Mobilized in ‘Operation Tomodachi’ to Help Quake-tsunami Victims*, NBC NEWS (Mar. 27, 2011, 12:12 AM), http://www.nbcnews.com/id/42289464/ns/world_news-asia_pacific/t/disaster-aid-puts-new-face-us-military-japan/.

¹⁴¹ See Lee, *supra* note 140, at 385–87 (arguing that the primary purpose of the Abe administration’s reinterpretation of Article 9 was to enable Japan to participate in a wider range of military activities and other international cooperative efforts).

¹⁴² See Tomohiko Satake, *The New Guidelines for Japan-U.S. Defense Cooperation and an Expanding Japanese Security Role*, 8 ASIAN POL. & POLY. 27, 33 (2016) (observing that, under the current interpretation of Article 9, the Japanese military could provide medical and other logistical support to regional partners, such as Australia); see also Simone V. de Souza, Yukio Kinoshita, and Brian Dallery, *Post-Disaster Local Infrastructure Reconstruction Finance: A Comparative Analysis of Policy Intervention in the Japanese Earthquake and Queensland Flood Disasters*, 15 PUB. FIN. & MGMT. 65 (2015) (arguing that Japan and Australia, as well as other states, could benefit from having administrative structures designed to facilitate intergovernmental disaster relief efforts, among other possible reforms); Misako Kaji, *Disaster Risk Reduction - Japanese Initiatives in the World Agenda*, 24 ASIA-PACIFIC REV. 58, 59 (2017) (noting that Japan has long sought greater international cooperation in response to natural disasters, particularly after the 2011 earthquake).

¹⁴³ See Renato Cruz De Castro, *21st Century Japan-Philippines Strategic Partnership: Constraining China’s Expansion in the South China Sea*, 44 ASIAN AFFAIRS: AN AM. REV. 31, 33–34 (2017) (detailing how, in the face of an increasingly assertive China, Japan and the Philippines have strengthened their security alliance).

¹⁴⁴ See Kei Koga, *The Rise of China and Japan’s Balancing Strategy: Critical Junctures and Policy Shifts in the 2010s*, 25 J. OF CONTEMP.

