



ENVIRONMENTAL LAW AND STRATEGIC COMPETITION: HELP OR HINDRANCE?

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Environmental law is often thought of as a hindrance to achieving long-term strategic competition goals. Environmental law imposes regulatory requirements that can constrain military acquisition, construction, and operations, providing a disadvantage compared to competitors not bound by environmental compliance requirements. However, recent national security strategic guidance recognizes that environmental security and national security issues are intertwined. For example, combating climate change is an issue where strategic competitors such as the United States and China could find common ground, easing tensions. This Article explores the ways that environmental law enhances or hinders national security efforts and compares environmental laws of the United States and China as they apply to the national security enterprise. Finally, this Article concludes by proposing solutions where environmental law can be improved to reduce tensions in the construct of long-term strategic competition. These solutions include streamlining environmental compliance efforts to ensure adequate environmental analysis and resource protection while reducing the regulatory burden, reforming environmental laws and regulations to reduce frivolous litigation, and ensuring compliance with environmental standards in international trade agreements.

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I. INTRODUCTION

Environmental law is sometimes thought of as a hindrance to achieving long-term strategic competition goals.¹ The 2017 National Security Strategy (“NSS”) lamented how “[e]xcessive environmental and infrastructure regulations” impeded energy and infrastructure development.² However, environmental law is necessary to mitigate

¹ Mark P. Nevitt, *On Environmental Law, Climate Change, & National Security Law*, 44 HARV. ENV’T L. REV. 321, 345 (2020) [hereinafter *Climate Change*].

² DONALD J. TRUMP, NATIONAL SECURITY STRATEGY OF THE UNITED STATES OF AMERICA 18 (2017) [hereinafter TRUMP].

the effects of climate change from unchecked greenhouse gas emissions, which poses a threat to global stability.³ Resource competition and conflict are expected to become more common as parts of the planet become uninhabitable.⁴ As an example of a strategic player in realm of national security and environmental law, the Air Force Judge Advocate General's Corps is responsible for advising Air Force and Space Force commands on environmental law issues.⁵ With the recent shift of the Air Force's environmental law practice from the civil law to the operational law portfolio, this Article provides a timely examination of how environmental law integrates within concepts of national security and strategic competition.

The 2021 Interim National Security Strategic Guidance recognizes that environmental security and national security issues are intertwined.⁶ Combating climate change is an issue where strategic competitors can find common ground.⁷ In this sense, environmental law can promote national security and reduce tension among nations competing for resources and influence. This Article explores the ways that environmental law enhances or hinders national security efforts, compares environmental laws of the United States and China as they apply to the national security enterprise, and discusses the ways environmental law can be improved to reduce long-term strategic competition tensions.

II. BACKGROUND

Strategic competition in economic, geopolitical, and military realms has been an increasing reality since the end of the Cold War.⁸ The NSS asserts that the United States has fallen behind while other

³ See U.S. GLOBAL CHANGE RSCH. PROGRAM, FOURTH NATIONAL CLIMATE ASSESSMENT 613 (2018).

⁴ *Id.*

⁵ HEADQUARTERS AIR FORCE, MANAGEMENT DIRECTIVE 1-14: GENERAL COUNSEL AND THE JUDGE ADVOCATE GENERAL 32-33 (2016).

⁶ JOSEPH R. BIDEN, INTERIM NATIONAL SECURITY STRATEGIC GUIDANCE 22 (2021) [hereinafter BIDEN].

⁷ *Id.* at 21.

⁸ TRUMP, *supra* note 2, at 27.

nations, such as China, have been gaining ground.⁹ Since strategic competition with China is a significant part of the presidential national security guidance, this Article focuses on the nexus between environmental law and national security within the framework of strategic competition with China.¹⁰

China and the United States are engaged in global strategic competition for economic influence, freedom of navigation, and freedom of access, especially in the South China Sea.¹¹ China operates from a position reliant on economic dominance over other nations, while the United States operates from a position supporting economic freedom and free trade.¹² China's Belt and Road Initiative involves building infrastructure projects in developing countries in Africa, Asia, and South America.¹³ Although the projects encourage economic development, China uses oppressive financing terms to ensure those nations acquiesce to China's geopolitical agenda.¹⁴ These projects also cause large-scale environmental destruction in the developing nations.¹⁵ To support the initiative, China established an overseas military base in the Horn of Africa, enabling power projection within the Suez Canal region, which is a major global trade route.¹⁶

⁹ *Id.* at 27-28.

¹⁰ BIDEN, *supra* note 6, at 20. While Russia is another obvious strategic competitor, this Article focuses on strategic competition with China as an economic near-peer competitor. The United States' competition with Russia is largely focused on cyberspace, information, and diplomacy challenges. *See* TRUMP, *supra* note 2, at 2, 8, 14.

¹¹ TRUMP, *supra* note 2, at 46; BIDEN, *supra* note 6, at 20.

¹² TRUMP, *supra* note 2, at 45-46.

¹³ Andrew Chatzky & James McBride, *China's Massive Belt and Road Initiative*, COUNCIL ON FOREIGN RELS. (Jan. 28, 2020); KATHERINE KOLESKI, THE 13TH FIVE YEAR PLAN 23 (2017).

¹⁴ Chatzky & McBride, *supra* note 13.

¹⁵ David H. Shinn, *The Environmental Impact of China's Investment in Africa*, 49 CORNELL INT'L L.J. 25, 54-65 (2016) (discussing Chinese infrastructure projects and environmental consequences in Sudan, Chad, and Gabon for oil; Democratic Republic of Congo for cobalt mining; and Mozambique for timber).

¹⁶ Tyler Headley, *China's Djibouti Base: A One Year Update*, DIPLOMAT (Dec. 4, 2018), <https://thediplomat.com/2018/12/chinas-djibouti-base-a-one-year-update/>.

China also threatens the sovereignty of nations in its vicinity and opposes freedom of access to the South China Sea through the rapid construction of military outposts on disputed coral reefs.¹⁷ Despite the Permanent Court of Arbitration ruling that China engaged in unlawful occupation of the reefs, China destroyed the reef environments, filling in reefs to convert them into artificial military base islands.¹⁸ These initiatives to expand China's global influence, coupled with the rapid increase in the size of its military, demonstrates China's serious efforts at strategic competition with the United States.¹⁹

To combat China's efforts of strategic competition with the United States, the NSS focuses on maintaining the deterrent effectiveness of the U.S. military's ability to overwhelm any potential adversary.²⁰ Priority efforts towards this goal include modernizing the military, streamlining acquisition, improving readiness, and ensuring capabilities across the full spectrum of potential conflicts, including space and cyberspace.²¹ To that end, the Air Force is undergoing a massive acquisition and basing process for Ground-Based Strategic Deterrence, which will modernize the United States' intercontinental ballistic missile fleet and B-21 Raider, the next-generation stealth bomber.²² Because environmental law is a component of the acquisition process,²³ these programs require extensive

¹⁷ Mike Ives, *The Rising Environmental Toll of China's Offshore Island Grab*, YALE ENV'T 360 (Oct. 10, 2016), https://e360.yale.edu/features/rising_environmental_toll_china_artificial_islands_south_china_sea; *In the Matter of the South China Sea Arbitration*, PCA Case No. 2013-19, (Perm. Ct. of Arbitration, 2016), <https://docs.pca-cpa.org/2016/07/PH-CN-20160712-Award.pdf>. See also Euan Graham, *The Hague Tribunal's South China Sea Ruling: Empty Provocation or Slow-Burning Influence?*, COUNCIL ON FOREIGN RELS. (Aug. 18, 2016).

¹⁸ *Id.*

¹⁹ See JOHN GRADY, PENTAGON REPORT: CHINA NOW HAS WORLD'S LARGEST NAVY AS BEIJING EXPANDS MILITARY INFLUENCE, US NAVAL INST. (Sept. 1, 2020).

²⁰ *Id.*

²¹ TRUMP, *supra* note 2, at 33.

²² Scott Gourley, *Rising to the Occasion: Northrop Grumman and the GBSD Program*, NORTHROP GRUMMAN (last visited Apr. 9, 2021); John A. Tirpak, *Second B-21 Under Construction as Bomber Moves Toward First Flight*, NORTHROP GRUMMAN (Jan. 15, 2021).

²³ See 42 U.S.C.S. § 4332 (2021).

environmental analyses, permitting requirements, and consultation with hundreds of federal and state agencies and Native American tribes given the vast geographic reach of the programs.²⁴

Diplomacy is a tool to build coalitions, reduce tensions, and find common ground amongst competing nations.²⁵ Environmental law, especially reducing greenhouse gas emissions and mitigating effects of climate change, is a potential common ground where the United States can use diplomacy to work with competitor nations.²⁶ Additionally, to respond to China, the NSS discusses the need to work cooperatively with global partners, especially in the Indo-Pacific region, and maintain a forward military presence in the Pacific to deter aggression.²⁷

Despite the large disparities in policy between the Trump and Biden administrations, the discussion of strategic competition in each administration's strategic guidance documents is consistent.²⁸ Both documents prioritize ensuring that strategic competition does not lead to conflict.²⁹ The Trump administration's NSS recognizes that economic competition is a component of current affairs and seeks to ensure a level playing field between nations while upholding the rule of law.³⁰ Compared to the Trump administration's NSS, the Biden administration's Interim NSS Guidance provides a consistent approach to economic competition with China.³¹ Moreover, the

²⁴ See discussion *infra* Section III.1.

²⁵ TRUMP, *supra* note 2, at 33.

²⁶ BIDEN, *supra* note 6, at 21.

²⁷ TRUMP, *supra* note 2, at 33. See also BIDEN, *supra* note 6, at 20–21.

²⁸ Compare TRUMP, *supra* note 2, with BIDEN, *supra* note 6, at 11–12.

²⁹ TRUMP, *supra* note 2, at 3; BIDEN, *supra* note 6, at 11–12.

