DON'T CONDEMN MY CREEK: USING EMINENT DOMAIN TO SATISFY ENVIRONMENTAL OBLIGATIONS

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Introi	DUCTION	.371
I.	BACKGROUND	.372
	A. Brief History of Eminent Domain in Virginia	.373
	B. History of Using Eminent Domain to Achieve	
	Environmental Goals	.376
	1. The Weeks Act	.377
	2. Shenandoah National Park	.379
	3. The Land and Water Conservation Fund	.381
II.	CASE STUDY: COMPENSATORY MITIGATION IN VIRGINIA	.382
	A. The Compensatory Mitigation Requirement	.383
	1. Mitigation Banks	.385
	2. In-Lieu Fee Programs	.387
	3. Permittee-Responsible Mitigation	.387
	B. Recent Changes to Virginia's Limits on Eminent Domain	
	C. Applying the Necessity Clause to Compensatory	
	Mitigation	.389
	1. Necessity	
	2. Location	
III.	CONCLUSIONS	.391
	A. Continuing Importance of Preservation	.391
	B. Compensatory Mitigation is a Necessary, if Imperfect,	
	System	.391

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C.	Property Rights Are Fundamental to Our System of Law	
	and National Identity	.392
D.	We Must Use Caution When Utilizing Eminent Domain	

to Achieve Environmental Goals to Balance the Perceived Impact and Maintain Public Support......393

INTRODUCTION

The Constitution of Virginia restricts the use of eminent domain such that "no more private property may be taken than necessary to achieve the stated public use." Under most circumstances, the necessity requirement for any particular taking is not difficult to show. The plan for a new road dictates the location of its roadbed and, therefore, what property must be taken taking the land under the roadbed is necessary. This is not always the case, however, with takings to meet environmental obligations. Where the condemning agency has the option to meet an environmental requirement either by condemning private land or through other means, is the condemnation truly necessary? Does an arbitrary choice of location, not dictated by the necessities of the project and its public purpose, create an unconstitutional taking? These questions arise when transportation projects, for which the Clean Water Act and its state-level equivalents mandate some form of compensatory mitigation to offset destruction of streams, achieve that compensatory mitigation by condemning the stream land of private citizens. The Clean Water Act offers several alternatives to agencyconducted mitigation on private land, none of which would require the use of eminent domain. Additionally, the Clean Water Act does not dictate the precise location of required compensatory mitigation, only that it be completed in the same watershed. Do agencies, presented with a range of options to achieve their public purpose, only one of which requires eminent domain, violate the Virginia Constitution where they choose voluntarily to use eminent domain?

This paper will briefly examine the history of using eminent domain to reach broad environmental goals in the United States. The paper will then focus on the narrower constitutional problem presented by using eminent domain to meet compensatory mitigation requirements in Virginia by examining the case of a Southwest Virginia road project and the conflict between the constitutional imperatives of eminent domain law and condemning agencies subject to environmental regulations that require the use of real property. Finally, the paper will present a set of conclusions designed to guide thinking on this complex issue.

^{1.} VA. CONST. art. I, § 11 (emphasis added).

I. BACKGROUND

From its earliest inception, the power of expropriation (*i.e.*, the taking of private property by the State) has been widely recognized as an inherent right of the nation-state. As this practice began to take shape in English common law, the property rights of individuals were initially few and rarely enforced by judicial bodies. Beginning in 1066 with the Norman invasion and subsequent conquest of England by William the Conqueror, the property rights attached to all seized lands under the common law were vested solely in the monarch.² These rights were often then distributed to Norman vassals, Anglo-Saxon supporters, and church officials through the granting of "fiefs"—estates of land—in exchange for monetary payment or other various forms of service.³ While this system appeared to provide individual property rights in theory, the monarch still possessed absolute authority over land, and fiefs were often revoked with or without cause.⁴ Throughout this period, the administration of justice under English common law appeared in many ways to be arbitrary and inequitable.

Such was the status quo under English law until 1215, when a little-known ruler by the name of King John signed a series of documents known as the Articles of Magna Carta.⁵ The Magna Carta, as it has now become known, established many of the fundamental rights that are now guaranteed in constitutions and jurisprudence across the world. Chief among these are the rights of due process, habeas corpus, and property ownership.⁶ For the purposes of this discussion, we will examine the clauses related to property ownership.

Clauses 28 and 39 of the Magna Carta guaranteed property protections under the English common law. The following translations are provided by British Museum manuscript scholar G.R.C. Davis:

- (28) No constable or other royal official shall take corn or other movable goods from any man without immediate payment, unless the seller voluntarily offers postponement of this.⁷
- (39) No free man shall be seized or imprisoned, or stripped of his rights or possessions, or outlawed or exiled, or

^{2.} Bruce L. Benson, *The Evolution of Eminent Domain: A Remedy for Market Failure or an Effort to Limit Government Power and Government Failure?*, 12 INDEP. REV. 423, 424 (2008).

^{3.} *Id*.

^{4.} Id. at 424-25.

^{5.} Id. at 425.

^{6.} *Id.* at 425–26.

^{7.} G.R.C. DAVIS, MAGNA CARTA 23-33 (4th rev. ed. 1963). The original Latin document did not have enumerated clauses. These have been inserted by the translator for clarity.

deprived of his standing in any way, nor will we proceed with force against him, or send others to do so, except by the lawful judgment of his equals or by the law of the land.⁸

As shown in these excerpts, the Magna Carta placed rudimentary, yet revolutionary, restraints on the monarch's ability to exercise his power of expropriation. The document required that payment for taken goods was to occur "immediately" and that no person could be deprived of "rights or possessions" without due process of law. And although such rights are largely taken for granted in Western democracies today, the concept of fundamental rights is a fairly recent legal development.

In the centuries following its ratification, many of the various rights and principles contained within the Magna Carta served as guideposts for Enlightenment-era thinkers such as John Locke and Sir Edward Coke, individuals who were largely responsible for fanning the flames of political revolution throughout much of Europe and the United States. The ideas enshrined in the Magna Carta can be found, for example, in both the English Bill of Rights of 1689, as well as the United States Constitution. Prior to adoption of the federal constitution, however, such ideas were given life in the colonies through the language of state constitutions. The Virginia Constitution is a special example of such language and ideas, as it would later serve as a template for the U.S. Constitution.

A. Brief History of Eminent Domain in Virginia

The constitutional history of the Commonwealth is one that spans across seven major iterations. Virginia's first Constitution, adopted in 1776 (less than one month before the signing of the Declaration of Independence¹²), described property rights as "inherent" to all and stated that the "means of acquiring and possessing property" could not be infringed by any compact. More specifically, the 1776 Constitution stated that Virginians "cannot be . . . deprived of their property for public uses, without their own consent, or that of the representatives so elected." The 1776 Constitution also preserved the right to a jury trial in all disputes relating to

9. John Steele Gordon, *Magna Carta: The Birth Certificate of the Rule of Law*, AM. ENTER. INST. (Jun. 18, 2015), https://www.aei.org/articles/magna-carta-the-birth-certificate-of-the-rule-of-law/ [https://perma.cc/8DBK-2AJF].

^{8.} *Id*

^{10.} *Id*.