- CHINA 777, 778 (2016) (describing how Japan, rather than acquiescing, or “bandwagoning,” to China’s growing influence, has been attempting to keep China within the structure of the existing, American-led international order).
- ¹⁴⁵ See *id.* at 784–90 (describing how Sino-Japanese relations have soured in recent years in no small part due to rising tensions over the Senkaku islands); see also Bert Chapman, *Geopolitical Implications of the Sino-Japanese East China Sea Dispute for the U.S.*, 9 *GEOPOLITICS, HIST., & INT’L REL.* 15, 29–30 (2017) (noting that tensions over the Senkaku islands have played a major role in convincing Japan to move from a “static” to a “dynamic” defense posture).
- ¹⁴⁶ See generally Gabor Szilagyi, *The Objectives of China and Japan in Regional Processes in Southeast Asia*, 10 *MIL. SCI. REV.* 235–44 (2017).
- ¹⁴⁷ See Pingping Luo, Bin He, Kaoru Takara, Yin E. Xiong, Daniel Nover, Weili Duan & Kensuke Fukushima, *Historical Assessment of Chinese and Japanese Flood Management Policies and Implications for Managing Future Floods*, 48 *ENVTL. SCI. & POL’Y* 265, 265–77 (2015) (describing how both China and Japan have a long history of flood management).
- ¹⁴⁸ Louisa Lim, *China Acts Fast in Aiding Japan Post-Earthquake*, NPR (Mar. 15, 2011), <https://www.npr.org/2011/03/15/134567659/china-acts-fast-in-aiding-japan-post-earthquake>.
- ¹⁴⁹ Bhuhindar Singh, *The Development of Japanese Security Policy: A Long-Term Defensive Strategy*, 19 *ASIA POL’Y* 49, 50, 53 (2015).
- ¹⁵⁰ Deongsang Ahn, John Bradford, James Newberry & Harold Wescott, *The Case for Establishing a Civil-Military Disaster-Relief Hub in Northeast Asia*, 14 *ASIA POL’Y* 51, 57 (2012) (“Though U.S. military assistance to the Japanese relief effort was large and nearly immediate, it was neither flawless nor without lessons learned.”).
- ¹⁵¹ But c.f. Yoshikuni Ono, *The Perceptions of Local Political Actors After Natural Disasters: The Effect of Japan’s 3/11 Disasters on Local Politics*, 8 *RISK HAZARDS & CRISIS IN PUB. POL’Y* 335, 335–355 (2017) (arguing that local politicians play an important role by providing aid and directing assistance after natural disasters).
- ¹⁵² See Youichi Yanagawa, Mitsunobu Nakamura, Yuki Saoyama & Seiji Mimura, *Lesson Learned in Helicopter Operations During a Large Multiagency Prevention Drill in Japan*, 38 *AIR MED. J.* 202, 202–08 (2019).
- ¹⁵³ See Ahn et al., *supra* note 151, at 65 (holding that a regional disaster hub in Northeast Asia that should be considered as an alternative or an addition to bilateral and multilateral relations regarding disaster assistance.); see also Ngoc Thang To and Taaki Kato, *Characteristics and Development of Policy and Institutional Structures of Emergency Response in Vietnam*, 31 *INT’L J. DISASTER RISK REDUCTION* 729, 729–41 (2018).
- ¹⁵⁴ Muneo Kaigo & Leslie Tkach-Kawasaki, *Social Media for Enhancing Civil Society and Disaster Relief: Facebook Usage by Local Municipalities in Japan*, 7 *J. OF DEMOCRACY & OPEN GOV’T* 1, 1–22 (2015).
- ¹⁵⁵ Rio Yonson, Ilan Noy & JC Gaillard, *The Measurement of Disaster Risk: An Example from Tropical Cyclones in the Philippines*, 22 *REV. DEV. ECON.* 736, 737–39 (2017).
- ¹⁵⁶ Central Intelligence Agency, *The World Factbook, Philippines*, (last updated Oct. 2, 2019), <https://www.cia.gov/library/publications/the-world-factbook/geos/rp.html>.
- ¹⁵⁷ See Juhn C. P. Espia & Pepito Frenandez, Jr., *Insiders and Outsiders: Local Government and NGO Engagement in Disaster Response in Guimaras, Philippines*, 19 *DISASTERS* 51, 51–68 (2014).
- ¹⁵⁸ The 1987 Constitution: The Constitution of the Republic of the Philippines, (last updated Oct. 18, 2019), <https://www.officialgazette.gov.ph/constitutions/1987-constitution/>.
- ¹⁵⁹ See *id.*
- ¹⁶⁰ Pia Ranada, *In 2018, Duterte Turns to Military for (Almost) Everything*, RAPPLER (Dec. 12, 2018), <https://www.rappler.com/newsbreak/in-depth/218680-duterte-turns-to-philippine-military-year-end-2018>.
- ¹⁶¹ See Veronique M. Morin, Pennung Warnitchai & Sutat Weesakul, *Storm Surge Hazard in Manila Bay: Typhoon Nesat (Pedring) and the SW Monsoon*, 81 *NATURAL NAT. HAZARDS* 1569, 1569–88 (2016); see also John P. Lapidez, et al., *Identification of Storm Surge Vulnerable Areas in the Philippines through Simulation of Typhoon Haiyan-induced Storm Surge Levels over Historical Storm Tracks*, 15 *NAT. HAZARDS & EARTH SYS. SCI.* 1473, 1473–81 (2015).
- ¹⁶² Const. Art. VII (Phil.); see also *supra* note 152 and accompanying text (explaining the Japanese government’s ability to use force during times of crisis, such as natural disasters).
- ¹⁶³ Seiji Yamada, *Hearts and Minds: Typhoon Yolanda/Haiyan and the Use of Humanitarian Assistance/Disaster Relief to Further Strategic Ends*, 11 *SOC. MED.* 76, 76 (2017).
- ¹⁶⁴ Thomas Parker et al., *The U.S. Pacific Command Response to Super Typhoon Haiyan*, 82 *JOINT FORCE Q.* 54, 54–5 (2016).
- ¹⁶⁵ Christian S. Chan et al., *Psychological Sequelae of the 2013 Super Typhoon Haiyan Among Survivor-Responders*, 79 *PSYCHIATRY* 282, 282–96 (2016); Nicole Curato, *‘We Haven’t Even Buried the Dead Yet’: Ethics of Discursive Contestation in a Crisis Situation*, 65 *CURRENT SOC.* 1010, 1010–30. (2017) (emphasizing the importance of global assistance during times of disaster).
- ¹⁶⁶ Brendan Howe & Geehyun Bang, *Nargis and Haiyan: The Politics of Natural Disaster Management in Myanmar and the Philippines*, 41 *ASIAN STUD. REV.* 69, 70 (2017).
- ¹⁶⁷ See generally Charmaine G. Misalucha & Julio S. Amador III, *U.S.-Philippines Security Ties: Building New Foundations?*, 8 *ASIAN POL. & POL’Y* 51, 51–61 (2016); Renato Cruz De Castro, *Developing a Credible Defense Posture for the Philippines: From the Aquino to the Duterte Administrations*, 9 *ASIAN POL. & POL’Y* 541, 541–63 (2017); Richard J. Heydarian, *Evolving Philippines-U.S.-China Strategic Triangle: International and Domestic Drivers*, 9 *ASIAN POL. & POL’Y* 564, 564–82 (2017); Renato Cruz De Castro, *The Role of Middle Powers in the Modernization of the Armed Forces of the Philippines (AFP): The Case of the Special Japan-Australia Strategic Partnership and the Philippines*, 31 *KOREAN J. OF DEF. ANALYSIS* 145, 145–163 (2019); Renato Cruz De Castro, *The Duterte Administration’s Foreign Policy: Unraveling the Aquino Administration’s Balancing Agenda on an Emergent China*, 3 *J. OF CURRENT SOUTHEAST ASIAN AFFAIRS*, 139, 139–159. (2016) (illustrating a shift in the Philippines shifting away from American assistance and moving towards aid from countries such as China); *Agreement between the Government of the Republic of the Philippines and the Government of the United States of America on Enhanced Defense Cooperation*, 9 *ASIAN POL. & POL’Y* 716, 716–43 (2017).
- ¹⁶⁸ See generally Phuong Nguyen, *Deciphering the Shift in America’s South China Sea Policy*, 38 *CONTEMP. SOUTHEAST ASIA* 389, 389–421; (2016) (explaining the shift in America’s policy regarding the South China Sea as China is seen as a more aggressive adversary).
- ¹⁶⁹ See Mahar Lagmay & Bernard A. Racoma, *Lessons from Tropical Storms Urduja and Vinta Disasters in the Philippines*, 28 *DISASTER PREVENTION MGMT.* 154, 154154–70 (2019) (noting that early warning systems need to be improved); Rabindra Osti & Tadashi Nakasu, *Lesson Learned from Southern and Eastern Asian Urban Floods: from a Local Perspective*, 9 *J. OF FLOOD RISK MGMT.*, 22, 22–35 (2016); Colin Walch, *Evacuation ahead of Natural Disasters: Evidence from Cyclone Phailin in India and Typhoon Haiyan in the Philippines*, 5 *GEOGRAPHY* 1, 1–16 (2018).
- ¹⁷⁰ See, e.g., Bruno Takahashi et al., *Communication on Twitter during a Disaster: An Analysis of Tweets during Typhoon Haiyan in the Philippines*, 50 *COMPUTERS IN HUM. BEHAV.* 392, 392–98 (2015) (explaining that the use of social media is an important tool in getting out the information from the upper echelons to those who need it most).
- ¹⁷¹ Angelina Matthies, *Community-Based Disaster Risk Management in the Philippines: Achievements and Challenges of the Purok System*, 10 *AUST. J. OF SOUTH-EAST ASIAN STUD.*, 101, 101–08 (2017); Pamela Combinido & Jonathan C. Ong, *Silenced in the Aid Interface: Responsible Brokerage and Its Obstacles in Humanitarian Interventions*, 65 *PHILIPPINE SOC. REV.*, 39, 39–64 (2017); Nimfa L. Bracamonte, *When the Most Devastated is in the Best Position to Respond: Community Adaptation after Typhoon Haiyan in Barangay Salvacion, Iloilo*, 63 *PHILIPPINE SOC. REV.*, 157, 157–78. (2015) (illustrating the importance of community-led action after a natural disaster).
- ¹⁷² Karina Dalgas, *Translocal Disaster Interventions: The Role of Individual Relief Channels in Philippine Disasters*, 26 *J. OF CONTINGENCIES AND CRISIS MGMT.* 377, 377–84. (2018) (discussing the many channels of relief integral to assisting the Philippines after natural disasters).
- ¹⁷³ Lorraine C. Salazar, *Typhoon Yolanda: The Politics of Disaster Response and Management*, *SOUTHEAST ASIAN AFFAIRS* 277, 290 (2015).
- ¹⁷⁴ J. Sedfrey S. Santiago, et al., *Of Timelines and Timeliness: Lessons from Typhoon Haiyan in Early Disaster Response*, 40 *DISASTERS* 643, 649 (2016).
- ¹⁷⁵ See Alan Robles, *Explained: the Philippines’ communist rebellion is Asia’s longest-running insurgency*, S. CHINA MORNING POST, (Sept. 16, 2019), <https://www.scmp.com/print/week-asia/politics/article/3027414/explained-philippines-communist-rebellion-asias-longest-running> (detailing the extensive insurgency that has plagued the Philippines for decades).
- ¹⁷⁶ See Jonatan A. Lassa et al., *Revisiting Emergency Food Reserve Policy and Practice under Disaster and Extreme Climate Events*, 10 *INT’L. J. OF DISASTER RISK SCI.* 1, 1–13 (2018) (recommending that food and other supplies

be stockpiled in advance so that it may be quickly received and distributed to those most affected).

¹⁷⁷ See generally Huong Thu Nguyen, *Gendered Vulnerabilities in Times of Natural Disasters: Male-to-Female Violence in the Philippines in the Aftermath of Super Typhoon Haiyan*, 25 VIOLENCE AGAINST WOMEN 421, 421–24 (2019).

¹⁷⁸ See Carolyn Kousky, *Impacts of Natural Disasters on Children*, 2826 THE FUTURE OF CHILDREN 73, 73–74 (2016) (noting that roughly half of the people adversely affected by natural disasters are children due to their physical and psychological vulnerability).

¹⁷⁹ See Yoko Sakai, Jonna P. Estudillo, Nobuhiko Fuwa, Yuki Higuchi & Yasuyuki Sawada, *Do Natural Disasters Affect the Poor Disproportionately? Price Change and Welfare Impact in the Aftermath of Typhoon Milenyo in the Rural Philippines*, 94 WORLD DEV. 16, 16–17 (2017) (observing that impoverished people are particularly vulnerable to food inflation after natural disasters).

¹⁸⁰ See Yaira Hamama-Raz, Yuval Palgi, Elazar Leshem, Menachem Ben-Ezra & Osnat Lavenda, *Typhoon Survivors' Subjective Wellbeing—A Different View of Responses to Natural Disaster*, 12 PLOS ONE, Sept. 6, 2017, at 1 (concluding that access to resources promotes the subjective well-being of individuals in the wake of natural disasters).

¹⁸¹ See Natalia Y. Puspita, *Natural Disaster in Armed Conflict Area: The Implementation of the Doctrine of Responsibility to Protect in the ASEAN*, 10 J. OF EAST ASIA & INT'L L. 463, 463–65 (2017) (discussing how the doctrine of “responsibility to protect” has been adopted to justify foreign humanitarian assistance when the area affected by natural disaster is not under the control of the area’s nominal government).