³⁰ TRUMP, *supra* note 2, at 17–19 (“[C]ompetition is healthy when nations share values and build fair and reciprocal relationships. The United States will pursue enforcement actions when countries violate the rules to gain unfair advantage.”).

³¹ BIDEN, *supra* note 6, at 20 (“In many areas, China’s leaders seek unfair advantages, behave aggressively and coercively, and undermine the rules and values at the heart of an open and stable international system. When the Chinese government’s behavior directly threatens our interests and values, we will answer Beijing’s challenge. We will confront unfair and illegal trade practices, cyber theft, and coercive economic practices that hurt American workers, undercut our advanced

Interim NSS Guidance views climate change and environmental law as grounds for cooperation with strategic competitors, such as China.³²

A. Current State of Strategic Competition

Strategic competition in economic, geopolitical, and military realms has been an increasing reality since the end of the Cold War.³³ The NSS asserts that the United States has fallen behind while other nations, such as China, have been gaining ground.³⁴ Since strategic competition with China is a significant part of the presidential national security guidance, this Article focuses on the nexus between environmental law and national security within the framework of strategic competition with China.³⁵

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³² *Id.* at 21 (“We also recognize that strategic competition does not, and should not, preclude working with China when it is in our national interest to do so. Indeed, renewing America’s advantages ensures that we will engage China from a position of confidence and strength. We will conduct practical, results-oriented diplomacy with Beijing and work to reduce the risk of misperception and miscalculation. We will welcome the Chinese government’s cooperation on issues such as climate change, global health security, arms control, and nonproliferation where our national fates are intertwined.”).

³³ TRUMP, *supra* note 2, at 27.

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Asia, and South America.³⁸ Although the projects encourage economic development, China uses oppressive financing terms to ensure those nations acquiesce to China's geopolitical agenda.³⁹ These projects also cause large-scale environmental destruction in the developing nations.⁴⁰ To support the initiative, China established an overseas military base in the Horn of Africa, enabling power projection within the Suez Canal region, which is a major global trade route.⁴¹

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⁴⁰ David H. Shinn, *The Environmental Impact of China's Investment in Africa*, 49 CORNELL INT'L L.J. 25, 54–65 (2016) (discussing Chinese infrastructure projects and environmental consequences in Sudan, Chad, and Gabon for oil; Democratic Republic of Congo for cobalt mining; and Mozambique for timber).

⁴¹ Tyler Headley, *China's Djibouti Base: A One Year Update*, DIPLOMAT (Dec. 4, 2018), <https://thediplomat.com/2018/12/chinas-djibouti-base-a-one-year-update/>.

⁴² Mike Ives, *The Rising Environmental Toll of China's Offshore Island Grab*, YALE ENV'T 360 (Oct. 10, 2016), https://e360.yale.edu/features/rising_environmental_toll_china_artificial_islands_south_china_sea; *In the Matter of the South China Sea Arbitration*, PCA Case No. 2013-19, (Perm. Ct. of Arbitration, 2016), <https://docs.pca-cpa.org/2016/07/PH-CN-20160712-Award.pdf>. See also Euan Graham, *The Hague Tribunal's South China Sea Ruling: Empty Provocation or Slow-Burning Influence?*, COUNCIL ON FOREIGN RELS. (Aug. 18, 2016).

⁴³ *Id.*

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⁴⁵ *Id.*

⁴⁶ TRUMP, *supra* note 2, at 33.

⁴⁷ Scott Gourley, *Rising to the Occasion: Northrop Grumman and the GBSD Program*, NORTHROP GRUMMAN (last visited Apr. 9, 2021); John A. Tirpak, *Second B-21 Under Construction as Bomber Moves Toward First Flight*, NORTHROP GRUMMAN (Jan. 15, 2021). Ellsworth Air Force Base, South Dakota was selected as the first base to receive the B-21 Raider. ROBERT E. MORIARTY, RECORD OF DECISION (June 3, 2021), https://www.b21eis.com/final_eis.aspx.

⁴⁸ See 42 U.S.C.S. § 4332 (2021).

⁴⁹ See discussion *infra* Section III.1.

⁵⁰ TRUMP, *supra* note 2, at 33.

⁵¹ BIDEN, *supra* note 6, at 21.

⁵² TRUMP, *supra* note 2, at 33. See also BIDEN, *supra* note 6, at 20–21.

Despite the large disparities in policy between the Trump and Biden administrations, the discussion of strategic competition in each administration's strategic guidance documents is consistent.⁵³ Both documents prioritize ensuring that strategic competition does not lead to conflict.⁵⁴ The Trump administration's NSS recognizes that economic competition is a component of current affairs and seeks to ensure a level playing field between nations while upholding the rule of law.⁵⁵ Compared to the Trump administration's NSS, the Biden administration's Interim NSS Guidance provides a consistent approach to economic competition with China.⁵⁶ Moreover, the Interim NSS Guidance views climate change and environmental law as grounds for cooperation with strategic competitors, such as China.⁵⁷

B. Effects of Climate Change on Strategic Competition

Climate change is a threat accelerant that increases tensions within the construct of long-term strategic competition, mainly due to resource scarcity and the resulting consequences. Climate change will

⁵³ Compare TRUMP, *supra* note 2, with BIDEN, *supra* note 6, at 11–12.

⁵⁴ TRUMP, *supra* note 2, at 3; BIDEN, *supra* note 6, at 11–12.

⁵⁵ TRUMP, *supra* note 2, at 17–19 (“[C]ompetition is healthy when nations share values and build fair and reciprocal relationships. The United States will pursue enforcement actions when countries violate the rules to gain unfair advantage.”).

⁵⁶ BIDEN, *supra* note 6, at 20 (“In many areas, China’s leaders seek unfair advantages, behave aggressively and coercively, and undermine the rules and values at the heart of an open and stable international system. When the Chinese government’s behavior directly threatens our interests and values, we will answer Beijing’s challenge. We will confront unfair and illegal trade practices, cyber theft, and coercive economic practices that hurt American workers, undercut our advanced and emerging technologies, and seek to erode our strategic advantage and national competitiveness.”).

⁵⁷ *Id.* at 21 (“We also recognize that strategic competition does not, and should not, preclude working with China when it is in our national interest to do so. Indeed, renewing America’s advantages ensures that we will engage China from a position of confidence and strength. We will conduct practical, results-oriented diplomacy with Beijing and work to reduce the risk of misperception and miscalculation. We will welcome the Chinese government’s cooperation on issues such as climate change, global health security, arms control, and nonproliferation where our national fates are intertwined.”).

result in more extreme weather and natural disasters.⁵⁸ Many parts of the Middle East and South Asia may become uninhabitable.⁵⁹ This will exacerbate resource competition as extreme weather and climate-fueled natural disasters lead to scarcity, price shocks, and food insecurity.⁶⁰ Environmental impacts include acidification of the oceans and extinction of coral reef ecosystems.⁶¹ The debilitating consequences of climate change will accelerate refugee migration and require more military involvement in global relief efforts.⁶² Additionally, some commentators point to global dependence on fossil fuels and the revenue stream that follows as enabling Russia's aggression against Ukraine and other neighbors.⁶³ These factors present a chance of conflict that will ramp up tensions formed by strategic competition in what scholars call the "climate-security century."⁶⁴

The U.S. government is obligated to protect states from the impact of climate change, regardless of whether greenhouse gas emissions come from the United States or a foreign source.⁶⁵ The impact of emissions on the global environment is the same regardless of the source country or state.⁶⁶ The United States' defense enterprise is already suffering deleterious effects of extreme weather and natural disasters spurred by climate change. For example, Tyndall Air Force Base faced devastating impacts from a hurricane in 2018, requiring \$4.5 billion for rebuilding efforts.⁶⁷ In 2019, Offutt Air Force Base

⁵⁸ *Climate Change*, *supra* note 1, at 332.

⁵⁹ *Id.* at 333–34.

⁶⁰ U.S. GLOBAL CHANGE RSCH. PROGRAM, *supra* note 3 (discussing how food insecurity in Egypt from climate-related drought led to revolution and increase in armed fighters in Egypt, Sudan, and Somalia).

⁶¹ *Climate Change*, *supra* note 1, at 333–34 (quoting DAVID WALLACE-WELLS, *THE UNINHABITABLE EARTH* 10 (2019)).

⁶² U.S. GLOBAL CHANGE RSCH. PROGRAM, *supra* note 3.

⁶³ See Ciara Nugent, *A Ukrainian Climate Scientist is Uniquely Positioned to Explain the Real Threat to the Global Order*, *TIME* (Mar. 1, 2022).

⁶⁴ *Climate Change*, *supra* note 1, at 346.

⁶⁵ See *id.* at 349 (discussing *Massachusetts v. Env't Prot. Agency*, 549 U.S. 497, 519 (2007)).

⁶⁶ *Id.*

⁶⁷ Rachel S. Cohen, *USAF Fully Funded for Tyndall, Offutt Rebuilds*, *USAF MAG.* (Feb. 18, 2020).

faced a disastrous flood requiring a substantial rebuilding effort, which will cost \$650 million.⁶⁸ More disruptions to the United States' national security operations from climate change can be expected in the future.⁶⁹

III. DISCUSSION: A COMPARATIVE TAKE ON THE INTEGRATION OF ENVIRONMENTAL LAWS IN NATIONAL SECURITY POLICY IN THE UNITED STATES AND CHINA

A. *Environmental Law Systems of the United States and China*

Environmental law requirements between the United States and China are very different. In the United States, there are many environmental laws at federal and state levels whose requirements must be met before a major action, such as a construction project, weapons system procurement, or basing action, can proceed. Compliance with U.S. environmental laws can take several years, during which apposite technology can become obsolete or funding can evaporate. In contrast, lax enforcement of environmental laws in China for government-run initiatives allows for rapid development of infrastructure projects and program acquisitions.