^{11.} For context, *see First Virginia Constitution, June 29, 1776*, EDUC. LIB. VA., http://edu.lva.virginia.gov/online_classroom/shaping_the_constitution/doc/va_constitution[https://perma.cc/2TUN-WPVR].

^{12.} ARMISTEAD R. LONG, THE CONSTITUTION OF VIRGINIA: AN ANNOTATED EDITION, 109 (1901) (quoting Va. Const. of 1776, § 1).

^{13.} Id.

^{14.} Id. at 110 (quoting VA. CONST. of 1776, § 6).

or concerning property. ¹⁵ And while the phrase "just compensation" was not present in the 1776 Constitution, the Virginia Supreme Court nevertheless declared that "fair compensation must *always* be made to the individual" in order for a taking to be "lawful." ¹⁶ Therefore, Virginia has required just compensation and public use since as early as the state's independence from Great Britain.

In the 1820s, limited representation in Virginia's increasingly-populous western counties led to the adoption of Virginia's second Constitution in 1830.¹⁷ The Constitution of 1830 made a number of revisions, primarily to address issues such as voting rights and the aforementioned malapportionment. However, the Constitution of 1830 also added important provisions relating to individual property rights, such as an explicit "just compensation" requirement in the state constitution's takings clause. ¹⁸

The next three iterations of the state constitution were adopted in 1851, 1864, and 1870, respectively. And while these documents did not present any major changes to the state's exercise of eminent domain, they preserved the "public use" and "just compensation" requirements of the 1776 and 1830 constitutions. On the state of the 1776 and 1830 constitutions.

In the 18th and 19th centuries, the citizens' rights under federal and state law were often not parallel. The rights enshrined in the Bill of Rights, for example, were only applicable under federal law during this period. As a consequence, the "public use" and "just compensation" protections of the Fifth Amendment were *not* guaranteed to citizens under state law. The decision to echo rights in the U.S. Constitution (e.g., in Virginia's eminent domain clauses) was not required by state legislatures at the time. In fact, Virginia is unique in that its Bill of Rights so closely aligns with that of the United States Constitution, most likely because Virginia's constitution served as inspiration for the federal constitution, which was drafted some thirteen years later. Such close resemblance was not uniform throughout the country, however, and prior to Reconstruction, the Supreme Court expressly *rejected* the idea that the protections contained within the Bill of Rights should be guaranteed at the state level.

However, this changed in 1868 with the adoption of the Fourteenth Amendment—specifically, the amendment's Due Process Clause and the

^{15.} Id. (citing VA. CONST. of 1776, § 11).

^{16.} Crenshaw v. Slate River Co., 27 Va. 245, 264-65 (1828) (emphasis added).

^{17.} See The Constitutional Convention of 1829–30, W. VA. DEP'T ARTS, CULTURE, & HIST., http://www.wvculture.org/history/government/182930cc.html [https://perma.cc/N7BY-GB8L].

^{18.} *Id.* (quoting VA. CONST. of 1830, art. III, § 11).

^{19.} See VA. CONST. OF 1870: VA. CONST. OF 1864: VA. CONST. OF 1851.

^{20.} See VA. CONST. OF 1870; VA. CONST. OF 1864; VA. CONST. OF 1851.

^{21.} See First Virginia Constitution, supra note 11.

^{22.} See Barron v. City of Balt., 32 U.S. 243 (1833).

subsequent arrival of the incorporation doctrine.²³ Under the theory of incorporation, certain rights guaranteed in the Bill of Rights must be guaranteed at the state level in order to preserve due process for all citizens. Although there is debate as to the Supreme Court's first application of the incorporation doctrine, the most likely candidate is *Chicago*, *Burlington & Quincy Railroad Co. v. City of Chicago*, a case which, pertinent to our discussion, dealt with the appropriation of land owned by private individuals.²⁴ The facts were as follows: In 1880, the Chicago City Council passed an ordinance that provided for the widening of a local street.²⁵ In order to accomplish this, however, the city was required to take property owned by certain landowners, as well as a portion of the right of way owned by a local railroad company.²⁶ The city filed a petition for condemnation of the relevant parcels and right of way, with the railroad company being admitted as a defendant in the proceeding.²⁷ At trial, the jury awarded the defendant railroad company with a nominal just compensation award of \$1.²⁸

On appeal, the Supreme Court declined to remand the jury determination, stating that the statute at issue in the case, which allowed for the taking of railroad rights of way, fell under the umbrella of the state's police powers.²⁹ As a consequence, the state of Illinois did not have to demonstrate an award of just compensation in order for the taking to be valid. Nevertheless, Justice Harlan, in his majority opinion, crafted the principle that has since become known as the "incorporation doctrine." The Court concluded that states must satisfy the "just compensation" requirements of the Takings Clause in order to comply with the Fourteenth Amendment's due process protections:

[A] judgment of a state court, even if it be authorized by statute, whereby private property is taken for the State...without compensation made or secured to the owner, is, upon principle and authority, wanting in the due process of law required by the Fourteenth Amendment of the Constitution of the United States 30

After the Supreme Court's incorporation of the Takings Clause, the Virginia Constitution went through two major iterations. In 1902, the language relating to the State's power of eminent domain remained relatively

^{23.} For a more thorough discussion of the incorporation doctrine, see Bryan H. Wildenthal, *Nationalizing the Bill of Rights: Scholarship and Commentary on the Fourteenth Amendment in 1867–1873*, 18 J. CONTEMP. LEGAL ISSUES 153 (2009).

^{24.} Chicago, Burlington & Quincy R.R. v. City of Chicago, 166 U.S. 226 (1897).

^{25.} *Id.* at 230.

^{26.} Id.

^{27.} Id.

^{28.} Id.

^{29.} See id. at 254-55.

^{30.} City of Chicago, 165 U.S. at 241 (emphasis added).

vague, maintaining that "[N]o person shall be deprived of his property without due process of law." By 1971, however, the Constitution of Virginia fully incorporated the public use requirement, stating that the General Assembly would refrain from passing any law "whereby private property [is] . . . taken or damaged for public uses, without just compensation" Notably, the 1971 Constitution granted explicit authority to the General Assembly in order to determine what constituted a "public use" in the Commonwealth. As discussed later in Section III.B, voters later rejected this language in a 2012 constitutional referendum.

B. History of Using Eminent Domain to Achieve Environmental Goals

The power of eminent domain is an incident of sovereignty. It "appertains to every independent government. It requires no constitutional recognition; it is an attribute of sovereignty."³⁴ Although the concept of eminent domain is patently enshrined in the Takings Clause of the Fifth Amendment, in reality this clause represents a limitation on that power, rather than a grant. When analyzing what the government can and cannot do under eminent domain law, it is more appropriate to look to the extent of the limits rather than the extent of the grant of power.

Congress has codified the precise limits on multiple occasions. One of the earliest such examples can be found in an 1888 federal statute authorizing the then-Secretary of War to condemn land or public buildings for the maintaining and improvement of rivers and harbors. Later in that same year, Congress enacted far-reaching legislation that appeared to greatly expand the authority of the federal government to initiate condemnation proceedings. Under the Condemnation Act of 1888, as it has now become known, the government could seek condemnation proceedings in order to fulfill any "public uses" whenever it was, in the opinion of the government agency, "necessary or advantageous to the Government to do so." Condemnation of the government to do so."