¹⁸² The ASEAN web site can be found at: <https://asean.org/>. See also Alex J. Bellamy, *To Build Regional Community, Southeast Asian Leaders Advocate for “Responsibility to Protect”*, GLOB. OBSERVATORY (Sept. 5, 2014), <https://theglobalobservatory.org/2014/09/southeast-asia-responsibility-to-protect-r2p/> (detailing how ASEAN member states committed themselves to the R2P principle, in part in order to deepen their regional ties); see also 2014 Report of the High-Level Panel on the Responsibility to Protect in Southeast-Asia, *Mainstreaming the Responsibility to Protect in Southeast Asia: Pathway Towards a Caring ASEAN Community*, UNITED NATIONS ON GENOCIDE PREVENTION AND THE RESPONSIBILITY TO PROTECT, (2014) https://www.un.org/en/genocideprevention/documents/responsibility-to-protect/HLAP%20Report_FINAL.pdf.

¹⁸³ Puspita, *supra* note 182, at 487.

¹⁸⁴ Joshua Eastin, *Hell and High Water: Precipitation Shocks and Conflict Violence in the Philippines*, 63 POL. GEOGRAPHY 116, 117 (2018).

¹⁸⁵ *Id.* at 127 (discussing how natural disasters can promote greater cooperation between the AFP and the civilian population of the affected area, which in turn facilitates future coordination between the two groups).

¹⁸⁶ See *The ASEAN Agreement on Disaster Management and Emergency Response*, ASS’N. OF SE ASIAN NATIONS (Aug. 14, 2012), https://asean.org/?static_post=the-asean-agreement-on-disaster-management-and-emergency-response

(announcing the adoption of the agreement and asserting that it “is expected to provide a framework for the development of operational procedures to respond collectively and expeditiously to disasters”); see also Gabrielle Simm, *Disaster Response in Southeast Asia: The ASEAN Agreement on Disaster Response and Emergency Management*, 8 ASIAN J. OF INT’L L. 116, 116–18 (2018) (assessing the success of the ASEAN Agreement on Disaster Management and Emergency Response as an instrument for regional co-operation in disaster response).

¹⁸⁷ *AADMER Work Programme*, ASS’N OF SE ASIAN NATIONS, <https://asean.org/asean-socio-cultural/asean-agreement-on-disaster-management-and-emergency-response-cop-to-aadmer/aadmer-work-programme/> (last visited on Oct. 27, 2019).

¹⁸⁸ See *ASEAN Agreement on Disaster Management and Emergency Response arts. 11, 12*, July 26, 2005, <https://ahacentre.org/wp-content/uploads/2017/05/AADMER.pdf> (establishing when and how ASEAN member states may provide one another with humanitarian assistance, and regulating the use of military personnel specifically in providing such assistance); see also Simm, *supra* note 187, at 128 (noting that, as the AADMER only regulates the provision of humanitarian assistance between ASEAN member states, the rules regarding the use of a non-ASEAN state’s military in providing humanitarian assistance must be established bilaterally between the affected ASEAN state and the assisting non-ASEAN state).

¹⁸⁹ See Simm, *supra* note 187, at 128 (noting that, as the AADMER only regulates the provision of humanitarian assistance between ASEAN member states, the rules regarding the use of a non-ASEAN state’s military in providing humanitarian assistance must be established bilaterally between the affected ASEAN state and the assisting non-ASEAN state).

¹⁹⁰ *Id.* (alluding to the possible use of “other mechanisms” for regulating military assistance in responding to natural disasters, but without specifying any alternatives).

¹⁹¹ Don E. Lucero-Prisno III, *Disasters, Resilience, and the ASEAN Integration*, 7 GLOB. HEALTH ACTION 1, 2 (2014) (asserting that, in light of the challenge posed by climate change, there “are no arguments” against having strong, cooperative ASEAN responses to natural disasters).

¹⁹² See Palitha Kohona, *Climate Change – Are We Really Confronting this Challenge?*, 46 ENVTL. POL’Y. & L. 109, 109–11 (2016) (listing the Philippines post-Typhoon Haiyan as but one example of a nation caught off-guard by climate change); see also Andrea L. Santiago & Fernando Y. Roxas, *Catastrophic Disasters as Opportunities for Sustainable Reconstruction: The Case of Typhoon Yolanda*, 25 DLSU BUS. & ECON. REV. 143, 143–44, 149–51 (2015) (discussing on-going attempts by the government of the Philippines to make Filipino communities more resilient in the face of increasingly strong and frequent natural disasters).

¹⁹³ Pauline Eadie, *Typhoon Yolanda and Post-Disaster Resilience: Problems and Challenges*, 60 ASIA PACIFIC VIEWPOINT 101, 103 (2019) (discussing the need for such leadership in addressing natural disasters, both pre-emptively and in reconstructing affected areas).

ENDNOTES: LAKE ERIE BILL OF RIGHTS GETS THE AX: IS LEGAL PERSONHOOD FOR NATURE DEAD IN THE WATER?

continued from page 16

nor fairly traceable to state actions nor redressable by the court). *But see* Juliana v. United States, 217 F. Supp.3d 1224, 1250 (D. Or. 2016) (holding that the right to “a climate system capable of sustaining life” is protected by substantive due process).

¹⁹ Pennsylvania, Montana, and Rhode Island have recognized a constitutionally protected environmental right. See Pa. Const. art I, § 27 (1971); Mt. Const. art. II, § 3 (1989); R.I. Const. art. I, § 17 (1970). Hawaii, Illinois, and Massachusetts protect the environmental rights of their citizens in separate charters. See Hi. Const. art. XI, §§ 1, 9 (1978); Ill. Const. art. XI, §§ 1, 2 (1971–72); Ma. Const. amend. 49 (1972). Several other states are in varying stages of the process. See *States Pursuing a Green Amendment, For the Generations*, <https://forthe generations.org/resources/states-pursuing-green-amendments/> (last visited Sept. 26, 2019).

²⁰ Pa. Const. art I, § 27; see also Robinson Twp., Washington Cnty. v. Pennsylvania, 83 A.3d 901, 963 (Pa. 2013) (plurality opinion) (explaining that the ERA was a response to natural resources being subject to “virtually unrestrained exploitation” with destructive consequences on the environment and citizens’ quality of life).

²¹ Pa. Const. art I, § 27.

²² See Robinson Twp., 83 A.3d at 984.

²³ The government’s trustee obligations include enacting environmental legislation for the purpose of conserving and maintaining the state’s natural resources for the benefit of all people. *Id.* at 958.

²⁴ Pa. Env’tl. Protection Found. v. Pennsylvania, 161 A.3d 911, 932 (Pa. 2017);

²⁵ The ERA states: “[t]he people have a right to clean air, pure water, and to the preservation of the natural, scenic, historic and esthetic values of the environment. Pennsylvania’s public natural resources are the common property of all the people, including generations yet to come. As trustee of these resources, the Commonwealth shall conserve and maintain them for the benefit of all the people.” Pa. Const. art I, § 27; *but see* Delaware Riverkeeper Network v. Sunoco Pipeline, 179 A.3d 670, 696 (Pa. Commw. Ct. 2018) (holding that plaintiffs failed to demonstrate that a municipal ordinance zoning out a public utility pipeline furthered the municipality’s trustee duties to conserve and protect public natural resources).

²⁶ See Found., 161 3d. 911, at 32.

²⁷ Under the ERA, a township [or municipality] does not have the power “to replicate the environmental oversight power given to the environmental board.” A municipality can use its zoning powers only to regulate where mineral extraction takes place. . . . but not how the gas drilling will be done. See *Frederick v. Allegheny Twp. Zoning Hearing Bd.*, 196 A.3d 677, 697 (Pa. Commw. Ct. 2018).

²⁸ See, e.g., Laura Parker, *U.N.: Environmental Threats are Jeopardizing Human Health*, NAT. GEOGRAPHIC (Mar. 23, 2019), <https://www.nationalgeographic.com/environment/2019/03/un-healthy-planet-report-environment/>.