1. Environmental Laws in the United States

In the United States, several environmental laws apply at federal and state levels to regulate a project. This section provides an overview of the major laws applicable to proposed federal projects. Federal laws discussed below include the National Environmental Policy Act ("NEPA"), Clean Air Act, Clean Water Act, Endangered Species Act ("ESA"), and National Historic Preservation Act ("NHPA"). Many of these programs are administered through cooperative federalism, where state agencies are authorized to carry out the federal program. States may also have their own set of environmental laws, such as the California Environmental Quality Act

⁶⁸ *Id.*

⁶⁹ See *Juliana v. United States*, 217 F. Supp. 3d 1224, 1265 (D. Or. 2016) (predicting climate change will adversely affect the United States' defense operations).

(“CEQA”), with which some federal projects in California need to comply.

a. National Environmental Policy Act

NEPA is an overarching statute that applies to virtually any federal project. This statute requires review and public comment for major actions (such as acquisition, basing decisions, or permitting decisions) that may generate significant environmental impact.⁷⁰ The federal agency proposing the action must provide a statement analyzing the action’s environmental impacts and alternatives to the action.⁷¹ Additionally, each agency promulgates its own regulations for compliance with NEPA.⁷²

Per the Air Force’s Environmental Impact Analysis Process regulations, where there is the “potential for significant degradation of the environment” or “substantial environmental controversy” over the impact of an action, an Environmental Impact Statement (“EIS”) is required.⁷³ Otherwise, an environmental assessment is required unless the action is categorically excluded from analysis and will have a “minimal adverse effect on environmental quality.”⁷⁴ Each agency can determine which actions are categorically excluded from the analysis, and the federal agency proposing the action must consult with other agencies that have “jurisdiction by law or special expertise with respect to any environmental impact involved.”⁷⁵

NEPA provides a useful tool for citizens and environmental groups to ensure that federal agencies analyze and disclose environmental impacts; however, it only goes so far as to protect

⁷⁰ 42 U.S.C.S. § 4332 (2020).

⁷¹ *Id.*

⁷² 40 C.F.R. § 1507.3 (2020).

⁷³ 32 C.F.R. § 989.16 (2020) (32 C.F.R. part 989 implement the Air Force’s Environmental Impact Analysis Process under the National Environmental Policy Act).

⁷⁴ 32 C.F.R. § 989.14 (2020); 32 CFR § 989.13 (2020). For a list of Air Force categorical exclusions, see 36 C.F.R. Part 989, Appendix B (2021).

⁷⁵ 40 C.F.R. § 1501.4 (2020); see *Nat’l Audubon Soc’y v. Navy*, 422 F.3d 174, 185 (4th Cir. 2005) (providing an overview of all stages in the EIS process and discussing the requirement for agencies to publish their final decision).

environmental resources. The regulations implementing NEPA require agencies to provide an opportunity for public comment and to respond to comments.⁷⁶ NEPA regulations further provide a minimum length of public review period after the publication of the environmental analysis.⁷⁷ Moreover, involved citizens reviewing a project can publicly comment throughout the process.⁷⁸ If citizens' concerns are not addressed, they may sue the proposing agency to ensure that the agency considered all of the environmental impacts.⁷⁹ Citizens and environmental groups are occasionally successful in obtaining injunctions against the military's proposed actions, such as aircraft basing or military training activities.⁸⁰

Notably, NEPA does not require an agency to select the least harmful alternative to the environment.⁸¹ As long as the agency analyzes the impact the action will have on environmental resources, the agency can select an option that destroys an environmental resource.⁸² NEPA only ensures that federal agencies fully analyze an action's impacts on the environment.⁸³ Additionally, consultations under other laws, such as ESA and NHPA, occur simultaneously with

⁷⁶ See 40 C.F.R. § 6.203 (2020); 40 C.F.R. § 1503.4 (2020).

⁷⁷ See 40 C.F.R. § 1506.11 (2020).

⁷⁸ See 40 C.F.R. § 1501.5 (2021); 40 C.F.R. § 1501.6 (2021); 40 C.F.R. § 1051.9 (2021).

⁷⁹ See, e.g., *Davis Mountains Trans-Pecos Heritage Ass'n v. United States Air Force*, 249 F. Supp. 2d 763, 769 (N.D. Tex. 2003) (alleging that the Air Force failed to take into account noise levels for expanding bomber training range over plaintiffs' lands).

⁸⁰ See, e.g., *Washington Cnty. v. Navy*, 357 F. Supp 2d 861, 878 (E.D.N.C. 2005) (county and citizens' groups obtained an injunction against the Navy because the Navy failed to properly analyze environmental impacts to waterfowl and wetlands as a result of proposed new training airspace and construction of a landing strip in North Carolina).

⁸¹ Caitlin McCoy et al., *NEPA Environmental Review Requirements*, HARV. ENV'T & ENERGY L. PROGRAM (Aug. 15, 2018).

⁸² See *id.*; see also *Winter v. Nat. Res. Def. Council*, 555 U.S. 7, 23 (2008) (providing that the Department of Defense has an interest in effective, realistic military training that may outweigh irreparable harm to the environment).

⁸³ See William S. Eubanks II, *Damage Done? The Status of NEPA After Winter v. NRDC and Answers to Lingerin*g Questions Left Open by the Court, 33 VT. L. REV. 649, 657 (2009); *WildWest Inst. v. Bull*, 547 F.3d 1162, 1168 (9th Cir. 2008) (providing that agency cannot take action that creates environmental impact or limits alternatives prior to issuing decision under NEPA).

NEPA, and the same analysis developed through consultation under those laws can be used to meet NEPA requirements.

The timeline for NEPA compliance is a major drawback. The median average EIS preparation timeline across federal agencies is three and a half years, with most EIS completions taking two to six years.⁸⁴ Recognizing this drawback, the Trump administration overhauled NEPA regulations intending to expedite the environmental review.⁸⁵ Major changes included the imposition of time limits and page limits on environmental analysis documents.⁸⁶ However, the time and page limits can be waived, only after involving a senior agency official, adding another bureaucratic step into the process.⁸⁷ Another regulatory change included the sharing of categorical exclusions among agencies involved in a project, which removes more actions from environmental review.⁸⁸ While the litigation effort against the 2020 regulations was dismissed for lack of standing, the Biden administration issued a proposed rulemaking to reverse changes to the regulation.⁸⁹ Since the streamlined NEPA

⁸⁴ See COUNCIL ON ENV'T QUALITY, ENVIRONMENTAL IMPACT STATEMENT TIMELINES 1 (2020).

⁸⁵ See 40 C.F.R. § 1501.5 (2020) (providing page length limitation of 75 pages for Environmental Assessment); 40 C.F.R. § 1501.10 (2020) (providing limit of 150 pages for Environmental Impact Statement); 40 C.F.R. § 1502.7 (2020) (providing time limits of 1 year for Environmental Assessment and 2 years for Environmental Impact Statement).

⁸⁶ See 40 C.F.R. § 1501.5 (2020) (providing page length limitation of 75 pages for Environmental Assessment); 40 C.F.R. § 1501.10 (2020) (providing limit of 150 pages for Environmental Impact Statement); 40 C.F.R. § 1502.7 (2020) (providing time limits of 1 year for Environmental Assessment and 2 years for Environmental Impact Statement).

⁸⁷ See 40 C.F.R. § 1501.5 (2020) (providing page length limitation of 75 pages for Environmental Assessment); 40 C.F.R. § 1501.10 (2020) (providing limit of 150 pages for Environmental Impact Statement); 40 C.F.R. § 1502.7 (2020) (providing time limits of 1 year for Environmental Assessment and 2 years for Environmental Impact Statement).

⁸⁸ See 40 C.F.R. § 1507.3(f)(5) (2020).

⁸⁹ Tad J. Macfarlan, et. al., *NEPA: The Old Becomes New*, 12 NAT'L L. REV. (2022) (citing *Wild Va. v. CEQ*, No. 3:20-cv-00045 WL (W.D. Va. June 21, 2021) (dismissed as nonjusticiable for mootness or lack of standing)). See also Council on Environmental Quality, National Environmental Policy Act Implementing Regulation Revisions, 86 Fed. Reg. 55757 (proposed Oct. 7, 2021) (to be codified at 40 C.F.R. pt. 1500); Ellen M. Gilmer, *Biden Officials Rethinking Trump*

regulations may not survive, at this point it is unknown how much efficiency will be gained in the NEPA review process.

b. Clean Air Act

The Clean Air Act governs much of the construction and operations activities on U.S. military installations. The Clean Air Act regulates various types of air pollution, such as criteria pollutants and hazardous air pollutants. It also regulates air pollution from both stationary sources, such as power plants, and mobile sources, such as aircraft or vehicles.⁹⁰ One of the significant programs of the Clean Air Act, the National Ambient Air Quality Standards, regulates six “criteria pollutants”: ozone, nitrogen oxide, sulfur dioxide, carbon monoxide, particulate matter, and lead.⁹¹ The Environmental Protection Agency (“EPA”) sets permissible levels of these pollutants in the environment based on public health, public welfare, and ecological conditions.⁹² States are then responsible for reporting whether the state is in attainment or non-attainment with the standards for each criteria pollutant.⁹³ Additionally, states are responsible for developing implementation plans, and once approved, the implementation plan is enforceable under both federal and state law.⁹⁴

In areas of the United States that are not within attainment of air quality standards, a pre-construction review is required for new or

Environmental Review Rule, BLOOMBERG L. (Mar. 17, 2020), <https://news.bloomberglaw.com/environment-and-energy/biden-officials-rethinking-trump-environmental-review-rule> (discussing pending litigation in *Wild Virginia v. Council on Env’t Quality*, No. 3:20-cv-00045 WL (W.D Va, June 21, 2021)).

⁹⁰ The Clean Air Act is codified at 42 U.S.C.S. §§ 7401, et. seq. (2020). The implementing regulations are contained at 40 C.F.R. parts 50–99 (2020).