The Condemnation Act was broader than its immediate predecessor in three respects: First, the Act allowed for any federal official to initiate condemnation proceedings, as opposed to the earlier 1888 legislation, which could only be initiated by the Secretary of War.³⁷ Second, the Act allowed for condemnation in order to satisfy any public purpose.³⁸ Finally, the Act

^{31.} VA. CONST. of 1902, art. I, § 11.

^{32.} VA. CONST. of 1971, art. I, §11.

^{33.} Id.

^{34.} Boom Co. v. Patterson, 98 U.S. 403, 406 (1878).

^{35.} Act of Apr. 24, 1888, ch. 194, 25 Stat. 94.

^{36.} Condemnation Act, ch. 728, 25 Stat. 357 (1888) (codified at 40 U.S.C. § 3113 (2002)).

^{37.} Compare id. (the Act allowed for condemnation proceedings to be initiated by any federal official), with ch. 194, 25 Stat. at 94, supra note 35 (condemnation proceedings could only be initiated by the Secretary of War).

^{38.} *Id*.

allowed federal officials to proceed in either state *or* federal court, the latter of which not being an option under the earlier legislation.³⁹

In the late 1930s, the constitutionality of this Act was challenged when the Federal Works Agency (FWA) and Postmaster General condemned private land in order to construct a federal courthouse and post office in the city of Cape Girardeau, Missouri. Upon granting *certiorari*, the U.S. Supreme Court unanimously held that the Act was indeed constitutional and, pertinent to our discussion, the Supremacy Clause of the U.S. Constitution made federal powers of eminent domain supreme.⁴⁰

While the Condemnation Act laid the groundwork for any future takings related to "public purposes," the question of whether environmental protection itself constituted a public use under federal law was initially avoided. Indeed, prior to the Act's passage, the federal government had already set aside land for the primary purpose of environmental preservation, avoiding the necessity of using condemnation for this particular purpose. In 1872, for example, Congress established what is now Yellowstone National Park using federal land located in the then-Territories of Wyoming and Montana.⁴¹ In the example of Yellowstone, however, the issue of condemnation was not reached because the boundaries of the park were entirely contained within federally owned property. In 1903, some thirty years after Yellowstone, President Theodore Roosevelt issued an executive order establishing Pelican Island National Wildlife Refuge, the first of its kind in the nation. 42 Like Yellowstone, however, the issue of condemnation was avoided because the land comprising the island refuge was classified as federal property.⁴³

1. The Weeks Act

At the turn of the 20th century, however, the early foundations of modern-day environmental law were beginning to take shape, and with it the question of whether to use eminent domain in order to achieve federal policy objectives. In 1905, Congress signaled a new era in environmental protection with the formation of the United States National Forest Service ("NFS").⁴⁴

40. United States v. Carmack, 329 U.S. 230, 240 (1946) ("The considerations that made it appropriate for the Constitution to declare that the Constitution of the United States, and the laws of the United States made in pursuance thereof, shall be the supreme law of the land make it appropriate to recognize that the power of eminent domain, when exercised by Congress within its constitutional powers, is equally supreme.").

^{39.} Id

^{41.} Act of Mar.1, 1872, ch. 24, 17 Stat. 32–33.

^{42.} Pelican Island Reservation for protection of native birds, Theodore Roosevelt Ctr. At Dickinson State Univ., https://www.theodorerooseveltcenter.org/Research/DigitalLibrary/Record.aspx?libID=o286619 [https://perma.cc/QBW3-LW9D].

^{43. 1903-}First Federal Bird Reservation, U.S. FISH & WILDLIFE SERV., https://www.fws.gov/invasives/volunteerstrainingmodule/swf/nwrsystem/1903.html [https://perma.cc/9W94-BPNM].

^{44.} Act of Feb. 1, 1905, ch. 288, 33 Stat. 628 (codified at 16 U.S.C. § 472).

Its mission: "To sustain the health, diversity, and productivity of the Nation's forests and grasslands to meet the needs of present and future generations." To accomplish this objective, in 1911, Congress passed the "Weeks Act"—named for its co-sponsor former Massachusetts Congressman John Weeks—which authorized the Secretary of Agriculture to "examine, locate, and recommend for purchase such lands . . . within the watersheds of navigable streams as . . . may be necessary to the regulation of flow of navigable streams "46"

Section 7 of the Act authorized the Secretary to purchase such tracts of land after receiving approval from an agency commission. Using this method of land acquisition, the newly formed NFS, under the direction of the Secretary of Agriculture, was able to acquire much of the land that now comprises the various national forests of the Eastern United States. In the Eastern and Southern regions, NFS-designated areas average approximately 46% non-federal land within their boundaries, while areas in the Western United States average roughly 10% non-federal acreage.

The Weeks Act continues to serve as a means for the Forest Service to acquire privately owned property. Additionally, in the decades since the Act's passage, Congress has conferred additional powers to the Secretary of Agriculture, such as the right to acquire land within or adjacent to designated wilderness areas, ⁵⁰ wild and scenic river corridors, ⁵¹ and certain segments of designated National Trails. ⁵² Today, the Forest Service manages roughly 193 million acres of protected forests and grasslands throughout the United States. ⁵³

While the Weeks Act provided for the designation of protected *places* in order to serve *people* (e.g., NFS's mission to protect spaces for current and future generations), there were no legislative mechanisms at the turn of the century to specifically protect *wildlife*. The few wildlife refuges that had been created, for example, were almost entirely via executive order. In 1929, Congress passed the first piece of legislation specifically authorizing the acquisition of privately owned lands for wildlife habitat: the Migratory Bird Conservation Act ("MBCA").⁵⁴ The MBCA authorized the Secretary to

48. Cong. Res. Serv., RL34273, Federal Land Ownership: Acquisition and Disposal Authorities 5 (2019).

^{45.} About the Agency, U.S. FOREST SERV., https://www.fs.fed.us/about-agency [https://perma.cc/2MLF-GJRE].

^{46.} Weeks Act, ch. 186, 36 Stat. 961, 962 (1911) (codified at 16 U.S.C. § 515).

^{47.} Id.

^{49.} Id.

^{50. 16} U.S.C. § 1134(c) (2018).

^{51.} Id. § 1277.

^{52.} Id. § 1244.

^{53.} By the Numbers, U.S. FOREST SERV., https://www.fs.fed.us/about-agency/newsroom/by-the-numbers [https://perma.cc/WO9D-VUMA].