ENDNOTES: AN ACE UP THEIR SLEEVE OR A HOUSE OF CARDS: CAN THE EPA’S AFFORDABLE CLEAN ENERGY RULE WITHSTAND CHEVRON DEFERENCE?

continued from page 18

into positive law). Since Title 42 has not been enacted into positive law the text of Section 111(d) as printed in the U.S. Code, containing only language as amended by Section 108(g) of the 1990 Amendments is not dispositive and other relevant provisions contained in the Statutes at Large must also be considered.

¹⁶ Order to Dismiss, *West Virginia v. EPA*, No. 15-01363 (D.C. Cir. Sept. 17, 2019) (The D.C. Circuit granting motions seeking to dismiss as moot the proceedings challenging the CPP eleven days after the effective date of the ACE Rule on September 17, 2019).

¹⁷ 42 U.S.C. § 7411(d)(1).

¹⁸ *Id.*

¹⁹ See CPP, *supra* note 1, at 64,663 (encouraging states to require utilities to swap electricity generation from existing coal-fired plants to lower emission alternatives including renewable energy and natural gas).

²⁰ See ACE Rule, *supra* note 1, at 32,526-27 (“contending that emissions reduction measures occurring off the physical premises of a given power plant are not “applicable” by the power plant and thus fall beyond EPA’s regulatory authority to mandate under CAA Section 111d”).

²¹ *Chevron, U.S.A., Inc. v. NRDC, Inc.*, 467 U.S. 837, 843-44 (1984) (holding that if a statute is clear on its face, then the court must effectuate congressional intent, if however the statute is ambiguous, the court will defer to an agency’s reasonable interpretation of the statute).

²² Administrative Procedure Act, 5 U.S.C. § 706(2)(A) (requiring courts to overturn agency actions determined to be “arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law”).

²³ ACE Rule, *supra* note 1, at 32,526-27. EPA has excluded other emissions reducing technologies such as natural gas and biomass co-firing as well as carbon capture and sequestration. EPA has not provided a consistent argument as to the rationale for their exclusion but has suggested that biomass co-firing was excluded due to the fact that it could lead to increases in

²⁹ Following the repeal of an Obama-era clean water regulation expanding the bodies of waters protected under the 1972 Clean Water Act, industrial polluters no longer need a federal permit to discharge chemicals into certain smaller waterways. See Lisa Friedman & Coral Davenport, *Trump Administration Rolls Back Clean Water Protections*, N.Y. TIMES (Sept. 12, 2019), <https://www.nytimes.com/2019/09/12/climate/trump-administration-rolls-back-clean-water-protections.html>; see also Nadja Popovich et al., *85 Environmental Rules Being Rolled Back Under Trump*, N.Y. TIMES (Sept. 12, 2019), <https://www.nytimes.com/interactive/2019/climate/trump-environment-rollbacks.html>.

emissions at the source. *Id.* This argument appears arbitrary as EPA’s own regulatory impact analysis concluded that heat rate improvements would have a very similar effect. *Infra* note 23. Alternatively, even modest natural gas co-firing has the potential to double emissions reductions under the current ACE framework. See Resources for the Future, Comment Letter on Proposed Affordable Clean Energy Rule (Oct. 31, 2018), https://media.rff.org/documents/RFF_Comments_10-31-18_EPA_6.pdf

²⁴ EPA, Regulatory Impact Analysis for the Proposed Emission Guidelines for Greenhouse Gas Emissions from Existing Electric Utility Generating Units; Revisions to Emission Guideline Implementing Regulations; Revisions to New Source Review Program, EPA-452/R-18-006 (Aug. 2018) [hereinafter ACE Proposal RIA]. (comparing three illustrative policy scenarios against a base case including the CPP and a No CPP case as a fourth illustrative scenario); EPA, Regulatory Impact Analysis for the Clean Power Plan Final Rule, EPA-452/R-15-003 (Aug. 2015) [hereinafter CPP RIA].

²⁵ This result is primarily due to the “emissions rebound effect” in which facilities are made more efficient by heat rate improvements and consequently operate more frequently and remain in operation for a longer period. Amelia T Keyes, *The Affordable Clean Energy Rule and the Impact of Emissions Rebound on Carbon Dioxide and Criteria Air Pollutant Emissions*, 14 ENVIRON. RES. LETT. 1, 1-9 (2019). This results in a rebound effect that diminishes potential emissions reductions and can even increase emissions rates at high emission facilities. *Id.* at 2. As a result, ACE will increase CO₂ emissions by up to 8.7% in 18 states plus the District of Columbia in 2030 compared to no policy. *Id.* at 9.

²⁶ ACE Rule, *supra* note 1, at 32,521.

²⁷ ACE Proposal RIA, *supra* note 23, at 3-14.

²⁸ CPP RIA, *supra* note 23, at ES-16, 17; ACE Proposal RIA, *supra* note 23 at 3-14.

ENDNOTES: THE RIGHT TO LEGALLY SOURCED LUMBER? HOW THE EFFECTIVE ENFORCEMENT OF THE LACEY ACT IS A U.S. HUMAN RIGHTS OBLIGATION AND CRITICAL TO PREVENTING ABUSE IN THE ILLEGAL LOGGING INDUSTRY

continued from page 30

¹⁷ *Id.*

¹⁸ WITS, PERU EXPORTS BY COUNTRY AND REGION 2017, <https://wits.worldbank.org/CountryProfile/en/Country/PER/Year/LTST/TradeFlow/Export/Partner/all/> (last visited Dec. 16, 2019).

¹⁹ See Dan Collyns, *Illegal Loggers Blamed For Murder of Peru Forest Campaigner*, THE GUARDIAN (Sep. 8, 2014), (explaining that local communities and activists that speak out against corruption are targeted and killed by illegal loggers) [hereinafter Collyns, *Illegal Loggers Blamed*].

²⁰ Guiding Principles on Business and Human Rights: Implementing the United Nations “Protect, Respect and Remedy” Framework, U.N. Doc. A/HRC/17/31 2 (Mar. 11, 2011) (by John Ruggie) [hereinafter UN Guiding Principles].

²¹ *Infra* Parts II, III.

²² *Infra* Part IV.

²³ See URRUNAGA ET AL., *supra* note 2, at 6 (highlighting the lack of a legal mechanism that exists to enforce the legal purchase of timber).

²⁴ See *Id.* at 8 (explaining what permanent production forests are and how these forests are historically predominant among the sources of forests that can be legally harvested for lumber).

²⁵ URRUNAGA ET AL., *supra* note 2, at 8.

²⁶ *Id.* 6

²⁷ *Id.*

²⁸ *Id.* 9

²⁹ See *Id.* (explaining that these forest consultants have, in theory, participated in the inventory process and POA preparation).

³⁰ *Id.* at 11.

³¹ Article 26 describes the expectations for knowledge of origin of forest products as follows: Toda persona está obligada, ante el requerimiento de la autoridad forestal, a acreditar el origen legal de cualquier producto o espécimen de especie de flora y fauna silvestre. Toda persona que posea, transporte y comercialice un producto o espécimen de especies de flora o fauna silvestre cuyo origen ilícito no pueda ser probado ante el requerimiento de la autoridad es pasible de comiso o incautación de dicho producto o espécimen, así como de la aplicación de las sanciones previstas en la presente Ley y su reglamento, independientemente del conocimiento o no de su origen ilícito. El reglamento de la presente Ley establece los documentos que acrediten el origen legal señalado en el párrafo anterior. Están exceptuados de esta acreditación los productos provenientes de plantaciones forestales de especies exóticas. Los propietarios de plantas de transformación de productos

forestales y de fauna silvestre que adquieran o procesen estos productos deben verificar a través de documentos que su extracción y aprovechamiento haya sido autorizada por la autoridad competente y realizada legalmente. [translated excerpt] Each person is obligated, according to the requirement of the forest authority, to accredit the legal origin of whatever species of product or specimen of plant and animal life. Each person that possesses, transports and commercializes a product or specimen of plant and animal life whose illicit origin cannot be proved according to this requirement is liable to confiscation or seizure . . . The proprietors of plants or processed forest products and wildlife that acquire or process these products must verify through documentation that their extraction and exploitation has been authorized by the competent authority through appropriate legal means. Ley Forestal y de Fauna Silvestre No. 29763 (2015) § 126 (Peru).