⁹¹ See 40 C.F.R. §§ 50.4–50.13 (2020). The Clean Air Act is currently the primary law for regulating greenhouse gas emissions in the United States. See *Massachusetts v. Env’t Prot. Agency*, 549 U.S. 497, 532 (2007).

⁹² 42 U.S.C.S. § 7409(b) (2020); see also ENVIRONMENTS AND CONTAMINANTS: CRITERIA AIR POLLUTANTS, in *AMERICA’S CHILDREN AND THE ENVIRONMENT*, 1 (3d ed.2019).

⁹³ 42 U.S.C.S § 7407(d) (2020).

⁹⁴ See 42 U.S.C.S. § 7410 (2020).

modified major air pollution sources.⁹⁵ Additionally, per the Conformity Rule, actions of the federal government within the United States must conform to the implementation plan for the state where operations take place.⁹⁶ Permits are required from the state prior to construction or modification of existing major sources of air pollution.⁹⁷ Obtaining a permit can be a lengthy process, but it can run concurrently with environmental review under NEPA. States have up to eighteen months to review a permit application, and the public and EPA can review and comment on a permit.⁹⁸ In the realm of Air Force operations, failure to meet the Clean Air Act requirements places constraints on the ability to station aircraft or conduct training operations at bases with little room left in the air quality budget.⁹⁹

c. Clean Water Act

The Clean Water Act addresses two sources of water pollution: discharge of pollutants into waterways and dredging or filling, especially in wetlands.¹⁰⁰ The primary goal of the Clean Water Act is to ensure the nation's waters are fishable and swimmable.¹⁰¹ The Clean Water Act's main provisions are Sections 402 and 404.

Section 402 regulates the discharge of pollutants from point sources into regulated waters.¹⁰² Permits are required to discharge

⁹⁵ 42 U.S.C.S. § 7502(b)(5) (2020). *See* 42 U.S.C.S. § 7602 (2020) for discussion of what are considered major sources.

⁹⁶ 42 U.S.C.S. § 7506(c) (2020). *See* *What is General Conformity?*, <https://www.epa.gov/general-conformity/what-general-conformity> (last visited Feb. 19, 2022). *See, e.g.*, ALICIA LOGALBO, ET. AL., FINAL ENVIRONMENTAL IMPACT STATEMENT FIFTH GENERATION FORMAL TRAINING UNIT OPTIMIZATION 3-7-3-10 (2021).

⁹⁷ *See* 42 U.S.C.S. § 7661a(a) (2020).

⁹⁸ 42 U.S.C.S. § 7661b(c)–(e) (2020).

⁹⁹ *See, e.g.*, JOHN M. SMITH, ENVIRONMENTAL LAW PRIMER: THE CLEAN AIR ACT 9 (2020) (discussing how Luke AFB, a training base for F-15s, failed to perform conformity analysis—regulators allowed the planes to land but no operations were permitted until the base complied with Clean Air Act requirements).

¹⁰⁰ *See* 33 U.S.C.S. §§ 1251(a)(1), 1272 (2020).

¹⁰¹ *See* 33 U.S.C.S. § 1251 (2020).

¹⁰² *See* 33 U.S.C.S. § 1342 (2020).

into regulated waters, such as for treated wastewater from sewage.¹⁰³ Additionally, a permit is required, and mitigation measures must be followed, for construction sites disturbing more than one acre.¹⁰⁴ Discharge permits require technology to ensure cleaner discharge and maintain overall water quality.¹⁰⁵ For a wastewater treatment plant to receive a permit, the facility needs to meet specific standards to reduce pollutants.¹⁰⁶ If the discharge does not meet water quality standards, the point source is subject to penalties.¹⁰⁷

The standard enforcement of Section 402 is largely delegated to the states, with the EPA exercising overall supervision. The EPA has granted almost all states the authority to manage the permitting program,¹⁰⁸ and most states are granted authority to regulate federal facilities.¹⁰⁹ About half of U.S. military installations operate wastewater treatment facilities that are regulated under the Clean Water Act.¹¹⁰ Section 402 has successfully reduced water pollution from industrial sources and sewage treatment facilities. For example, in Southern California, which a few decades ago was famous for frequently polluted ocean waters and beach closures, “water quality has improved dramatically since implementation” of the Clean Water Act.¹¹¹ However, water pollution from stormwater runoff, which the

¹⁰³ 33 U.S.C.S. § 1311 (2020).

¹⁰⁴ 40 C.F.R. § 122.26 (2020).

¹⁰⁵ 33 U.S.C.S. § 1316(a)(1) (2020); *see* 40 C.F.R. § 125.3(a) (2020); 40 C.F.R. § 125.123(d)(1) (2020).

¹⁰⁶ *See* 40 C.F.R. § 125.3 (2020).

¹⁰⁷ 33 U.S.C.S. § 1319 (2020).

¹⁰⁸ *NPDES State Program Authority*, EPA, <https://www.epa.gov/npdes/npdes-state-program-authority> (last visited Mar. 22, 2021).

¹⁰⁹ *Id.*

¹¹⁰ JUDITH A. BARRY, CHARACTERIZATION OF DoD INSTALLATION WASTEWATER TREATMENT 1 (2012).

¹¹¹ GREG S. LYON & ERIC D. STEIN, HOW EFFECTIVE HAS THE CLEAN WATER ACT BEEN AT REDUCING POLLUTANT MASS EMISSIONS TO THE SOUTHERN CALIFORNIA BIGHT OVER THE PAST 35 YEARS? 8-9 (2008).

Clean Water Act does not regulate, continues to be a problem,¹¹² especially for military installation construction activities.¹¹³

Section 404 regulates the disposition of dredge and fill materials into regulated waters, including many wetlands.¹¹⁴ Wetlands promote better water quality and proper sediment flows downstream.¹¹⁵ Section 404 does not prevent fill of wetlands but instead imposes a permit requirement.¹¹⁶ The permitting process requires a public hearing before issuance,¹¹⁷ and the Army Corps of Engineers grant permits in most states. In addition, the applicable regional or local water board must certify that the permit complies with the state's water quality plan.¹¹⁸ To obtain a permit, the developer must provide mitigation to restore wetlands within the same watershed.¹¹⁹ Permits to fill a wetland under section 404 will not be granted if there are "significantly adverse effects" on "recreational, aesthetic, and economic values."¹²⁰ If citizens or environmental organizations find that permitting provisions are administered improperly, they have standing to raise legal challenges.¹²¹

The Clean Water Act applies to government facilities, such as military installations, in much the same way it applies to private facilities.¹²² Like private facilities, federal facilities may be subject to injunctions enforcing compliance with Clean Water Act provisions. In addition, citizens have standing to sue to enforce agencies'

¹¹² *Id.* at 9.

¹¹³ *See, e.g.*, U.S. FISH & WILDLIFE SERV., CONSERVATION LANDS AS COMPATIBLE USE BUFFERS (2004).

¹¹⁴ 33 U.S.C.S. § 1344 (2020).

¹¹⁵ AUSTRALIAN GOV'T – DEP. OF THE ENV'T, WETLANDS AND WATER QUALITY 1 (2016).

¹¹⁶ 33 U.S.C.S. § 1344 (2020).

¹¹⁷ *Id.*

¹¹⁸ *See, e.g.*, CALIFORNIA WATER BOARDS, WATER BOARD FUNCTION: WETLANDS PROTECTION, AND DREDGE & FILL REGULATION (last visited Mar. 22, 2021).

¹¹⁹ 33 C.F.R. § 332.3(b) (2012).

¹²⁰ 40 C.F.R. § 230.10(c)(4) (2012).

¹²¹ *See, e.g.*, *Surfrider Found. v. California Reg'l Water Quality Control Bd.*, 211 Cal. App. 4th 557 (2012) (alleging that proposed mitigation measures were inadequate to minimize the impact on sea life).

¹²² 33 U.S.C.S. § 1323 (2020).

compliance with the Clean Water Act.¹²³ While sovereign immunity exempts federal agencies from civil penalties or punitive fines for Clean Water Act violations, agencies may still face monetary sanctions.¹²⁴ This provides an effective method for citizen groups to ensure that wastewater discharge from military installations is within allowable standards.

d. Endangered Species Act

The ESA applies to government agencies and private actors.¹²⁵ In addition to activities within the United States' jurisdiction, the ESA applies to actions within international waters.¹²⁶ The ESA protects listed species whose continued existence is in jeopardy and who are, based on scientific data, considered "threatened" or "endangered."¹²⁷ The ESA prohibits "takings" of listed animal species. Takings are broadly defined and include any actions "to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or attempt to engage in any such conduct."¹²⁸ The ESA also provides for the establishment and protection of critical habitat for listed species.¹²⁹ Military installations are potentially exempt from new critical habitat designations where the installation

¹²³ 33 U.S.C.S. § 1365 (LexisNexis 2021); *New York v. United States*, 620 F. Supp. 374 (E.D.N.Y. 1985).

¹²⁴ *Met. Sanitary Dist. v. Navy*, 722 F. Supp. 1565 (N.D. Ill. 1989); *U.S. Dep't of Energy v. Ohio*, 503 U.S. 607 (1992).

¹²⁵ See 16 U.S.C.S. §§ 1531-1544 (LexisNexis 2021).

¹²⁶ Mark P. Nevitt, *Defending the Environment: A Mission for the World's Militaries*, 36 HAW. L. REV. 27, 40 (2014) [hereinafter *Defending the Environment*]. But see 50 C.F.R. § 424.12(g) (2020) (providing that critical habitat cannot be established outside of the United States' jurisdiction).

¹²⁷ 16 U.S.C.S. § 1533 (LexisNexis 2021).

¹²⁸ 16 U.S.C.S. § 1532(19) (LexisNexis 2021). The Endangered Species Act implementing regulations add further insight to these definitions. Per 50 C.F.R. § 17.3 (2022), "harm" is defined as "an act which actually kills or injures wildlife" including "significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding, or sheltering." Harassing a listed species is defined as "an intentional or negligent act or omission which creates the likelihood of injury to wildlife by annoying it to such an extent as to significantly disrupt normal behavioral patterns which include, but are not limited to, breeding, feeding or sheltering."