^{54. 16} U.S.C. §§ 715–715(r) (1925); Edward J. Heisel, Comment, *Biodiversity and Federal Land Ownership: Mapping a Strategy for the Future*, 25 Ecology L.Q. 229, 238

purchase areas recommended by an agency commission as "necessary for the conservation of migratory game birds." These areas would be acquired by the U.S. Fish and Wildlife Service ("FWS"). Through the MBCA, acreage could be designated as National Wildlife Refuges, just as prior refuges had been designated through executive orders. Both the refuges created by executive order and those authorized by the commission would fall under the jurisdiction of FWS. Soon after its creation, a subsequent bill required waterfowl hunters to purchase the right to hunt in these protected refuges. Funds from this program were then used to fund condemnation awards supplied to private landowners under the terms of the MBCA. ⁵⁶

2. Shenandoah National Park

Congress also used eminent domain to acquire the land necessary to create several of the United States' National Parks. In February of 1925, Congress passed an act authorizing the Secretary of the Interior to determine appropriate boundaries of suitable lands in the Blue Ridge Mountains of Virginia and the Smokey Mountains of North Carolina and Tennessee for the creation of national parks.⁵⁷ The Blue Ridge Mountain lands identified by the Secretary would ultimately become the core of Shenandoah National Park.⁵⁸ The Act, ordering that this land should become Shenandoah, additionally provided that no federal funds should be used to acquire the land; only public or private donations would be allowed.⁵⁹ Because of this restriction on the use of federal funds, the federal government partnered with the Commonwealth of Virginia to acquire the land. Virginia would acquire the land and subsequently donate it to the United States for the creation of the park.⁶⁰

Virginia, in order to begin the process, created the State Commission on Conservation and Development by act of the General Assembly in March of 1926. The Commission was authorized to acquire, by purchase or through the use of eminent domain power, "any areas, properties, or lands of scenic beauty, recreational utility, or historical interest which, in the judgment of the commission, should be preserved and maintained for the use, observation, education, health, and pleasure of the people of Virginia." Additionally, the

^{(1998);} See also Richard J. Fink, The National Wildlife Refuges: Theory, Practice, and Prospect, 18 HARV. ENVIL. L. REV. 1, 12–13 (1994).

^{55. 16} U.S.C. §§ 715(a), (c).

^{56.} See Hiesel, supra note 54, at 238.

^{57.} Via v. State Comm'n on Conservation & Dev. of Va., 9 F. Supp. 556, 557 (W.D. Va. 1935), *aff'd*, 296 U.S. 549 (1935).

^{58.} Via, 9 F. Supp. at 557–58.

^{59. 16} U.S.C. § 403 (2018).

^{60.} See Via, 9 F. Supp. at 559.

^{61.} Id. at 558.

Commission had the power to convey the land thus acquired to the United States in order to create a national park.⁶²

Virginia subsequently began condemnation proceedings and ultimately condemned over 1,100 tracts and forced the relocation of 465 families. Among these condemnations were challenged in court on various grounds, including that (1) the acquisitions were unconstitutional because they are not for a public need of the Commonwealth but instead for a gift to the United States, (2) a different (and easier) procedure was set up for park condemnations than was already in place for other condemnation actions, raising due process issues, and (3) no requirement that negotiations for voluntary sale must take place before condemnation was used. Generally, these legal challenges failed and the takings were upheld. Today, little evidence of the former residents remains within Shenandoah, though it is not uncommon to see a standing stone chimney or dry-set stone wall surrounded by deep forest.

This method of conservation, though ultimately achieving a portion of what has been called "America's Best Idea," did come at a cost. 66 Resentment among the displaced individuals was high at the time the park was created and remains over eighty years later. 67 Often framed at the time as a rescue from poverty for the residents of the future park, the descendants see things differently. In a 1982 Washington Post article on the subject, displaced families and their descendants said, "books they wrote about the mountain people being ignorant and all. Nothing but lies. They just trying to make all these people up here look like they didn't have any sense so they could take our land." And, "[t]here's one man we know who still has nightmares about being moved . . . He said he'd go back tomorrow. But he can't. You can't: the structure, the network, is gone. You can't undo what's done. But perhaps you can be more sensitive in the future." 68

63. Robert Kyle, *The Dark Side of Skyline Drive*, Wash. Post, (October 17, 1993), available at https://www.washingtonpost.com/archive/opinions/1993/10/17/the-dark-side-of-skyline-drive/d72e6151-6b96-483c-ab68-dea952288b6a/ [https://perma.cc/L2BR-CZ73].

^{62.} Id.

^{64.} Via, 9 F. Supp. at 559.

^{65.} See, e.g., id. at 559; see also Rudacille v. State Comm'n on Conservation & Dev., 156 S.E. 829, 834 (Va. 1931).

^{66.} See The National Parks: America's Best Idea (PBS television broadcast Sept. 27–Oct. 2, 2009).

^{67.} See Audrey J. Horning, When Past is Present: Archaeology of the Displaced in Shenandoah National Park, U.S. NAT'L PARK SERV. (Feb. 26, 2015), https://www.nps.gov/shen/learn/historyculture/displaced.htm [https://perma.cc/GM4P-ZXZY]; see also Don Nunes, Shenandoah National Park: Pain Lingers for Displaced Mountain Folks, WASH. POST (May 31, 1982), https://www.washingtonpost.com/archive/local/1982/05/31/shenandoahnational-park-pain-lingers-for-displaced-mountain-folks/740b402a-1535-40ec-bacad37743a5753f/ [https://perma.cc/73E5-UY8W]; Kyle, supra note 63.

^{68.} Nunes, supra note 67.

3. The Land and Water Conservation Fund

In 1965, Congress built upon the successes of the Weeks Act and MBCA to create the Land and Water Conservation Fund ("LWCF").69 Described by the Wilderness Society as "America's Most Important Parks Program,"70 the LWCF and its subsequent amendments allow for the appropriation of \$900 million annually, 71 \$30 million of which may be used for the acquisition of land, water, wetlands, preservation of endangered species under the Endangered Species Act ("ESA"), or for the creation and expansion of national wildlife refuges.⁷² This comprehensive interagency fund, under the authority of the Department of the Interior, has led to the acquisition and/or increased protection of land in a number of wildlife habitats, including the California Coastal National Monument, Everglades National Park, Petrified Forest National Park, and Red Rock Lakes National Wildlife Refuge.⁷³ In addition to the \$30 million available annually for the purposes of eminent domain, state and federal partnerships under the LWCF have resulted in the protection of over 2.3 million acres of privately owned land.⁷⁴ While legal authorization for the LWCF expired on September 30, 2018,⁷⁵ it was permanently reauthorized in bipartisan legislation signed on March 12, 2019.⁷⁶

Finally, no discussion of land protection would be complete without recognition of the Bureau of Land Management ("BLM"). Created by act of Congress in 1946⁷⁷ and operating under the Department of the Interior, the mission of BLM is to "sustain the health, diversity, and productivity of America's public lands for the use and enjoyment of present and future generations."⁷⁸ Today, BLM administers roughly 244.4 million surface acres of public land.⁷⁹ In 1976, Congress amended the powers of this agency under the Federal Land Policy and Management Act ("FLPMA").⁸⁰ Under Section

^{69. 54} U.S.C. §§ 200301-200310 (2018).

^{70.} America's Most Important Parks Program: Take the Pledge to #saveLWCF, WILDERNESS SOC'Y (Oct. 1 2018), https://www.wilderness.org/articles/blog/americas-most-important-parks-program-take-pledge-savelwcf [https://perma.cc/W9NN-K42Q].

^{71.} Congressional Acts, Land and Conservation Fund, NAT'L PARK SERV., https://www.nps.gov/subjects/lwcf/congressionalacts.htm.

^{72. 54} U.S.C. §§ 200306, 200308 (2018).