³² These are only theoretically legitimate for the reasons described below. See *infra* Part II(b). URRUNAGA ET AL., *supra* note 2, at 3–6.

³³ URRUNAGA ET AL., *supra* note 2, at 10.

³⁴ See *id.* at 10, (citing NUMBER OF SUPERVISED TREES, OSINFOR, <https://observatorio.osinfor.gob.pe/Estadisticas/Home/Reportes/5> (deselect the years preceding 2016; then select “generate report”).

³⁵ URRUNAGA ET AL., *supra* note 2, at 10.

³⁶ *Id.*

³⁷ *Id.*

³⁸ See *Id.* at 11 (“Between 2009 and 2016, almost 80% of [Osinfor’s] inspections revealed irregularities sufficient to initiate legal proceedings against logging contract holders.”).

³⁹ See URRUNAGA ET AL., *supra* note 2, at 8–13 (discussing the multiple layers of authenticating the georeferenced maps and lists of trees to be cut down to ensure their authenticity, which are often overlooked by the authorities charged with making determinations that trees are not being logged illegally).

⁴⁰ See *Id.* (laying out the complicated enforcement mechanisms that are often overlooked due to their complexity). *Id.*

⁴¹ *Id.* at 10 (examining the common practice of inventing trees where they don’t exist or using the same tree multiple times on inventory lists to hide the fact that a tree was logged in an area where it is illegal to do so).

⁴² *Id.* (noting that the complicated manner of verifying the authenticity of those trees that were cut down creates a system where those responsible for verification accept the inventories as is because it is too cumbersome to go back and verify themselves)..

⁴³ Collyns, *Illegal Loggers Blamed*, *supra* note 18.

⁴⁴ *Id.*

⁴⁵ *Peruvian Antilogging Activist Edwin Chota Killed*, AMAZONWATCH (Sep. 8, 2014), <http://amazonwatch.org/news/2014/0908-peruvian-antilogging-activist-edwin-chota-killed>.

⁴⁶ *Id.*

⁴⁷ Collyns, *Illegal Loggers Blamed*, *supra* note 18.

⁴⁸ See, e.g., Lyndsie Bourgon, *Indigenous People Battle Squatters and Timber Poachers in Peru’s Amazon*, NAT’L GEO. (Apr. 12, 2019), <https://www.nationalgeographic.com/environment/2019/04/indigenous-people-battle-squatters-timber-poachers-peruvian-amazon/>; Collyns, *Illegal Loggers Blamed*, *supra* note 18; Dan Collyns, *Six Farmers Shot Dead Over Land Rights Battle In Peru*, THE GUARDIAN (Sep. 6, 2014), <https://www.theguardian.com/environment/2017/sep/06/six-farmers-shot-dead-over-land-rights-battle-in-peru> [hereinafter Collyns, *Six Farmers*].

⁴⁹ Bourgon, *supra* note 48.

⁵⁰ URRUNAGA ET AL., *supra* note 2, at 13; Nadia Drake, *Isolated Tribes and Forests Threatened by New Amazon Road*, NAT’L GEO. (Mar. 23, 2018), <https://www.nationalgeographic.com/news/2018/03/peruvian-amazon-road-forests-uncontacted-tribes-indigenous-rights/>; G. Miranda, *Uncontacted Indians ‘Abandoned To Their Fate’ As Loggers And Drug Smugglers invade*, SURVIVAL INTERNATIONAL (Mar. 31, 2014), <https://survivalinternational.org/news/10118>.

⁵¹ G. Miranda, *supra* note 50.

⁵² *Id.*

⁵³ Collyns, *Six Farmers*, *supra* note 48.

⁵⁴ *Id.*

⁵⁵ *Summary of the United States-Peru Trade Promotion Agreement*, OFFICE OF THE US TRADE REPRESENTATIVE at 8 (June 2007), https://ustr.gov/sites/default/files/uploads/factsheets/2007/asset_upload_file672_13066.pdf.

⁵⁶ INTERNATIONAL LABOUR ORGANIZATION, *ILO Declaration on Fundamental Principles and Rights at Work*, §2(b) (Jun. 18, 1988), <http://www.ilo.org/declaration/thedeclaration/textdeclaration/lang--en/index.htm> [hereinafter ILO Declaration].

⁵⁷ GARLAND & Silva-SANTISTEBAN, *supra* note 12, at ix.

⁵⁸ *Id.* at ix–x.

⁵⁹ *Id.*

⁶⁰ *Id.* at xi.

⁶¹ *Id.* at ix.

⁶² *Id.* at 5.

⁶³ *Id.*

⁶⁴ *Id.* at x.

⁶⁵ FABIAN NOVAK & SANDRA NAMIHAS, LA TRATA DE PERSONAS CON FINES DE EXPLOTACIÓN LABORAL: EL CASO DE LA MINERÍA AURÍFERA Y LA TALA ILLEGAL DE MADERA EN MADRE DE DIOS 68, 69 (International Labour Organization, 2009), http://www.ilo.org/global/topics/forced-labour/WCMS_143197/lang--es/index.htm (“No suelen contar con atención médica cercana a los lugares de explotación ni servicios de vacunación, no pudiendo por tanto curarse de enfermedades o accidentes de trabajo de manera oportuna; suelen consumir agua del río lo que les provoca numerosas enfermedades infecciosas; su alimentación es tan deficiente que la mayoría de las víctimas suelen tener altos índices de desnutrición. Tampoco cuentan con centros educativos. Las horas dedicadas al trabajo exceden largamente los límites permitidos por ley, contando con muy pocas horas de descanso.” [(trans) They cannot usually count on medical attention near the places of exploitation or living places – lacking vaccination, not able to be treated for diseases or work accidents in a timely fashion; they drink river water that causes them numerous infectious diseases; their food is so deficient that the majority of the victims usually have high rates of malnutrition. Nor can they count on education services. The hours dedicated to working far exceed the limits permitted by law, and are allowed very few hours of rest.]

⁶⁶ *Id.* at 27.

⁶⁷ NOVAK & NAMIHAS, *supra* note 65, at 69.

⁶⁸ *Id.* at 70.

⁶⁹ *Id.* at 69. This testimony has been translated by the author. The original comment reads: “[E]n un descuido abrí mi mano en 2 y se quedó colgado 3 dedos. Me empezó a chorrear harta sangre y no aguantaba el dolor. Yo grité de dolor pidiendo auxilio. . . Me enviaron de emergencia a Puerto Maldonado, ahí me cortaron la mano porque sino se iba a cangrenar.”

⁷⁰ *Id.* at 72.

⁷¹ *Id.* at 71. This testimony has been translated by the author. The original comment reads: “Así, sin darnos cuenta terminábamos trabajando años y años para los madereros. . . No teníamos alternativa porque el patrón nos amenazaba y nos decía que le debemos pagar la deuda adquirida. Pero algunos jóvenes de mi edad, se escapaban y otros no regresaban a trabajar en la segunda y tercera zafra; terminaban desertando. Los dos hombres con los que vino el patrón tenían armas y se turnaban en las noches para asegurarse de que nadie huya del campamento.”

⁷² Frank Bajak, *AP Investigation Shows Peru Backsliding On Illegal Logging*, ASSOCIATED PRESS (Apr. 19, 2017), <https://www.apnews.com/8fd73bdc605446c9c64bc2aedf7aa31>; URRUNAGA ET AL., *supra* note 2, at 13.

⁷³ See e.g., Woods Hole Research Center, *New Measurements Show Widespread Forest Loss Has Reversed The Role Of Tropics As A Carbon Sink*, PHYS.ORG (Sep. 28, 2017), <https://phys.org/news/2017-09-widespread-forest-loss-reversed-role.html>.

⁷⁴ URRUNAGA ET AL., *supra* note 2, at 13.