¹²⁹ 16 U.S.C.S. § 1533(a)(3) (2020).

has an Integrated Natural Resources Management Plan under the Sikes Act that provides for the protection of the species.¹³⁰

Since unintentional conduct can result in liability under the ESA, military construction activities or operations need to consider potential effects on listed species.¹³¹ Therefore, military operations must make allowances to ensure the protection of listed species.¹³² Citizen groups, such as environmental organizations, have standing to sue “any person,” including federal agencies, to enforce the ESA.¹³³ Violations can result in an injunction to stop an agency’s operations, criminal liability, or steep civil penalties.¹³⁴ One common litigation issue under the ESA involves whether an agency has based its decision on the best available scientific data.¹³⁵ Under the Federal Rules of Civil Procedure, where a court finds the plaintiff has proven there is a potential for irreparable harm to the species, a court may impose an injunction to stop the operation or activity at issue until the litigation is resolved.¹³⁶

Since the ESA applies to actions of the federal government, agencies are required to consult with the Fish and Wildlife Services or National Marine Fisheries Service on any action likely to impact a protected species negatively.¹³⁷ The scope of consultation includes

¹³⁰ 16 U.S.C.S. § 1533(a)(3)(B)(i) (LexisNexis 202). *See also* 16 U.S.C.S. § 670a (LexisNexis 2021) (providing for natural resources conversation on installations and discussing Integrated Natural Resources Management Plans).

¹³¹ *See* 50 C.F.R. § 50.7 (2020).

¹³² *See, e.g.,* Erin Truban, *Military Exemptions from Environmental Regulations: Unwarranted Special Treatment or Necessary Relief?*, 15 VILL. ENV’T L.J. 139, 141 n.18 (2004).

¹³³ 16 U.S.C.S § 1540 (2021). *Compare* Lujan v. Defs. of Wildlife, 504 U.S. 555, 563 (1992) (requiring a citizen suit to show direct injury) *with* Forest Conservation Council v. Rosboro Lumber Co., 50 F.3d 781, 786 (9th Cir. 1995) (providing that alleged past, present, or imminent future injury to a listed species satisfies the standing requirement for direct injury).

¹³⁴ 16 U.S.C.S. § 1540 (LexisNexis 2021).

¹³⁵ *See, e.g.,* Roosevelt Campobello Int’l Park v. Env’t Prot. Agency, 684 F.2d 1041, 1055 (1st Cir. 1982); False Pass v. Watt, 565 F. Supp. 1123, 1154 (D. Alaska 1983), *aff’d* 733 F.2d 605 (9th Cir. 1984); Natural Res. Def. Council v. Evans, 279 F. Supp. 2d 1129, 1179–80 (N.D. Cal. 2003).

¹³⁶ FED. R. CIV. P. 65.

¹³⁷ 16 U.S.C.S. § 1536 (LexisNexis2021).

any area directly or indirectly affected by a proposed action.¹³⁸ Consultation will result in a determination of whether there are expected effects to a listed species and reasonable mitigation measures to avoid effects jeopardizing the existence of the species.¹³⁹ The ESA provides that the Endangered Species Committee must grant an exemption when the Secretary of Defense determines it is necessary for national security.¹⁴⁰ Expecting such an exemption for military operations would not be practical since such an exemption has never been granted.¹⁴¹ Additionally, a grant of such an exemption would potentially face litigation, as discussed above. The ESA provides broad protection to species and requires federal agencies, including military operations, to recognize species protection as an overarching priority.

e. National Historic Preservation Act

Virtually any proposed federal agency action covered under NEPA also requires the agency to consult with the State Historic Preservation Office (“SHPO”) or the Advisory Council on Historic Preservation (“ACHP”) to determine whether the proposed action will have any adverse effects on historic properties.¹⁴² Additionally, the federal agency must consult with federally-recognized Native American tribes historically affiliated with the land covered by the project area to determine any adverse effects on tribal resources.¹⁴³ When locations listed on the National Register of Historic Places are present and could be affected, the agency must integrate measures developed during consultation into making a decision.¹⁴⁴ Usually, these measures are discussed and implemented through an agreement between the agency, SHPO or ACHP, and tribes. Despite this requirement, “decisions rest with the agency implementing the

¹³⁸ 50 C.F.R. § 402.02 (2020).

¹³⁹ See 50 C.F.R. § 402.13 (2020) (discussing informal consultation); 50 C.F.R. § 402.14 (2020) (discussing formal consultation).

¹⁴⁰ 16 U.S.C.S. § 1536(j) (2020).

¹⁴¹ M. LYNNE CORN, BETSY A. CODY, & ALEXANDRA M. WYATT, ENDANGERED SPECIES ACT (ESA): THE EXEMPTION PROCESS 9–10 (2017).

¹⁴² 54 U.S.C.S. § 306108 (2020).

¹⁴³ 36 C.F.R. § 800.3 (2020).

¹⁴⁴ 36 C.F.R. § 60.2(a) (2018); 36 C.F.R. § 800.3 (2020); 36 C.F.R. § 800.4 (2020).

undertaking.”¹⁴⁵ The process can take several months but can occur concurrently with the NEPA review. An agency’s good faith compliance requires several months of time and costs for research and consultation, and work is often performed by contractors.¹⁴⁶ Failure to follow the historic preservation consultation process does not result in any injunction against the project, but instead results in a “foreclosure” proceeding by the SHPO or ACHP for foreclosing those agencies’ ability to address adverse effects to historic properties.¹⁴⁷ Thus, while compliance or noncompliance with the NHPA will not in itself stop the project, compliance adds time and cost to any procurement or construction activity that could potentially affect historic properties.

f. California Environmental Quality Act

Some states hosting military operations have laws that parallel NEPA, such as California’s CEQA, which requires an assessment of environmental impacts and affects some federal actions.¹⁴⁸ Environmental analysis prepared under NEPA also serves as the assessment required under CEQA, provided that both state and federal law requirements are met in the same document.¹⁴⁹ CEQA applies to federal projects that occur outside of areas of exclusive federal jurisdiction and are activities undertaken in partnership with a California state agency, activities financed by a California state agency, or private activities that require approval from a California state agency.¹⁵⁰

Military projects that require compliance with CEQA often include renewable energy and energy resilience projects on federal installations that mitigate the anticipated effects of climate change and

¹⁴⁵ 36 C.F.R. § 60.2(a) (2018).

¹⁴⁶ *See, e.g.*, 1 ENVIRONMENTAL IMPACT STATEMENT B-21 MOB 1 BEDDOWN AT DYESS AFB OR ELLSWORTH AFB 1-3-1-6, 6-1-6-2 (describing process timeline and listing preparers, including Leidos as the contractor preparing the documents).

¹⁴⁷ 36 C.F.R. § 800.7 (2020).

¹⁴⁸ West’s Ann. Cal. Pub. Res. Code § 21003 (2020).

¹⁴⁹ *Compare* 42 U.S.C.S. § 4321, et. seq., *with* West’s Ann. Cal. Pub. Res. Code § 21003 (2020); *see also* 40 C.F.R. § 1506.2 (2020).

¹⁵⁰ 14 C.C.R. § 15002 (2020).

ensure continued operations.¹⁵¹ This is because the projects require construction or create effects extending off the federal installation and into other public infrastructure components, driving permit requirements from California state agencies.¹⁵²

CEQA creates litigation risk because broad standing exists under California law for citizen suits to challenge the adequacy of environmental analysis for a project. A CEQA plaintiff must file a petition within thirty days after the agency posts a Notice of Determination to approve a project and must also personally serve the agency within ten days after the petition is filed.¹⁵³ Because CEQA focuses on broad and long-term environmental effects, California courts do not follow the strict standing applied in other cases. California allows citizen suits where there is a “public interest.”¹⁵⁴ Plaintiffs also have standing when they have a “beneficial interest,” which are adverse impacts from a proposal, and the impact need not be an environmental impact.¹⁵⁵ CEQA rules for standing are much broader than NEPA, which requires that a plaintiff be within the “zone of interests” the statute seeks to protect.¹⁵⁶ One limitation on CEQA standing is that the plaintiff’s objection to the process or document must have been raised during public comment.¹⁵⁷ Because broader standing is provided for citizen suits under California law

¹⁵¹ See, e.g., ANDREA BREWER-ANDERSON, ET. AL., DRAFT ENVIRONMENTAL IMPACT STATEMENT/ENVIRONMENTAL IMPACT REPORT FOR THE EDWARDS AFB SOLAR PROJECT ES-1, (2019); GERALD ROBBINS, ET. AL., FINAL ENVIRONMENTAL ASSESSMENT FOR THE BEALE WAPA INTERCONNECTION PROJECT 1-1, A-1 (2020). Energy resilience to ensure a reliable energy supply for continued operations is an issue that is increasingly faced by California bases, where there have been an increase in controlled blackouts based on wildfire risk conditions or lack of supply to meet demand. See, e.g., Katherine Blunt, *New Blackouts Darken California*, WALL ST. J. (Sept. 8, 2020).

¹⁵² See CA OFF. OF PLANNING AND RSCH., NEPA AND CEQA: INTEGRATING STATE AND FEDERAL ENVIRONMENTAL REVIEWS 11 (2013).

¹⁵³ Cal. Pub. Res. Code § 21167 (2020); Cal. Pub. Res. Code § 21167.6 (2020).

¹⁵⁴ *Save the Plastic Bag Coal. v. City of Manhattan Beach*, 52 Cal. 4th 155, 167 (Cal. 2011).

¹⁵⁵ *Id.* at 170.

¹⁵⁶ *Id.* at 166 n.3 (citing *Waste Mgmt. of Alameda Cnty., Inc. v. Cnty. of Alameda*, 79 Cal. App. 4th 1223, 1233-34 (2000)).