^{73.} Land and Water Conservation Fund, U.S. DEP'T OF THE INTERIOR, https://www.doi.gov/lwcf [https://perma.cc/M98H-4K23].

^{74.} *Id*.

^{75.} History of the LWCF, NAT'L PARK SERV., https://www.nps.gov/subjects/lwcf/lwcfhistory.htm [https://perma.cc/63J2-C238].

^{76.} *Id*.

^{77. 43} U.S.C. § 1731 (1976).

^{78.} Bureau of Land Management: Public Land Statistics 2018, Foreword, U.S. DEP'T OF THE INTERIOR, https://www.blm.gov/sites/blm.gov/files/PublicLandStatistics2018.pdf [https://perma.cc/N52U-2G7A].

^{79.} Id. at 1.

^{80.} Federal Land Policy and Management Act of 1976, Pub. L. No. 94-579, 90 Stat. 2743 (1976).

205 of the FLPMA, the Secretary of the Interior, acting in furtherance of BLM objectives, may exercise eminent domain over non-federal land primarily to gain *access* to public lands held under BLM's jurisdiction.⁸¹

As seen from the above history, the federal government has a number of avenues by which it may initiate condemnation proceedings in order to acquire private land for the purposes of habitat protection and species conservation. Therefore, it should serve as no surprise that such power is also conferred in the text of the Clean Water Act, discussed below.

II. CASE STUDY: COMPENSATORY MITIGATION IN VIRGINIA

The overarching goal of the Clean Water Act ("CWA") is "to restore and maintain the chemical, physical, and biological integrity of the Nation's waters." One avenue the CWA uses to achieve this goal is to make illegal the discharge of dredged or fill materials in the waters of the United States, unless a permit authorizing the discharge is first issued by the U.S. Army Corp of Engineers under section 404. The Corp has wide discretion. "In deciding whether to grant or deny a permit, the [Corp] exercises the discretion of an enlightened despot, relying on such factors as 'economics,' 'aesthetics,' 'recreation,' and 'in general, the needs and welfare of the people." The Corp may not issue a permit unless "steps have been taken which will minimize potential adverse impacts of the discharge [of fill material] on the aquatic ecosystem." In order to minimize adverse impacts, the Corp has adopted a three-pronged approach designed to ensure that there is no net loss of wetlands: avoidance, minimization, and compensatory mitigation.

Avoidance is the broadest prong and means selecting the "least environmentally damaging practical alternative." In the case of a road, for instance, avoidance might require the routing of a road along a ridgeline rather than through a valley to avoid wetland impacts. Minimization is the secondary-level approach and involves, once the least damaging broad alternative is selected, taking further steps within that approach to minimize impacts, generally through the use of project modifications or permit conditions. Ragain, using the example of a road, minimization might involve using a bridge over a waterway rather than a fill to minimize the impact on the wetlands over which the road crosses. The last prong is compensatory

^{81.} See 43 U.S.C. § 1715 (1976).

^{82.} Rapanos v. United States, 547 U.S. 715, 722 (2006).

^{83.} Fairbanks N. Star Borough v. U.S. Army Corps of Eng'rs, 543 F.3d 586, 589 (9th Cir. 2008).

^{84.} Rapanos, 547 U.S. at 721 (quoting 33 C.F.R. § 320.4(a)).

^{85.} Ohio Valley Envtl. Coal. v. Aracoma Coal Co., 556 F.3d 177, 202 (4th Cir. 2009) (quoting 40 C.F.R. § 230.10(d)).

^{86.} Id.

^{87.} Id.

^{88.} Id.

mitigation, designed to compensate for, or offset the impact of, wetlands impacts that are unavoidable after application of the first two prongs.

A. The Compensatory Mitigation Requirement

Compensatory mitigation is designed to force those impacting wetlands to both consider whether or not it is possible to avoid those impacts and, if so, to do so. If it is not possible to avoid impacts, compensatory mitigation is the alternative to ensure no net loss of wetlands. Example 19 Compensatory mitigation provides an offset to environmental costs that result from the unavoidable impacts of permitted activities after the other methods of reducing the impact (avoidance and minimization) have already achieved their maximum effect. In other words, mitigation is required to compensate "for the aquatic resource functions that will be lost as a result of the permitted activity."

The compensatory mitigation rule has several stated goals, including setting standards to ensure that compensatory mitigation projects meet nationally consistent and science-based standards. 92 Additionally, the rule is designed to

make watershed-based decisions on siting and suitability of proposed mitigation projects . . . [establish] a clear understanding of the requisite components of a complete and approvable mitigation plan . . . [refine] long-term monitoring requirements . . . [establish] tools defining success and failure, and clarification of the need for long term post-construction management or mitigation areas . . . [and, reinforce] of the traditional 'avoid, minimize, compensate' requirements of § 404 by requiring documentation of this process by permit applicants.⁹³

Options for compensation include, "restoration, enhancement, establishment, and in certain circumstances preservation." Restoration is the preferred technique for compensating for wetland loss because "the likelihood of success is greater and the impacts to potentially ecologically important uplands are reduced compared to establishment, and the potential gains in terms of aquatic resource functions are greater, compared to enhancement and preservation." Though compensatory mitigation may take place on public land, credit for public-land mitigation must be a result

^{89. 40} C.F.R. § 230.93(a)(1) (2008).

^{90.} *Id*

^{91.} Basinkeeper v. U.S. Army Corps of Eng'rs, 894 F.3d 692, 699 (5th Cir. 2018).

^{92.} Wetlands Mitigation Defined, in Envtl. Sci. Deskbook § 9:52 (2019).

^{93.} Id.

^{94. 40} C.F.R. § 230.93(a)(2).

^{95.} Id.

of the "resource functions provided by the compensatory mitigation project, over and above those provided by public programs already planned or in place." In other words, if a National Forest is already protecting a stream in its natural state, no mitigation credit may be generated by continuing to preserve that stream or taking any other action that does not restore, enhance, or establish wetlands.

The final rule provides three primary types of compensatory mitigation permitted to satisfy obligations under a permit.⁹⁷ Those three are: mitigation banks, in-lieu fee programs, and permittee-responsible mitigation.⁹⁸ The rule creates a hierarchy of the three types, with the use of mitigation banks being preferred over in-lieu fee programs and in-lieu fee programs being preferred over permittee-responsible mitigation.⁹⁹

There are several reasons why the hierarchy exists. For instance, mitigation banking is preferred because it helps reduce the risks and insecurity associated with permittee-responsible mitigation. This is true because of the "scientific management, large scale, and financial security provided within mitigation banks." These factors are seen as relieving some of the uncertainty of success associated with permittee-responsible mitigation and preventing temporal loss of functions during the time between when the loss is incurred and when the permittee-responsible mitigation is complete. The final rule provides that mitigation banks "typically involve larger, more ecologically valuable parcels, and more rigorous scientific and technical analysis, planning and implementation than permittee-responsible mitigation." These justifications are also true for in-lieu fee programs.