⁷⁵ See UN OFFICE OF THE COMM’R OF HUMAN RIGHTS, SPECIAL REPRESENTATIVE OF THE SECRETARY-GENERAL ON HUMAN RIGHTS AND TRANSNATIONAL CORPORATIONS AND OTHER BUSINESS ENTERPRISES, <https://www.ohchr.org/EN/Issues/Business/Pages/SRSGTransCorpIndex.aspx> (last visited Oct. 6, 2019) (resolving to prevent human rights abuses by identifying and clarifying standards for corporate responsibility and accountability); see also UN Guiding Principles, *supra* note 20.

⁷⁶ UN Guiding Principles, *supra* note 20. The states’ duties include enforcing existing laws aimed at protecting human rights, routinely assessing their effectiveness, and ensuring new laws and policies enable respect for human rights. States should also provide guidance to business enterprises on how to respect human rights throughout their operations.

⁷⁷ UN Guiding Principles, *supra* note 20, at 3.

⁷⁸ *Id.*

⁷⁹ *Id.* at 4.

⁸⁰ *Id.* at 4. One approach to enforcement was the creation of criminal regimes that allow perpetrators to be prosecuted based on their nationality no matter where the crime takes place.

⁸¹ See Peru Trade Promotion Agreement, *supra* note 4, Art. 18.5(a)(iii).

⁸² *Summary of the United States Peru Trade Promotion Agreement*, OFFICE OF THE UNITED STATES TRADE REPRESENTATIVE (Jun. 2007), https://ustr.gov/sites/default/files/uploads/factsheets/2007/asset_upload_file672_13066.pdf.

⁸³ ILO Declaration, *supra* note 56, § 2.

⁸⁴ See Frederic L. Kirgis, *Treaties as Binding International Obligation*, 2 AM. SOC. INT'L LAW (1997), available at <https://www.asil.org/insights/volume/2/issue/4/treaties-binding-international-obligation>.

⁸⁵ See URRUNAGA ET AL., *supra* note 2, at 12 (stating that workers are subject to harsh and unsafe conditions, low wages, and no labor contracts).

⁸⁶ Peru Trade Promotion Agreement, *supra* note 4, at 18–18 (Annex 18.3.4 (3)(h)).

⁸⁷ *Id.* The States have committed to implementing bilateral initiatives to combat the illegal logging and wildlife trades.

⁸⁸ *Id.*

⁸⁹ *Id.*

⁹⁰ Lise Olsen, *Illegally harvested Amazon wood destroyed in unusual U.S. settlement*, HOUSTON CHRON. (Feb. 3, 2017), <https://www.houstonchronicle.com/news/houston-texas/houston/article/Stolen-Amazon-wood-destroyed-in-unusual-U-S-10870538.php>. Several additional cases elaborate on additional cases where the United States excluded suspect shipments from entry into the United States. See *infra* Part VI.

⁹¹ Responsible Business Conduct: First National Action Plan for the United States of America, SECRETARY OF STATE (Dec. 16, 2016), <https://www.state.gov/u-s-national-contact-point-for-the-oecd-guidelines-for-multinational-enterprises/u-s-national-action-plan-on-responsible-business-conduct/> [hereinafter National Action Plan].

⁹² UN OFFICE OF THE HIGH COMM'R, STATE NATIONAL ACTION PLANS ON BUSINESS AND HUMAN RIGHTS, <https://www.ohchr.org/EN/Issues/Business/Pages/NationalActionPlans.aspx> (last visited Oct. 5, 2019).

⁹³ National Action Plan, *supra* note 91, at 21.

⁹⁴ *Id.*

⁹⁵ TPA art. 18.4(2).

⁹⁶ National Action Plan, *supra* note 91, at 21.

⁹⁷ *Id.* at 17.

⁹⁸ *Id.*

⁹⁹ *Id.*

¹⁰⁰ *Id.*

¹⁰¹ Michael Froman, *Combating Illegal Timber Trade in Peru: Views from Ucayali*, TRADEWINDS: THE OFFICIAL BLOG OF THE UNITED STATES TRADE REPRESENTATIVE (May, 2016), <https://ustr.gov/about-us/policy-offices/press-office/blog/2016/may/combating-illegal-timber-trade-views-from-ucayali-peru>.

¹⁰² *Our Work: Forestry*, USAID, <https://www.usaid.gov/peru/our-work/forestry> (last updated Jul. 31, 2017).

¹⁰³ Michael Froman, *supra* note 101; *Presentan herramienta que permitirá seguir la madera desde el bosque hasta su comercialización*, SERFOR (Mar. 21, 2017), <https://www.serfor.gob.pe/noticias/presentan-herramienta-que-permitira-seguir-la-madera-desde-el-bosque-hasta-su-comercializacion>.

¹⁰⁴ UN Guiding Principles, *supra* note 20, at 23.

¹⁰⁵ *Id.* at 27.

¹⁰⁶ *U.S. Lacey Act*, FOREST LEGALITY, <http://www.forestlegality.org/policy/us-lacey-act> (last visited Apr. 25, 2018).

¹⁰⁷ *Id.*

¹⁰⁸ *Id.*

¹⁰⁹ See *supra* Part II(b).

¹¹⁰ 16 U.S.C. § 3372 (2008).

¹¹¹ C. Jarrett Dieterle, Note, *The Lacey Act: A Study in the Mechanics of Overcriminalization*, 1279 GEO. L. J. 1283–84 (2014).

¹¹² *Id.* at 1283.

¹¹³ *Id.*

¹¹⁴ Ley Forestal y de Fauna Silvestre No. 29763, *supra* note 31.

¹¹⁵ URRUNAGA ET AL., THE LAUNDERING MACHINE 13 (ENVIRONMENTAL INVESTIGATION AGENCY, Apr. 10, 2012), <https://eia-international.org/wp-content/uploads/The-Laundering-Machine.pdf> [hereinafter *The Laundering Machine*].

¹¹⁶ See *supra* Part III(a).

¹¹⁷ Dan Collyns, *Illegal loggers remain hidden in Peru's forest but timber finds global buyers*, THE GUARDIAN (Oct. 14, 2014), <https://www.theguardian.com/environment/2014/oct/14/illegal-logging-peru-amazon-deforestation>.

¹¹⁸ *Id.* at 3.

¹¹⁹ EDGAR MARAVI ET AL., ETFRN NEWS: SEPTEMBER 2008, 3.4 TIMBER EXTRACTION AND TRADE IN PERU 59 (2008).

¹²⁰ *The Laundering Machine*, *supra* note 115, at 17.

¹²¹ *Id.*

¹²² *Id.* at 13.

¹²³ “Lo más destacado de la reproducción del trabajo forzoso en La Amazonia peruana es que se da sobre todo en situaciones de aislamiento extremo, en áreas remotas . . . donde no existen instituciones estatales supervisoras y las poblaciones indígenas desconocen sus más mínimos derechos.” [translation: *The most notable of the perpetuation of forced labor in the Peruvian Amazon is that it primarily happens in situations of extreme isolation, in remote areas . . . where there is no presence of supervisory State institutions and the indigenous populations are unaware of the most minimum of their rights.*] GARLAND & SILVA-SANTISTEBAN, *supra* note 12, at 14.

¹²⁴ See NOVAK & NAMIHAS, *supra* note 65, at 68–69. State supervision is further undermined by the fact that even where supervisory authorities are aware of abuses, they are often complicit or ignore the activities because they profit off of them through bribes or other pecuniary benefits. See GARLAND & SILVA-SANTISTEBAN, *supra* note 12, at 15–16 (describing how the absence of supervisory authorities mean that there is rarely official state awareness of the infractions, lack resources to handle them when they do become aware, or are in fact complicit in the same illicit activities).

¹²⁵ *The Laundering Machine*, *supra* note 115, at 4.