¹⁵⁷ Cal. Pub. Res. Code § 21177 (2020).

than is under federal law, federal actions designed to improve climate and energy resiliency in furtherance of national security goals at California military installations could face resistance in state courts.

2. Environmental Laws in China

Unlike the United States, while China has developed environmental laws and pollution reduction targets, the laws are not universally applicable or enforced.¹⁵⁸ In China, the Environmental Protection Law regulates environmental media, such as air, water, soils, natural resources, and chemical pollution.¹⁵⁹ For example, the Environmental Protection Law requires an EIS for construction projects.¹⁶⁰ In addition, China has laws regulating specific environmental issues. For example, the Water Pollution Law in China requires reporting on public drinking water sources, sets water quality standards, and regulates agricultural pesticide and fertilizer usage.¹⁶¹ In 2018, China also enacted an “environmental business tax against the producers of water, air, noise, and solid waste pollution” to provide funding for enforcement of environmental laws.¹⁶² However, China’s environmental laws contain few enforceable provisions.¹⁶³

Chinese citizens have little standing to bring enforcement actions against government agencies or other polluters.¹⁶⁴ Even where a plaintiff has standing, a court or regulator does not have to hear the

¹⁵⁸ Erin Ryan, *Breathing Air with Heft: An Experiential Report on Environmental Law and Public Health in China*, 41 ENVIRONS ENV'T L. & POL'Y J. 195, 232 (2018) [hereinafter *Breathing Air with Heft*].

¹⁵⁹ Env'tl Protection Law of the People's Republic of China (promulgated by the Standing Comm. Nat'l People's Cong., Dec. 26, 1989), art. 2.

¹⁶⁰ *Id.* at art. 13.

¹⁶¹ *Breathing Air with Heft*, *supra* note 133, at 234–35.

¹⁶² *Id.* at 238.

¹⁶³ Erin Ryan, *The Elaborate Paper Tiger: Environmental Enforcement and the Rule of Law in China*, 24 DUKE ENV'T & POL'Y J. 183, 189–90 (2013) [hereinafter *Elaborate Paper Tiger*] (discussing lack of enforceable standards in the Circular Economy Law, lack of results from the Energy Conservation Law, lack of implementing regulations behind the Solid Waste Pollution Law, and failure to meet environmental targets in five-year goals).

¹⁶⁴ *Id.* at 215.

complaint.¹⁶⁵ However, within the last several years, there has been an increased appetite for judicial enforcement of environmental laws in China.¹⁶⁶ In 2015, China updated the Environmental Protection Law to provide stricter punishments for violators and expanded avenues for citizen groups to lodge complaints against alleged violators of the Environmental Protection Law.¹⁶⁷ In 2018, China also amended the Civil Procedure Law to permit local prosecutors to bring enforcement actions against polluters, a new power that had not previously existed.¹⁶⁸

There are other signs that China is seeking to place greater importance on lowering its environmental impact. First, China is a party to the Paris Climate Agreement.¹⁶⁹ Second, China's Nationally Determined Contributions from 2016 include peaking carbon emissions by 2030, producing twenty percent of energy from renewable sources, and increasing forest area.¹⁷⁰ Third, China is investing in green infrastructure, such as high-speed rail lines and renewable energy.¹⁷¹ Finally, several Chinese cities are experimenting with carbon credits (cap-and-trade) and carbon tax programs.¹⁷²

¹⁶⁵ *Id.* at 217–18.

¹⁶⁶ Yanmei Lin & Jack Tuholske, *Green NGOs Win China's First Environmental Public Interest Litigation: The Nanping Case*, 45 ENV'T L. REP. 11102 (2015); Peter C. Pang, *China's Evolving Environmental Protection Laws*, MONDAQ (June 18, 2020) <https://www.mondaq.com/china/clean-air-pollution/955486/china39s-evolving-environmental-protection-laws>.

¹⁶⁷ Laney Zhang, *China: Environmental Protection Law Revised*, LIBR. OF CONG. GLOBAL LEGAL MON. (June 6, 2014) [https://www.loc.gov/law/foreign-news/article/china-environmental-protection-law-revised/#:~:text=\(June%206%2C%202014\)%20On,effect%20on%20January%201%2C%202015.&text=This%20was%20the%20first%20time,its%20enactment%20in%20December%201989](https://www.loc.gov/law/foreign-news/article/china-environmental-protection-law-revised/#:~:text=(June%206%2C%202014)%20On,effect%20on%20January%201%2C%202015.&text=This%20was%20the%20first%20time,its%20enactment%20in%20December%201989).

¹⁶⁸ *Breathing Air with Hefi*, *supra* note 133, at 238.

¹⁶⁹ Paris Agreement, United Nations Treaty Collection (last visited 26 Mar. 21).

¹⁷⁰ ENHANCED ACTIONS ON CLIMATE CHANGE: CHINA'S INTENDED NATIONALLY DETERMINED CONTRIBUTIONS, 7 <https://www.law.uh.edu/faculty/thester/courses/Climate%20Intervention%20Law%202019/China's%20First%20NDC%20Submission.pdf>.

¹⁷¹ *Breathing Air with Hefi*, *supra* note 133, at 197; KOLESKI, *supra* note 13, at 21.

¹⁷² *Breathing Air with Hefi*, *supra* note 133, at 255.

Despite China having a broad body of environmental law and an increased appetite for judicial enforcement, enforcement is lacking.¹⁷³ Chinese officials historically focused on meeting economic goals and sustaining growth at the expense of achieving environmental standards.¹⁷⁴ As a result, environmental regulatory agencies are extremely under-staffed.¹⁷⁵ There was little requirement for polluters, especially state-owned enterprises, to report factual data on pollution output.¹⁷⁶ Furthermore, enforcement officials' common practice of bribery enabled industrial pollution sources to escape regulation.¹⁷⁷ The requirement for EIS prior to construction permitting has often been ignored or circumvented at the provincial level.¹⁷⁸ To respond to these issues, the Environmental Protection Law in China includes an article imposing administrative sanctions or criminal liability for public officials who engage in abuse of power, bribery, or similar acts.¹⁷⁹

Within the last decade, public protest has led to the Chinese government recognizing environmental harms and taking pollution

¹⁷³ KOLESKI, *supra* note 13, at 17.

¹⁷⁴ Alex L. Wang, *The Search for Sustainable Legitimacy: Environmental Law and Bureaucracy in China*, 37 HARV. ENV'T L. REV. 365, 381 (2013); KOLESKI, *supra* note 13, at 16 (stating that 20 percent of China's arable land, 33 percent of China's surface waters, and 80 percent of China's aquifers are polluted as a result of China's 'growth at any cost' strategy).

¹⁷⁵ *Elaborate Paper Tiger*, *supra* note 138, at 196 (comparing how the Chinese Ministry of Environmental Protection had 200 employees for a nation of 1.5 billion people, whilst the U.S. Environmental Protection Agency employed a staff of 18,000 for a nation of 300 million people).

¹⁷⁶ *Id.* at 197.

¹⁷⁷ *Id.* at 198-199.

¹⁷⁸ Zhang Chun, *Has China's Environmental Impact Assessment Law Lost Its Teeth?*, CHINA DIALOGUE (July 20, 2016), [https://chinadialogue.net/en/pollution/9122-has-china-s-impact-assessment-law-lost-its-teeth/#:~:text=China's%20Environmental%20Impact%20Assessment%20\(EIA,const%20construction%20has%20been%20recently%20revised.&text=Under%20it%2C%20dev%20elopers%20could%20still,submitting%20an%20environmental%20impact%20statement](https://chinadialogue.net/en/pollution/9122-has-china-s-impact-assessment-law-lost-its-teeth/#:~:text=China's%20Environmental%20Impact%20Assessment%20(EIA,const%20construction%20has%20been%20recently%20revised.&text=Under%20it%2C%20dev%20elopers%20could%20still,submitting%20an%20environmental%20impact%20statement).

¹⁷⁹ ENV'T PROT. P.R.C. LAW, Art. 45. *But see* KOLESKI, *supra* note 13, at 17 (noting that fines for violations are cheaper than the cost of compliance).

more seriously.¹⁸⁰ Recently, there has been an increase in China's enforcement of domestic environmental laws.¹⁸¹ However, given the magnitude of environmental issues in China and the slow-moving political will to prioritize environmental concerns, China still has obstacles to overcome to make meaningful strides to enforce environmental laws.¹⁸²

B. Environmental Law Seen as Detrimental to National Security Goals

Historically, environmental law is seen as conflicting with the ability to achieve national security goals.¹⁸³ The NSS derided “[e]xcessive environmental and infrastructure regulations” as an impediment to the “American energy trade and development of new infrastructure projects.”¹⁸⁴ Much of this conflict arises from constraints that environmental law places on U.S. operations. Training missions may be rerouted, or construction projects limited, to avoid environmental impacts or litigation.¹⁸⁵ Some in the national security community view environmental regulations as overly burdensome due to the time and cost of compliance or exemption

¹⁸⁰ *Elaborate Paper Tiger*, *supra* note 138, at 195 (discussing how public protest in Beijing responded to protest and pressure from the U.S. government embassy's reporting of pollution data led to the Beijing government's conforming to the international air pollution particulate matter reporting standards).

¹⁸¹ *Breathing Air with Hefi*, *supra* note 133, at 237; KOLESKI, *supra* note 13, at 17.

¹⁸² *Breathing Air with Hefi*, *supra* note 133, at 235-36.

¹⁸³ *Climate Change*, *supra* note 1.

¹⁸⁴ TRUMP, *supra* note 2.