Between mitigation banking and in-lieu fee programs, however, a preference still exists for mitigation banking because "development of a mitigation bank requires site identification in advance, project-specific planning, and significant investment of financial resources that is often not practicable for many in-lieu fee programs." Additionally, mitigation banks are not permitted to issue credits prior to completion of the compensatory mitigation for which they are issued, while in-lieu fee programs may accept fees for compensatory mitigation before the actual mitigation is done. This

99. *Id.* § 230.93 (b)(2); *see also* Pioneer Reserve, LLC v. United States, 128 Fed. Cl. 483, 486 (2016), *aff* 'd, 690 F. App'x 687 (Fed. Cir. 2017) ("Within these three alternatives, the Corps has expressed a hierarchical preference, with mitigation banking considered the most preferable, in-lieu fee providers the second most preferable, and permitee responsible mitigation the least preferable option."). For a more in-depth discussion of the primary types of compensatory mitigation permitted, *see infra* Sections II.A.1–3.

^{96.} Id. § 230.93(a)(2).

^{97.} Id. § 230.93(b).

^{98.} Id.

^{100. 40} C.F.R. § 230.93(b)(2).

^{101.} Basinkeeper v. U.S. Army Corps of Eng'rs, 894 F.3d 692, 699-700 (5th Cir. 2018).

^{102. 40} C.F.R. § 230.93(b)(2).

^{103.} Id.

^{104.} Id.

creates a temporal issue that is detrimental, at least temporarily, to the nonet-loss goal of the compensatory mitigation system. 105

Despite the hierarchy, the permit-issuer retains significant latitude to determine which method is most appropriate, or even possible, in any given situation. On Siderations when determining what compensatory mitigation will be required include "the likelihood for ecological success and sustainability, the location of the compensation site relative to the impact site and their significance within the watershed, and the costs of the compensatory mitigation project."

Additionally, the rule directs that mitigation take place in the same watershed as the impact.¹⁰⁸ The primary reason for this requirement is to locate the mitigation where it is "most likely to successfully replace lost functions and services."¹⁰⁹

1. Mitigation Banks

A mitigation bank consists of wetland areas that have been purchased by an entity desiring to create mitigation "credits" that can then be purchased by projects needing these credits to satisfy a compensatory mitigation requirement. The wetlands are restored, established, enhanced, or preserved in accordance with regulations prior to credits being issued. Privately-sponsored compensatory wetland mitigation banks have generally been shown through private and government sponsored research to be the most effective means of providing successful compensatory wetland mitigation. The Army Corps of Engineers maintains a system to keep track of mitigation banks and credits available from each bank. This system is known as RIBITS, the Regulatory In Lieu Fee and Bank Information Tracking System. This system may be used by regulators to establish the availability of credits for individual projects.

It is important to note that the mitigation banking system is a free market system. No government regulations set the value of a credit in any

^{105.} See generally id. § 230.93.

^{106.} Id. §§ 230.93 (a)(1), (b)(2).

^{107.} Id. § 230.93 (a)(1).

^{108.} Id. § 230.93 (c)(1).

^{109.} Id.

^{110.} Compensatory Mitigation Factsheet, EnVTL. PROT. AGENCY, https://www.epa.gov/sites/production/files/2015-08/documents/compensatory_mitigation_factsheet.pdf [https://perma.cc/NRU3-6RH8].

^{111.} *Id*.

^{112.} Mitigation Banks under CWA Section 404, ENVTL. PROT. AGENCY, https://www.epa.gov/cwa-404/mitigation-banks-under-cwa-section-404 [https://perma.cc/PV9P-TOA9].

^{113.} Pioneer Reserve, LLC v. United States, 128 Fed. Cl. 483, 485 (2016), aff'd, 690 F. App'x 687 (Fed. Cir. 2017).

^{114.} Id.

^{115.} Id.

particular watershed. Instead, the mitigation bank sponsor and the purchaser negotiate the price of the credit. 116

Some jurisdictions have, by statute, authorized state agencies to use eminent domain to create mitigation banks. For instance, Texas

Additionally, some jurisdictions have, by statute, authorized state agencies to use eminent domain to take private property for compensatory mitigation, regardless of whether or not property is intended to be part of a mitigation bank. In the case of Virginia, this power is authorized with certain restrictions. The property taken by eminent domain must be in the same physical location as the related project, and the governing body of the locality must consent to the condemnation for the purpose of compensatory mitigation. Note that this code section does not apply to the use of eminent domain by the Department of Highways in Virginia, which is the subject of the case study within this article. The Department of Highways is authorized to use eminent domain by another statutory section that neither expressly authorizes nor restricts its use for eminent domain.

However, the mitigation banking and credit system, though the preferred method under the Clean Water Act, is not perfect:

By embracing mitigation banks as the preferred means of compensatory mitigation, federal law and policy arguably have encouraged destruction of natural wetlands. Mitigation banks have created a system by which developers can easily satisfy compensatory mitigation obligations without thinking deeply about the development project's impact on wetlands. Although mitigation banking is desirable because it purportedly protects wetlands before §404 permits are

117. Tex. Nat. Res. Code Ann. § 221.021.

^{116.} *Id*.

^{118.} Va. Code § 15.2-1907.1.

^{119.} See id. (as to condemnation by cities, towns, and counties); Va. Code § 25.1-109 (as to condemnation by the Commonwealth and other political subdivisions).

^{120.} See Va. Code § 25.1-109 (2005).

^{121.} See generally Va. Code § 33.2.

issued, scientific studies have shown that mitigation banking often falls flat as a conservation tool. 122

2. In-Lieu Fee Programs

Like a mitigation banking, in-lieu fee programs also allow projects to pay for compensatory mitigation rather than completing it themselves. In-lieu fee programs differ from mitigation banks in that the sponsor, which may be a government agency or a non-profit organization, is not required to complete the mitigation before accepting the fee and granting credit to the project. ¹²³ Instead, the fees collected from many projects are pooled together and used to fund mitigation projects. ¹²⁴ "In-lieu fee projects typically involve larger, more ecologically valuable parcels, and more rigorous scientific and technical analysis, planning and implementation than permittee-responsible mitigation." ¹²⁵ Additionally, these programs "devote significant resources to identifying and addressing high-priority resource needs on a watershed scale, as reflected in their compensation planning framework." ¹²⁶

3. Permittee-Responsible Mitigation

Permittee-responsible mitigation is the final and least-preferred method of compensatory mitigation. The project permit holders themselves perform the acts that restore, establish, enhance, or preserve wetlands after the permit is issued. 127 One issue with using permittee-responsible mitigation is the competing interests the permit must necessarily resolve. On one hand, the permittee must comply with the permit. On the other hand, however, the permittee must also minimize costs. Add these likely conflicting interests to the generally lower level of scientific and technical expertise that a permittee is likely to have as compared to the sponsor of a mitigation bank or in-lieu fee program. It is clear to see why, of the three types permitted under the Act, "permittee-sponsored mitigation historically has been problematic."128

B. Recent Changes to Virginia's Limits on Eminent Domain

Following the Supreme Court's controversial decision in *Kelo v. City* of *New London*, ¹²⁹ which greatly expanded the meaning of a public purpose

^{122.} R. Kyle Alagood, *The Mythology of Mitigation Banking*, 46 Envtl. L. Rep. 10200, 10206 (2016).

^{123.} ENVTL. PROT. AGENCY, supra note 112.

^{124.} *Id*.

^{125. 40} C.F.R. § 230.93.

^{126.} Id.