¹²⁶ *Id.* at 4 (citing World Bank, Justice for Forests: Improving Criminal Justice Efforts to Combat Illegal Logging, March 2012, 4, available at <http://web.worldbank.org/WBSITE/EXTERNAL/TOPICS/EXTFINANCIALS/EXTOR/0,,contentMDK:23146160~pagePK:148956~piPK:216618~theSitePK:282885,00.html>).

¹²⁷ *Gibson Guitar Corp. Agrees to Resolve Investigation into Lacey Act Violations*, DEP. OF JUSTICE (Aug. 6, 2012), <https://www.justice.gov/opa/pr/gibson-guitar-corp-agrees-resolve-investigation-lacey-act-violations>.

¹²⁸ *Id.*

¹²⁹ *Id.*

¹³⁰ *Id.*

¹³¹ Caitlin Clarke, *Gibson Guitar Logging Bust Demonstrates Lacey Act's Effectiveness*, FOREST LEGALITY (Oct. 8, 2012), <http://www.forestlegality.org/blog/gibson-guitar-logging-bust-demonstrates-lacey-act%E2%80%99s-effectiveness>.

¹³² Jennifer Arlen, *Corporate Criminal Enforcement in the United States: Using Negotiated Settlements to Turn Potential Corporate Criminals into Corporate Cops* in CRIMINALITÀ D'IMPRESA E GIUSTIZIA NEGOZIATA: ESPERIENZE A CONFRONTO 91, 9–10 (Stefano Manacorda and F. Centonze, eds., Giuffrè, 2018).

¹³³ Stephanie Gleason, *Gibson Guitar May Default if Company Can't Refinance Its Debt*, THE STREET (Aug. 27, 2017), <https://www.thestreet.com/story/14280618/1/gibson-guitar-may-default-if-company-can-t-refinance-its-debt.html>.

¹³⁴ DEP'T OF JUSTICE, *supra* note 127.

¹³⁵ *Id.*

¹³⁶ In 2008, the Lacey Act was amended to prohibit illegally trafficked timber. Gibson was investigated and then sanctioned in 2011. *Id.*

¹³⁷ Craig Havighurst, *Why Gibson Guitar Was Raided By The Justice Department*, NPR (Aug. 31, 2011), <https://www.npr.org/sections/therecord/2011/08/31/140090116/why-gibson-guitar-was-raided-by-the-justice-department> (“Gibson vigorously denies these allegations, maintaining that all of its purchases from Madagascar have complied with U.S. and Malagasy law”); see also DEP. OF JUSTICE, *supra* note 125 (reporting that an employee was informed that certain parts of the wood they were trading was considered illegal and subsequently reported this fact to management in 2008).

¹³⁸ *Gibson Guitar Corp. Responds to Federal Raid*, GIBSON (Aug. 25, 2011), <http://www.gibson.com/News-Lifestyle/News/en-us/gibson-0825-2011.aspx> <http://es.gibson.com/News-Lifestyle/News/en-us/gibson-0825-2011.aspx>.

¹³⁹ Press release, *Lumber Liquidators Inc. Sentenced for Illegal Importation of Hardwood and Related Environmental Crimes*, DEP'T OF JUSTICE (Feb. 1, 2016), <https://www.justice.gov/opa/pr/lumber-liquidators-inc-sentenced-illegal-importation-hardwood-and-related-environmental>.

¹⁴⁰ LUMBER LIQUIDATORS, <https://www.lumberliquidators.com/ll/home> (last visited Dec. 16, 2019).

¹⁴¹ See *id.* (noting total amount to be paid by Lumber Liquidators and the division of the total into criminal fines, criminal forfeiture, community service payments, and civil forfeiture).