¹⁸⁵ See Keith Ridler, *Air Force Disputes Lawsuit to Stop Urban Training in Idaho*, USAF TIMES (June 8, 2019), <https://www.airforcetimes.com/news/your-air-force/2019/06/08/air-force-disputes-lawsuit-to-stop-urban-training-in-idaho/> (discussing lawsuit filed by residents near Mountain Home Air Force Base to stop flight training over urban areas that would give pilots necessary skills for close air support missions); Keith Ridler, *US Air Force Appeals Ruling Against Urban Training in Idaho*, KTVB7 (Dec. 3, 2020), <https://www.ktvb.com/article/news/national/military-news/united-state-air-force-appeals-ruling-against-urban-training-in-idaho/277-6a2c2bb9-f263-483f-934a-31bcdecbe100#:~:text=A%20federal%20judge%20ruled%20that,could%20harm%20humans%20and%20wildlife.>

obtainment and the fact that operations must accommodate environmental concerns.¹⁸⁶

Additionally, some environmental laws create incentives for litigation in order to extract concessions from proponents in a practice known as “greenmail.”¹⁸⁷ Litigation under CEQA provides a prime example where environmental laws can be used to delay or deter projects that would prove beneficial to the environment in the long run, like the targeting of climate-friendly projects, such as renewable energy development.¹⁸⁸ The high-speed rail line through California’s Central Valley between Los Angeles and San Francisco is another example of an environmentally-beneficial project that will reduce harmful greenhouse gas emissions which has seen project delays and spiraling costs because of CEQA litigation.¹⁸⁹ CEQA lawsuits are often filed by labor unions for the purpose of obtaining a project

¹⁸⁶ See *Defending the Environment*, *supra* note 101, at 36. See also, TRUMP, *supra* note 2.

¹⁸⁷ See Christian Britschgi, *How California Environmental Law Makes It Easy for Labor Unions to Shake Down Developers*, REASON (Aug. 21, 2019), <https://reason.com/2019/08/21/how-california-environmental-law-makes-it-easy-for-labor-unions-to-shake-down-developers/>.

¹⁸⁸ See, e.g., Lisa Halverstadt, *Union Used CEQA Against Solar Projects, Too*, VOICE OF SAN DIEGO (Oct. 19 2015), <https://www.voiceofsandiego.org/topics/science-environment/union-used-ceqa-against-solar-projects-too/>.

¹⁸⁹ See *Atherton v. Cal. High Speed Rail Auth.*, 228 Cal. App. 4th 314, 323-325 (Cal. Ct. App. 2014); Ralph Vertebedian, *State Bullet Train Delays ‘Beyond Comprehension,’ Contractor Says in Blistering Letter*, L.A. TIMES (Jan. 12, 2021), <https://www.latimes.com/california/story/2021-01-12/california-high-speed-rail-delays-contractor-angry-letter> (discussing initial operating capacity delayed from 2017 until the 2030s); City of Millbrae, *California High-Speed Rail Faces Major Challenge from City of Millbrae*, PR NEWSWIRE (Oct. 7, 2020), <https://www.prnewswire.com/news-releases/california-high-speed-rail-faces-major-challenge-from-city-of-millbrae-301147768.html> (city posing new CEQA lawsuit based on impacts on nearby residences); Juliet Williams, *Deal Reached on Suit over High-Speed Rail*, O.C. Register (Apr. 18, 2013), <https://www.oregister.com/2013/04/18/deal-reached-on-suit-over-high-speed-rail/> (discussing settlement of lawsuit by Farm Bureau and dozens of other separate CEQA lawsuits regarding the high-speed rail project); see also, CALIFORNIA HIGH SPEED RAIL AUTHORITY, CALIFORNIA HIGH-SPEED TRAIN FINAL PROGRAM EIR/EIS 3.3-19 (2005) (discussing air pollution reduction benefits provided by the proposed high speed rail line in place of freeway trips and air travel).

agreement with the developer.¹⁹⁰ Businesses use CEQA as a tool to avoid competition, and local governments use CEQA to compel non-environmental changes to proposed projects.¹⁹¹ Most lawsuits under CEQA are not filed by environmental groups and contain claims not founded in environmental science.¹⁹² Despite the questionable basis of many CEQA lawsuits, unions and other special interest groups can obtain concessions that both delay and increase costs for environmentally-friendly projects that would further national security goals, such as energy resiliency.¹⁹³

While the U.S. military must follow stringent environmental regulations, strategic competitors, such as China, operate outside of such a legal framework.¹⁹⁴ The Chinese military is, in theory, subject to China's environmental laws, but the military is generally not specifically addressed in those laws.¹⁹⁵ China's military is directed to self-regulate through the "environmental protection department of the armed forces," where there is no mechanism for outside accountability.¹⁹⁶ China's Law on the Environmental Impact Assessment simply provides that "[t]he measures of environmental impact assessment for military facility construction projects shall be formulated by the Central Military Commission," which oversees China's armed forces.¹⁹⁷ The Chinese military's own environmental regulations discuss lofty environmental goals, but they do not provide

¹⁹⁰ See, e.g., Haverstadt, *supra* note 163; Britschgi, *supra* note 162.

¹⁹¹ Anthony Threatts, *NEPA, CEQA, CICA, and the FAR: Reforming Areas of Abuse Which Consistently Impact Federal Government Projects*, 51 TEX. ENV'T L.J. 187, 260-261 (citing Scott Herold, *Herhold: A San Jose gas station corner is ground zero in environmental fight*, MERCURY NEWS (Oct. 29, 2019), <https://www.mercurynews.com/2012/10/29/herhold-a-san-jose-gas-station-corner-is-ground-zero-in-environmental-fight/>).

¹⁹² See *id.*

¹⁹³ See TRUMP, *supra* note 2, at 22-23.

¹⁹⁴ See *Defending the Environment*, *supra* note 101, at 60-61.

¹⁹⁵ See *id.* at 61-66.

¹⁹⁶ See *id.* at 64 (citing Environmental Protection Law of the People's Republic of China (promulgated by the Standing Comm. Nat'l People's Cong., Dec. 26, 1989, effective Dec. 26, 1989), art. 7 (China)).

¹⁹⁷ *Id.* at 65 (citing Law of the People's Republic of China on the Environmental Impact Assessment (promulgated by the Standing Comm. Nat'l People's Cong., Oct. 28, 2002, effective Sept. 1, 2002), art. 37 (2002)(China)).

for any judicially enforceable standards.¹⁹⁸ While China's Environmental Protection Law now includes a citizen suit provision, there have not been any citizen suits "against any Chinese military activities."¹⁹⁹

In contrast to the lack of accountability and oversight over the Chinese military's actions and their impact on the environment, the U.S. military is explicitly subject to domestic environmental law for activities within the United States' jurisdiction.²⁰⁰ If the military fails to meet legal requirements for construction projects or operations, concerned citizens and environmental groups can obtain an injunction forbidding the activity.²⁰¹ There are instances where this has occurred, or a planned construction activity or operation has been changed from the mission-preferred alternative to avoid a potential litigation risk.²⁰² The U.S. military's accountability to environmental law requires time and resources spent on environmental planning and compliance, which is a burden that strategic competitors, like China, do not share.

Most U.S. domestic environmental laws do not apply to military activities in overseas jurisdictions.²⁰³ However, by executive order, the U.S. military must comply with "host nation environmental pollution control standards of general applicability" for overseas activities.²⁰⁴ For example, when the United States operates out of overseas locations such as Europe, Japan, or South Korea, the U.S. military must comply with the host jurisdiction's environmental laws. In addition, Department of Defense regulations require compliance with baseline environmental standards if a host jurisdiction lacks a

¹⁹⁸ See *Defending the Environment*, *supra* note 101, at 68.

¹⁹⁹ *Id.* at 66.

²⁰⁰ See *id.* at 31.

²⁰¹ See, e.g., *Washington Cnty. v. Navy*, 357 F. Supp 2d 861, 878 (E.D.N.C. 2005).

²⁰² See, e.g., Chris Hubbuch, *F-35 opponents file second lawsuit over Truax basing decision*, WI STATE J. (11 March 2021), https://madison.com/ws/news/local/environment/f-35-opponents-file-second-federal-lawsuit-over-truax-basing-decision/article_b4c1cb0e-8c7b-57d1-8fe5-3bb3c849ea4f.html.

²⁰³ *NEPA Coal. of Japan v. Aspin*, 837 F. Supp. 466, 467–68 (D.D.C. 1993).

²⁰⁴ Exec. Order No. 12088, 3 C.F.R. § 1801 (1978).

substantial environmental protection regime.²⁰⁵ Status of Forces Agreements may also create enforceable environmental compliance obligations for United States' operations within the host country.²⁰⁶ While there is an environmental benefit from the U.S. military's compliance with domestic and host nation environmental laws, China has the advantage because it does not operate within such a strict framework. Therefore, China has more freedom and flexibility in military operations than the United States.

C. Ways Environmental Law Contributes to National Security Goals

There has been a change of focus in the national security strategic guidance regarding environmental concerns and climate change within the past year. The NSS viewed energy independence as a national security requirement and streamlining environmental regulations as a necessary step. However, the 2021 Interim NSS Guidance changed priorities and views climate change as a threat to national security.²⁰⁷ To the extent that environmental law furthers the goal of reducing emissions and mitigating the effects of climate change, environmental law aligns with current strategic priorities for national security.

The NSS prioritized greenhouse gas reduction in tandem with the expansion of the economy.²⁰⁸ Despite the United States' withdrawal from the Paris Climate Agreement during the Trump administration, the NSS saw the United States as an emissions reduction leader based on technical innovation, not regulatory requirements.²⁰⁹ The NSS envisioned the United States' status as an "energy-dominant nation" as important to meeting national security

²⁰⁵ See U.S. DEP'T OF DEF., INSTRUCTION 47105, ENVIRONMENTAL COMPLIANCE AT INSTALLATIONS OUTSIDE THE UNITED STATES (Nov. 1, 2013).

²⁰⁶ *Defending the Environment*, *supra* note 101, at 52–53.

²⁰⁷ BIDEN, *supra* note 6, at 11–12.

²⁰⁸ TRUMP, *supra* note 2, at 22.