^{127.} ENVTL. PROT. AGENCY, supra note 112.

^{128.} Ia

^{129.} Kelo v. City of New London, 545 U.S. 469 (2005).

under takings law, state legislatures acted swiftly and with near-complete unanimity in rejecting the Court's new threshold for constitutional takings. On April 4, 2007, the Virginia state legislature adopted House Bill 2954, which began by stating affirmatively, "The right to private property being a fundamental right, the General Assembly shall not pass any law whereby private property shall be taken or damaged for public uses without just compensation." ¹³⁰ In defining what constitutes a "public use," the legislature limited the term's applicability to the following scenarios:

(i) the property is taken for the possession, ownership, occupation, and enjoyment of property by the public or a public corporation; (ii) the property is taken for construction, maintenance, or operation of public facilities by public corporations or by private entities provided that there is a written agreement with a public corporation providing for use of the facility by the public; (iii) the property is taken for the creation or functioning of any public service corporation, public service company, or railroad; (iv) the property is taken for the provision of any authorized utility service by a government utility corporation; (v) the property is taken for the elimination of blight provided that the property itself is a blighted property; or (vi) the property taken is in a redevelopment or conservation area and is abandoned or the acquisition is needed to clear title where one of the owners agrees to such acquisition or the acquisition is by agreement of all the owners. 131

In 2012, the Virginia legislature proposed even greater limitations on the state's ability to exercise its power of eminent domain. These proposed changes were presented to Virginia voters in the form of a referendum. The measure, known as Amendment 1, would amend Article I, Section 11 of Virginia's Constitution to prohibit the taking of more private property "than *necessary* to achieve the stated public use." The language proposed represented a clear response to the Supreme Court's prior decision in *Kelo*. Not surprisingly, the amendment passed with overwhelming support, entering into effect on January 1, 2013. 133

^{130. 2006} Va. H.B. 2954 § 1., codified at Va. Code § 1-219.1(A) (2007).

^{131.} *Id*

^{132.} Proposed Const'l Amendment 1, COMMW. OF VA. (adopted Nov. 6, 2012) (included in VA. CONST. art. I, § 11) (emphasis added).

^{133.} See VA. CONST. art. I, § 11.

C. Applying the Necessity Clause to Compensatory Mitigation

The Corridor Q highway project is designed to provide a much-needed, limited-access highway to an area of Southwest Virginia desperately in need of improved transportation. ¹³⁴ Because of the rugged topography of the area, much of the route of the road must be constructed through the use of alternating mountain road cuts and valley fills. The valley fill sections of the roadway unavoidably destroy intermittent and perennial streams in the valleys filled and create the need for compensatory mitigation under the Virginia Department of Transportation's permit to construct the roadway. ¹³⁵ The Department has satisfied this requirement, at least in part, through the use of eminent to domain to acquire property on which to conduct permittee-responsible mitigation. This use raises two possible constitutional challenges: necessity and location.

1. Necessity

Necessity is an issue because the clause contained in Virginia's Constitution limits eminent domain to only so much property as is necessary to achieve the public purpose. The public purpose here is clear: building a highway is a classic use of eminent domain power and, in fact, is expressly authorized by statute in Virginia. The more complicated question, in light of Virginia's Constitution, is whether or not the property taken for compensatory mitigation is *necessary* to achieve the public purpose of building the highway. The easy answer to this complicated question is that, yes, of course it's necessary if it's required by the permit. The less easy answer, however, takes a stricter view of the necessity clause. If the Department could have used a mitigation bank or in-lieu fee program to

^{134.} See Route 460 Connector Phase II, VA. DEP'T OF TRANSP., https://www.virginiadot.org/projects/bristol/route_460_connector_- phase_ii_new_construction_buchanan_county.asp [https://perma.cc/H6CS-Z3U6]; see also U.S. Route 121 and U.S. Route 460 Corridor Q Map, VA. DEP'T OF TRANSP., available https://www.virginiadot.org/projects/resources/CoalfieldsExpressway/Map_US_Route_121_and_US_Route_460_Corridor_Q_as_of_Feb_2019.pdf [https://perma.cc/84TG-8V6Q].

^{135.} There is debate about whether or not compensatory mitigation is an effective tool in mitigating the impact of valley-fill type steam destruction. Though dealing with valley fill from mountaintop mining rather than road construction, the following source informs this issue. The mechanics of valley-fill for mountaintop removal mining and valley-fill for road construction in areas of continuous steep topography are similar. See Lucy Allen, Making Molehills Out of Mountaintop Removal: Mitigated "Minimal" Adverse Effects in Nationwide Permits, 41 Ecology L.Q. 181, 190 (2014) (stating that, in the context of valley-fill stream replacement, "any streams created are unlikely to support the same types of ecosystems as the streams that were filled with overburden. Finally, valley fill often destroys ephemeral and intermittent streams, but the streams created are often perennial streams. These two steam types support distinct ecosystems, and swapping one for the other causes permanent loss of certain organisms from that area").

^{136.} See supra Section II.B.

^{137.} See generally Va. Code §§ 33.2-1030, 33.2-1032.

satisfy its compensatory mitigation requirements rather than eminent domain, does the necessity clause obligate it to do so? After all, if a mitigation bank or in-lieu fee program is a possibility and would not require the use of eminent domain, doesn't using eminent domain to conduct permittee-responsible mitigation lead to the unavoidable conclusion that more property than is necessary is being taken? The preference under the final rule for mitigation banks and in-lieu fee programs over permittee-responsible mitigation gives further strength to this argument.

In the case of the Corridor Q project, the issue is even more complicated because no mitigation banks or in-lieu fee programs are available in the Big Sandy Watershed in which the project is located. The Department has, however, established its own mitigation banks in several other watersheds within Virginia. Private and non-profit banks and in-lieu fee programs are available in nearly all watersheds within the Commonwealth other than the Big Sandy. Should the Department be required to establish a mitigation bank if private and non-profit options are not available, rather than use eminent domain?

2. Location

Another issue with using eminent domain power to satisfy compensatory mitigation requirements is that the location of the property taken is not dictated by the location of the project. Generally, when a project—whether highway, utility, or other public need—requires property to be taken by eminent domain, the clear needs of the project dictate the location of the property to be taken. If the highway needs an access ramp or drainage pond or the utility needs a right of way, the location of the property needed is determined by needs identified and directly related to the location of the project. With compensatory mitigation, this is not necessarily the case. The location of permittee-responsible mitigation, while usually required to be in the same watershed, is not dictated by the location of the project. A watershed can cover many hundreds of square miles. This disconnect between the direct and unavoidable property needed by the project site and the potentially remote property that could be used for compensatory mitigation creates a cloud over the process. The selection of a location could, in the best instance, be seen as arbitrary and, in the worst instance, be seen as motivated by corruption or other factors unrelated to the project. Land or a conservation easement could almost certainly be purchased on the open

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^{138.} The Virginia Department of Transportation has established the following mitigation banks within Virginia: Eagle Rock; Goose Creek; Great Oaks; Mattaponi; Mountain Run; and Nottaway River. The service areas for these banks cover the following watersheds, respectively: Upper-James; Southeastern Virginia and Eastern Shore Tidal Wetlands; Northern Potomac; York; Upper-Rappahannock; Chowan. See Regulatory In-Lieu Fee and Bank Information Tracking System, available at https://ribits.usace.army.mil/ribits_apex/f?p=107:2 [https://perma.cc/YM44-7RJJ].

market at some location within the subject watershed, avoiding the cloud altogether.