¹⁴² *Id.*

- ¹⁴³ See DEP'T OF JUSTICE, OFFICE OF PUB. AFF., *Lumber Liquidators Inc. Pleads Guilty to Environmental Crimes and Agrees to Pay More Than \$13 Million in Fines, Forfeiture and Community Service Payments*, Press Release No. 15-1298 (2015), <https://www.justice.gov/opa/pr/lumber-liquidators-inc-pleads-guilty-environmental-crimes-and-agrees-pay-more-13-million> (documenting Lumber Liquidators' failure to follow not only its own internal procedures but also to address self-raised red flags) [hereinafter *Lumber Liquidators Inc. Pleads Guilty*].
- ¹⁴⁴ See *id.* (noting that, in 2013 alone, Lumber Liquidators imported Russian timber in excess of the legal harvest allowance by more than 800 percent).
- ¹⁴⁵ Even consider Lumber Liquidator's lesser \$813 million in annual revenue, the fine imposed on Gibson was significantly more.
- ¹⁴⁶ See Press Release, LUMBER LIQUIDATORS, *Lumber Liquidators Announces Settlement Related To Lacey Act Investigation* (Oct. 7, 2015), <http://investors.lumberliquidators.com/2015-10-07-Lumber-Liquidators-Announces-Settlement-Related-To-Lacey-Act-Investigation>.
- ¹⁴⁷ *Lumber Liquidators Inc. Sentenced*, *supra* note 139.
- ¹⁴⁸ See *supra* note 137.
- ¹⁴⁹ See *Gibson Guitar Corp. Agrees to Resolve Investigation into Lacey Act Violations*, DEP'T OF JUSTICE, *supra* note 127 (\$611,844 in criminal penalties, community service payments, and civil forfeiture); *Lumber Liquidators Inc. Sentenced*, *supra* note 139, (\$13.15 MILLION IN CRIMINAL PENALTIES, CRIMINAL FORFEITURE, COMMUNITY SERVICE PAYMENTS, AND CIVIL FORFEITURE).
- ¹⁵⁰ According to TRAC, a data gathering, research, and distribution organization at Syracuse University, the number of federal prosecutions for environmental crimes actually declined during parts of the Obama administration. Given the sparsity of Lacey Act prosecutions generally and the fact that many of the Lacey Act charges are brought for other sections of the act, this finding may not be conclusive as to the Obama administration's true policies and procedures in either direction. See *Environmental Prosecutions Decline under Obama*, TRANSACTIONAL RECS. ACCESS CLEARINGHOUSE (Sep. 17, 2014), <http://trac.syr.edu/tracreports/enviro/363> (examining long-term trends in prosecution of environmentally-related cases and long-term trends in type of charges brought).
- ¹⁵¹ See WORLD BANK, *supra* note 1, at 12 (detailing countries with significant illegal deforestation problems).
- ¹⁵² See *supra* Part II.
- ¹⁵³ See *The Laundering Machine*, *supra* note 115, at 63 (summarizing Peru's extensive illegal deforestation problem); Bob Abehouse & Luis Del Valle, *Peru's Rotten Wood*, AL JAZEERA (Aug. 12, 2015), <https://www.aljazeera.com/programmes/peopleandpower/2015/08/peru-rotten-wood-150812105020949.html> (detailing the practice of use falsified permits to illegally harvest timber).12, 2015).
- ¹⁵⁴ Bajak, *supra* note 72 (detailing cooperation between the U.S. and Peru in seizing illegally harvested timber from the Yacu Kallpa).
- ¹⁵⁵ See Conniff, *supra* note 16 ("Many months later, final reports on the [Yacu Kallpa's] last voyages were complete. For the August shipment - the one impounded in Houston - it would show that at least 92 percent of the 3.9 million-pound haul was illegal.").
- ¹⁵⁶ See Mica Rosenberg, *U.S. agents move against illegal timber imports from Amazon*, REUTERS (Jun. 8, 2016), <https://www.reuters.com/article/us-usa-lumber-amazon/u-s-agents-move-against-illegal-timber-imports-from-amazon-idUSKCN0YU2K1> (reporting on the investigation).
- ¹⁵⁷ See *id.* (noting much of the wood seized was illegally harvested).
- ¹⁵⁸ See Conniff, *supra* note 16 (describing Global Plywood's growing purchases from La Oroza).
- ¹⁵⁹ See *id.* (reporting inspiration and extent of investigations).
- ¹⁶⁰ *Id.*
- ¹⁶¹ *Id.* (detailing partnership between EIA and Peru's Forest Service and coordination with Interpol).
- ¹⁶² *Id.*
- ¹⁶³ *Id.*
- ¹⁶⁴ *Id.*
- ¹⁶⁵ Dieterle, *supra* note 111.
- ¹⁶⁶ *Id.*
- ¹⁶⁷ Rosenberg, *supra* note 156.
- ¹⁶⁸ Abehouse & Del Valle, *supra* note 153.
- ¹⁶⁹ *Id.*
- ¹⁷⁰ *Id.*
- ¹⁷¹ Conniff, *supra* note 16.
- ¹⁷² *Id.*
- ¹⁷³ *Id.*
- ¹⁷⁴ *Id.*
- ¹⁷⁵ This evidence is also detailed in a search warrant executed on Global Plywood's office in California. See Application for Search Warrant at 6, '16MJ1610 (S.D. Cal. Jun. 16, 2016) (No. 3:16-mj-01610-MDD), <http://www.millerco.com/pdfdocuments/GlobalPlywood.pdf>.
- ¹⁷⁶ *EIA Issues Statement Following Executed Search Warrant at Global Plywood*, ENVIRONMENTAL INVESTIGATION AGENCY (June 8, 2016), <https://eia-global.org/press-releases/eia-issues-statement-following-executed-search-warrant-at-global-plywood>.
- ¹⁷⁷ Conniff, *supra* note 16.
- ¹⁷⁸ UN Guiding Principles, *supra* note 20, at 17.
- ¹⁷⁹ *Id.*
- ¹⁸⁰ See URRUNAGA ET AL., *supra* note 2, at 24; *Peru's Rotten Wood*, *supra* note 153.
- ¹⁸¹ *Scaling Up Action on Human Rights: Operationalizing the UN Guiding Principles on Business and Human Rights*, WORLD BUSINESS COUNCIL FOR SUSTAINABLE DEVELOPMENT, at 16 (Nov. 2014) [hereinafter *WBCSD Brief*].
- ¹⁸² UN Guiding Principles, *supra* note 20, at 3.
- ¹⁸³ *Id.*
- ¹⁸⁴ See Mica Rosenberg, *supra* note 156 (reporting on the Peruvian Forest Service's investigation into La Oroza and subsequent revocation of La Oroza's logging concession in 2010).
- ¹⁸⁵ *Global Plywood & Lumber, Inc. Filing History*, NEV. SEC'Y OF STATE (Dec. 13, 2017), <https://esos.nv.gov/EntitySearch/BusinessFilingHistoryOnline>.
- ¹⁸⁶ Press Release, USTR Announces Unprecedented Action to Block Illegal Timber Imports from Peru, OFFICE OF U.S. TRADE REP. (Oct. 19, 2017), <https://ustr.gov/about-us/policy-offices/press-office/press-releases/2017/october/ustr-announces-unprecedented-action>.
- ¹⁸⁷ Dieterle, *supra* note 111.
- ¹⁸⁸ See *infra* Part X.
- ¹⁸⁹ See, e.g., Michael E. Porter & Mark R. Kramer, *Creating Shared Value*, HARV. BUS. REV. 6 (Jan.-Feb. 2011).
- ¹⁹⁰ See WBCSD Brief, *supra* note 181, at 2.
- ¹⁹¹ See e.g. Letter from Larry Fink, Chairman & CEO, BlackRock, to CEOs (Jan. 16, 2018), <https://www.blackrock.com/corporate/investor-relations/larry-fink-ceo-letter>.
- ¹⁹² See, e.g., Aryeh Neier, "Naming and shaming": still the human rights movement's best weapon, OPEN GLOBAL RIGHTS (July 11, 2018), <https://www.openglobalrights.org/Naming-and-shaming-still-the-human-rights-movements-best-weapon/>.
- ¹⁹³ *Lumber Liquidators Inc. Sentenced*, *supra* note 139.
- ¹⁹⁴ See Richard Conniff, *supra* note 16.
- ¹⁹⁵ See *id.*; see also URRUNAGA ET AL., *supra* note 2, at 12.
- ¹⁹⁶ Implementing an electronic tracking technology system was one of the "urgent areas of work" recommended to be prioritized by the U.S. Timber Committee. URRUNAGA ET AL., *supra* note 2, at 26.
- ¹⁹⁷ Dan Collins, *Illegal Loggers Remain Hidden In Peru's Forest But Timber Finds Global Buyers*, THE GUARDIAN (Oct. 14, 2014), <https://www.theguardian.com/environment/2014/oct/14/illegal-logging-peru-amazon-deforestation>.
- ¹⁹⁸ See URRUNAGA ET AL., *supra* note 2, at 47 (describing a multi-pronged argument from Peru's National Wildlife and Forest Service and Peru's logging industry for pushback on traceability reform).
- ¹⁹⁹ *Id.* at 53.
- ²⁰⁰ See *id.*
- ²⁰¹ *Id.*
- ²⁰² Peru Trade Promotion Agreement, *supra* note 4.
- ²⁰³ See, e.g., Conniff, *supra* note 16.
- ²⁰⁴ *Id.*
- ²⁰⁵ Bajak, *supra* note 72.
- ²⁰⁶ See E-mail from Richard Conniff, Author, Wired, to Melanie Hess, (Apr. 21, 2018) (on file with author)..
- ²⁰⁷ "See Email from Dep't of Justice, Envtl. & Nat. Res. Div., to Melanie Hess (Apr. 25, 2018) ("Consistent with longstanding policy, we care unable to confirm or deny the existence of any investigations into this or any other matter.").
- ²⁰⁸ See *supra* Part VI.
- ²⁰⁹ Sophie Chou, *Environmental prosecutions Prosecutions Uprosecutions nder Trump Projected to be the Lowest in Two Decades*, PUB. RADIO INT'L (Feb. 26, 2018), <https://www.pri.org/stories/2018-02-26/environmental-prosecutions-under-trump-projected-be-lowest-two-decades>.

AN ENVIRONMENT OF OPPORTUNITY



The Program on Environmental and Energy Law provides students with a wealth of opportunities to explore issues in animal law, energy law, and environmental law.

With faculty who are actively engaged in the latest environmental policies, and a LEED Gold Certified facility just a few Metro stops from everything D.C. has to offer, American University Washington College of Law is the right place to specialize in environmental law.

[LEARN MORE](#)



STUDENTS GAIN A THOROUGH GROUNDING IN ENVIRONMENTAL AND ENERGY LAW

In addition to core environmental and energy law courses, we offer more than 20 specialty courses, including natural resources law, international and comparative environmental law, and animal law; an annual summer session on environmental law, and an LL.M. specialization in international environmental law.



ENGAGED EXPERT FACULTY

Our faculty engage actively in the broader environmental community, advising environmental NGOs, testifying on Capitol Hill, litigating cases, and writing on timely policy issues.



GET INVOLVED: STUDENT-RUN ORGANIZATIONS AND LAW BRIEF

The Program supports four student-run organizations: the Animal, Energy, and Environmental Law Societies and the *Sustainable Development Law and Policy Brief*.



8½ ACRE CAMPUS
LEED GOLD CERTIFIED
FIRST UNIVERSITY IN THE
U.S. TO GO CARBON NEUTRAL

500+
ENVIRONMENTAL,
ENERGY, + ANIMAL LAW
ALUMNI

100+
EXTERNSHIP AND
INTERNSHIP
PLACEMENTS
IN GOVERNMENT
AGENCIES, NGOS,
TRADE ASSOCIATIONS,
AND PRIVATE FIRMS

Washington College of Law
4300 Nebraska Ave., NW
Washington, DC 20016
wcl.american.edu/environment

[Unsubscribe](#)

*Champion
What Matters*



AMERICAN UNIVERSITY
WASHINGTON, DC

SDLP

AMERICAN UNIVERSITY
WASHINGTON COLLEGE OF LAW
4300 NEBRASKA AVENUE, NW ROOM CT03
WASHINGTON, DC 20016

FORWARDING SERVICE REQUESTED

Nonprofit Org.
U.S. Postage
PAID
Hagerstown MD
Permit No. 93