²⁰⁹ *Id.*; Quirin Schiemeier, *The US has Left the Paris Climate Deal—What's Next?*, NATURE (Nov. 4, 2020), <https://www.nature.com/articles/d41586-020-03066-x>.

requirements.²¹⁰ The NSS warned that climate policies can constitute “an anti-growth energy agenda . . . detrimental to U.S. economic and energy security interests.”²¹¹ In order to ensure energy dominance, the NSS focused on streamlining environmental regulations for energy projects while “ensuring responsible environmental stewardship” and fostering technological innovations, including renewable energy and carbon capture technologies.²¹²

The Interim NSS Guidance changes the approach to climate change by viewing climate change as an “existential risk” and asserting that “weather extremes and environmental stress” are a national security risk.²¹³ In the discussion of Central America and Africa, the Interim NSS Guidance states that confronting the effects of climate change is a priority for international cooperation.²¹⁴ The Interim NSS Guidance recognizes that foreign and domestic policy, including national security and environmental security, are interrelated.²¹⁵

In addition to the Interim NSS Guidance, the Biden administration reversed the United States’ withdrawal from the Paris Climate Agreement,²¹⁶ an important step for providing leadership on the world stage to combat the climate crisis.²¹⁷ Aiding other nations to mitigate effects and adapt to consequences of climate change aligns with national security because cooperation abroad builds goodwill that allows the United States more leeway to achieve partnerships beneficial to meeting national security goals.²¹⁸ The Interim NSS Guidance provides that “defense investments in climate resiliency and clean energy” are necessary to incorporate in the defense budget.²¹⁹ Both the Trump and Biden administrations’ national security strategic guidance is adamant about the need to invest in innovative

²¹⁰ TRUMP, *supra* note 2, at 22.

²¹¹ *Id.*

²¹² *Id.* at 23.

²¹³ BIDEN, *supra* note 6, at 11–12, 17.

²¹⁴ *Id.* at 10–11.

²¹⁵ *Id.* at 22.

²¹⁶ Exec. Order No. 14008 § 102, 86 Fed. Reg. 7619, 7620 (Jan. 21, 2021).

²¹⁷ BIDEN, *supra* note 6, at 12.

²¹⁸ *Id.* at 12–13.

²¹⁹ *Id.* at 14.

technologies.²²⁰ In the explicit discussion of strategic competition, the Interim NSS Guidance provides that the United States would work with China on issues aligning with national security interests, such as solving the problems posed by climate change.²²¹

The Biden administration has also promulgated policy prioritizing climate change as a national security problem. For example, Executive Order 14008 requires the Department of Defense to develop a climate risk analysis to improve the next NSS.²²² This Executive Order also reinstated the Climate and National Security Working Group and created a requirement for federal agencies to assess climate change impacts and ways to adapt to climate risks in agency planning.²²³ Overall, the Interim NSS Guidance is in stark contrast to the NSS by viewing climate change as a national security risk and a priority to address.

D. How Environmental Law Can Adapt for Better Compatibility with National Security

Environmental law supports national security priorities by reducing greenhouse gas emissions and mitigating the climate and security risks exacerbated by climate change. Streamlining regulations to ease the regulatory burden while ensuring adequate environmental protection is a way that environmental law can be compatible with national security concerns.²²⁴ NEPA regulations enacted in September 2020 were intended to be a step in this direction; however, it remains unknown if the regulations will withstand litigation or will reduce the time and cost of compliance.²²⁵ Agencies such as the

²²⁰ Compare TRUMP, *supra* note 2, at 23, with BIDEN, *supra* note 6, at 20.

²²¹ BIDEN, *supra* note 6, at 21.

²²² Exec. Order No. 14008, 86 Fed. Reg. 7619, 7620 (Jan. 21, 2021).

²²³ *Id.*; see also Memorandum on Climate Change and National Security, WEEKLY COMP. PRESS. DOC. 2 (Sept. 21, 2016).

²²⁴ TRUMP, *supra* note 2, at 29 (discussing removal of bureaucratic impediments to innovation).

²²⁵ 40 C.F.R. § 1501.10 (2021) (discussing time limits); 40 C.F.R. § 1507.3(f)(5) (2021) (discussing sharing of another agency's categorical exclusions). *But see* Wild Va. v. Council on Env't Quality, No. 3:20-cv-00045 WL (W.D. Va. June 21, 2021) (pending litigation that could potentially order a stay or remand on the NEPA streamlining regulations).

Department of the Air Force can streamline regulations to provide broader categorical exclusions from NEPA.²²⁶ Additionally, aligning CEQA lawsuit standing requirements with federal law will reduce mission-inhibiting, frivolous litigation.²²⁷ Reducing the time and cost of regulatory burden to comply with environmental standards will enable the United States to catch up to the speed of operational decision-making that competitors like China enjoy.²²⁸

Environmental law is an area where there is potential to find common ground with China, which has expressed commitment to climate change mitigation and environmental protection.²²⁹ Competition within a free market and free trade framework provides benefits, such as innovative products and the efficient use of resources.²³⁰ Strategic competition becomes problematic when some are unencumbered by the rules that apply to others. For effective environmental law, there must be international, binding consensus on environmental standards. While the Paris Climate Agreement has garnered widespread support because it uses non-binding provisions, full compliance is not achievable without binding environmental commitments.²³¹

²²⁶ Compare 32 C.F.R. Part 651 App. B (2022) (providing Army categorical exclusions, such as construction projects meeting screening criteria with less than five acres of land disturbed) with 32 C.F.R. Part 989 App. B (2022) (providing more restrictive Air Force categorical exclusions, such as construction projects with less than one acre of land disturbed). If the Air Force regulations matched the Army, this could potentially lead to an approximate 25 percent reduction in the number of Environmental Assessments the Air Force conducts under NEPA.

²²⁷ *Save the Plastic Bag Coal. v. City of Manhattan Beach*, 155 Cal.4th. 167 (Cal. 2011) (discussing differences between standing requirements under federal law and CEQA).

²²⁸ Compare COUNCIL ON ENV'T QUALITY, *supra* note 59, with *Defending the Environment*, *supra* note 101, at 28, 60–61.

²²⁹ See ENHANCED ACTIONS ON CLIMATE CHANGE, *supra* note 145, at 5; see also *Breathing Air with Heft*, *supra* note 133, at 260.

²³⁰ See, e.g., Gary North, *Free Trade: The Litmus Test of Economics*, MISES INST. (Sept. 9, 2012).

²³¹ See Rafael Leal-Arcas & Antonio Morelli, *The Resilience of the Paris Agreement: Negotiating and Implementing the Climate Regime*, 31 GEO. ENV'T L. REV. 1, 15 (2018) (discussing how using non-binding nationally determined contributions was essential to achieving accord).

An effective approach to ensure China's commitment and compliance with international environmental standards is linking trade agreements to environmental norms to ensure binding environmental standards and protections.²³² Such an approach would limit China's ability to use lax environmental standards to maintain a competitive advantage.²³³ Precedent for this approach is shown through the United States' negotiation of environmental provisions in thirteen trade agreements, including the 2020 United States-Mexico-Canada Agreement ("USMCA"), which controls trade within the North American continent.²³⁴ Economic sanctions and tariffs that overcome advantages gained – and are proportional to potential noncompliance – could be used to enforce China's conformity with environmental standards.²³⁵ Moreover, trade agreements could provide binding international arbitration as a neutral forum to resolve disagreements and impose sanctions, reducing tensions and potential for conflict.²³⁶ Linking environmental standards to trade agreements would level the playing field and encourage China to meet its ambitions to be more environmentally conscious.

IV. CONCLUSION

The goals of environmental law complement the achievement of the U.S. national security mission. Environmental law reduces the risks that climate change poses to international stability. With a growing international consensus on the risks of climate change, which

²³² *Id.* at 41–45 (discussing how provisions of bi-lateral and multi-lateral preferential trade agreements can be effectively used to effectuate compliance with environmental protection norms).

²³³ Josh Ederington, *Should Trade Agreements Include Environmental Policy?*, 4 REV. ENV'T ECON. & POL'Y 84, 98 (2010).

²³⁴ Agreement between the United States of America, Mexico, and Canada, art. XXIV, July 1, 2020, U.S.T [hereinafter USMCA Agreement]; Environmental Protection Agency, *EPA's Role in International Trade*, EPA, <https://www.epa.gov/international-cooperation/epas-role-international-trade> (last visited July 13, 2021).

²³⁵ See USMCA Agreement, art. XXIV, July 1, 2020, U.S.T.

²³⁶ See Edwin C. Kiesel, *Law as an Instrument to Solve the Orbital Debris Problem*, 51 ENV'T L. 223, 236–37 (Mar. 2021) (discussing the utility of binding international arbitration to resolve international disputes over environmental liability caused by orbital debris in space). See, e.g., USMCA Agreement, art XXIV.

the United States has increasingly recognized in its strategic guidance, action is needed to reduce these threats. Environmental law provides a potential source of common ground that the United States may have to work with strategic competitors, such as China, and find ways to reduce tensions and level the playing field of economic and geopolitical competition.

While environmental law has a reputation for inhibiting mission accomplishment, environmental compliance is necessary for defense acquisitions, construction, and operations. However, the timelines and regulatory burden of compliance can slow mission accomplishment. At times, environmental litigation has also been used as a sword to defeat worthwhile national security or infrastructure efforts, including projects with beneficial environmental outcomes to mitigate climate change.

There are solutions to overcome these problems. First, the United States should streamline environmental compliance efforts to ensure that the law provides for adequate environmental analysis and resource protection while reducing the regulatory burden. Second, Congress can reform environmental laws to reduce frivolous litigation and ensure that litigation is truly based on environmental concerns. Finally, environmental standards should be included in international trade agreements to ensure compliance and provide for arbitration to resolve disputes. With these targets in mind, environmental law can aid in attaining national security goals in this era of strategic competition and the United States can provide global leadership on the way ahead.