Using eminent domain in such an instance is much less supportable and far likelier to provoke public dissent than situations where the direct needs of the project dictate the location of property taken.

III. CONCLUSIONS

From the above review of the of the historical and present use of eminent domain to achieve environmental goals, I draw four broad conclusions:

A. Continuing Importance of Preservation

The preservation of wetlands and the environment in general should remain a national priority. The United States has lost enormous areas of wetlands. Wetlands support biodiversity and provide ecological functions that simply are not replaceable. For this reason, it is critical that regulations designed to maintain the quantity and quality of our wetlands are not compromised.

B. Compensatory Mitigation is a Necessary, if Imperfect, System

Compensatory mitigation is not a perfect system. It attempts to create a net zero impact on the environment by replacing, enhancing, or preserving wetlands. Such a simple arithmetic exchange, however, is not possible, even when the ratio is increased above 1:1, as is often required. Improving the riparian zone of an existing creek will not truly offset the loss of an entire creek in another location, and to what extent it's possible or advisable for purposeful "improvement" to take place is also debatable.

^{139.} Thomas E. Dahl, *Wetlands Loss Since the Revolution, National Wetlands Inventory*, U.S. FISH & WILDLIFE SERV. (1990), https://www.fws.gov/wetlands/Documents%5CWet lands-Loss-Since-the-Revolution.pdf [https://perma.cc/M5VN-VX2E] (indicating that 22 states have lost over 50 percent of their original wetlands and that 10 states have lost over 70 percent between the revolution and the 1980's).

^{140.} The Virginia Department of Environmental Quality requires a 2:1 ratio: two acres of mitigation for every one acre of impact for unavoidable impacts to forested wetlands. Other ratios exist for other types of wetlands, often in excess of 1:1. *See Mitigation*, VA. DEP'T OF ENVTL. QUALITY, https://www.deq.virginia.gov/Programs/Water/WetlandsStreams/Mitigation.aspx [https://perma.cc/U2XN-OR8V].

^{141.} See Dave Owen, Little Streams and Legal Transformations, 2017 UTAH L. REV. 1, 41 (2017) (quoting Martin W. Doyle & F. Douglas Shields, Compensatory Mitigation for Streams Under the Clean Water Act: Reassessing Science and Redirecting Policy, 48 J. AM. WATER RESOURCES ASS'N 494, 495 (2012)) ("The balance of published evidence . . . suggests that current practices of stream restoration . . . cannot be assumed to provide demonstrable physical, chemical, or biological functional improvements.").

Additionally, compliance with the Act can create a perceived efficacy that may not actually exist. It is natural, when you have fully complied with an environmental law and received the approval of a government agency, to believe you have done what is necessary to ensure that a project's impact on the environment has been minimized. This could cause project managers to think less about the other impacts of a project.

Despite the truth of the preceding paragraphs, the compensatory mitigation requirements of the Clean Water Act serve a critical function. They force project developers to think about what otherwise may not even be a consideration. The avoid-minimize-compensate system of the CWA does force consideration of the first two prongs before compensation is even addressed. This forced analysis may actually be the most valuable part of the system as a whole. Therefore, as part of a larger system, compensatory mitigation is a necessary, if imperfect, part. Additionally, improvements in the underlying science and the resulting compensatory actions are being made constantly, which, in theory, should result in increasing effectiveness over time. He was a critical function.

C. Property Rights Are Fundamental to Our System of Law and National Identity

Property rights, specifically the right to exclude others from your property, are some of the most sacred tenets of U.S. law. 144 Eminent domain is one of the most direct affronts to this right. Most people will recognize the necessity of having an eminent domain system in general, but few will feel that it is justified when their own land is taken. As the Supreme Court has stated: "Individual freedom finds tangible expression in property rights." 145 In other words, ownership of real property and the right to exclude others from using or taking that property for their benefit is a core belief which has been, and should continue to be, zealously protected by the law.

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^{142.} See, e.g., id. at 41–42 (2017) ("[A]t worst, we have traded a circumstance in which stream impacts occur and are not mitigated at all for one in which those impacts occur and are partially mitigated.").

^{143.} *Id.* ("[R]estoration science also is evolving; even critics of existing practices have also offered ideas about how stream restoration might be done better. And the Corps and the EPA have been receptive to those new ideas.").

^{144.} See, e.g., Kaiser Aetna v. United States, 444 U.S. 164, 176 (1979) (stating that the right to exclude is "one of the most essential sticks in the bundle of rights that are commonly characterized as property"); JOSEPH W. SINGER, PROPERTY LAW: RULES, POLICIES, AND PRACTICES xxxix (5th ed. 2010) (stating that "most scholars agree that the right to exclude is either the most important, or one of the most important, rights associated with ownership."); Thomas W. Merrill, *Property and the Right to Exclude*, 77 NEB. L. REV. 730 (1998) ("[T]he right to exclude others is more than just 'one of the most essential' constituents of property—it is the sine qua non.").

^{145.} United States v. James Daniel Good Real Prop., 510 U.S. 43, 61 (1993).

D. We Must Use Caution When Utilizing Eminent Domain to Achieve Environmental Goals to Balance the Perceived Impact and Maintain Public Support

In order to avoid public backlash and to maintain support for important and needed environmental legislation, we should approach the use of eminent domain to satisfy environmental obligations with caution.

Protection and preservation of the environment will always challenge the competing interest of property owners to make whatever use they desire of their property. Environmental regulations, with good reason, create some restrictions in the scope of what property owners are free to do. Citizens may not without consequence, for instance, simply decide to utilize your property as an unregulated hazardous waste dump. Likewise, environmental regulations impose important restrictions and obligations on projects, both public and private. As explained above, these restrictions and obligations serve a clear purpose.

Both of these tenets meet when the government uses eminent domain power to advance an environmental goal. It both satisfies its own regulatory obligations and restricts, or eliminates, the ability of the property owner to use their property. This is not always a bad thing, and some element of force is almost certainly necessary if this intersection is not to result in a frequent stalemate.

Environmentalism through force, however, is a dangerous game. It is one thing to say that property owners may not place a hazardous waste dump on their property, but quite another to say that the property owner, because of environmental needs, may not have their property at all. The risk of public backlash is high. The echoes of the National Park takings are still strong in the Blue Ridge Mountains of Virginia. It would be a net loss to environmentalism as a whole if public backlash were to result in successful pressure on the legislature to weaken our nation's environmental laws.

For these reasons, I believe Virginia's constitutional approach, so long as it is applied strictly, provides an excellent means of balancing the competing needs described above without creating unnecessary public pushback. If Virginia's constitution is strictly interpreted to allow takings of only so much land as is truly necessary, and that same restriction applies to takings for environmental needs as well as other takings. Government actors requiring real property to meet an environmental need will necessarily have to exhaust all other options before resorting to eminent domain. This is exactly how it should be. Eminent domain should remain an option—because it is a necessity—but should only be utilized when it is, in fact, a necessity.