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UNIVERSITY OF DENVER STURM COLLEGE OF LAW

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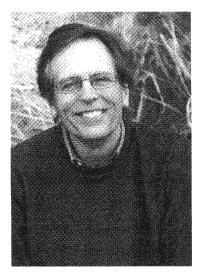
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FEDERICO ("FRED") CHEEVER 1957–2017



This issue of the Denver Law Review is dedicated to our beloved faculty advisor, Professor Fred Cheever, Having served as an advisor to our journal since 2004, Professor Cheever left a lasting impact on our organization and each of our members, both past and present. After he tragically passed away this summer, our Executive Board sought to honor his legacy. So, we asked some of his closest colleagues and a former student to write about their most cherished memories of Professor Cheever. These five tributes attempt to capture the life of a great professor, a devoted advisor, and one of the nicest persons you will ever meet. Of course, no amount of writing can adequately describe the essence or importance of Professor Cheever's life. And Professor Cheever's contribution to the Denver Law Review and the legal community cannot be summarized in five short tributes-but we tried our best. If you had the pleasure of knowing Professor Cheever, these stories will make you proud to have known him. Some stories may make you laugh or cry, and others may help you recall fond memories of him. If you did not have the opportunity to meet him, we hope these pieces allow you to picture the presence of his greatness—as a mentor, as a teacher, as a lawyer, and as a friend. Professor Cheever: we miss you greatly, now and every day.

- Denver Law Review, Volume 95

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IN MEMORIAM

FEDERICO ("FRED") CHEEVER (1957-2017)

BRUCE P. SMITH[†]

The Denver Law Review's first issue of Volume 95 honors the memory of Professor Federico ("Fred") Cheever, who served with great distinction on the faculty of the University of Denver Sturm College of Law from 1993 until his tragic passing in June 2017. As the following testimonials reveal, Fred had a colossal and life-changing impact on his many colleagues, students, and friends throughout the Rocky Mountain West and further afield. He was also a strong and long-standing supporter of the Denver Law Review, and it is thus particularly fitting that his legacy be honored in its pages.

During his twenty-four years on the University of Denver faculty, Fred contributed his immense talents and energies across the University's entire enterprise. As a law professor, he was an innovative interdisciplinary scholar, a brilliant and revered teacher, and a treasured colleague and friend. He was also a respected and influential mentor, particularly to students and alumni in the environmental and natural resources area. As the law school's Associate Dean for Academic Affairs from 2009 to 2013, he played a vital role in developing Denver Law's pioneering and highly successful experiential learning initiative. He also made significant and enduring contributions at the University level, co-founding (and later chairing) the University's Sustainability Council (in which capacity he promoted campus energy efficiency, environmentally-sound transportation methods, and waste reduction) and more recently serving as a member of the Chancellor's Enhancing Sustainability Task Force (which seeks to advance the University of Denver to a position of national leadership in campus sustainability). In the broader community, Fred served on the boards of the Rocky Mountain Mineral Law Foundation and Transportation Solutions, and he represented environmental groups in cases under the Endangered Species Act, the National Forest Management Act, the National Environmental Policy Act, and the Wilderness Act, among other environmental laws.

Having joined the University of Denver in July 2016, I had the privilege of sharing a faculty with Fred for only one year. But I felt that I had known him much longer and more deeply. In some respects, I had. At my prior institution, the University of Illinois at Urbana-Champaign, Fred was

[†] Dean and Professor of Law, University of Denver Sturm College of Law. An earlier version of this essay was delivered at a memorial service at the University of Denver on July 2, 2017.

the brilliant entry-level cross-disciplinary scholar who "got away"—a hugely promising job candidate, for whom the charms of the Illinois prairie simply could not trump his beloved Rockies. As a new dean, I relied disproportionately on Fred—for his wisdom, for his rock-solid institutional values, and for his incredible ability to understand the perspectives of others. (And I must confess that, on some days, the mere sound of his voice and laugh outside my office would draw me out, simply to be in the field of his magnetic presence.)

As a scholar, Fred possessed an uncanny capacity to recognize, understand, and transcend boundaries-legal boundaries, disciplinary boundaries, and natural boundaries. With respect to legal boundaries, he comprehended—perhaps better than any legal scholar of our Age—the ways that four distinctive bodies of law (public lands law, land use controls, conservation law, and environmental law) have worked together to shape the history and landscape of the Mountain West. In terms of disciplinary expertise, his reach was similarly breathtaking, ranging well beyond law into geology, ecology, botany, history, ethics, and literature. (Fred was as conversant with the Engelmann spruce, Gambel oaks, and Ponderosa pine as he was with the conservation easements that protected them.) And Fred possessed an unparalleled understanding of what he styled our "landscape of borders"-places where the pristine natural world rubbed up against the lived experience of humans-sites such as his beloved Roxborough State Park in Douglas County, Colorado, which he enjoyed hiking and about which he wrote so eloquently. (As Fred once wrote, in his marvelously understated way: "There is some quality about a sunny morning at Roxborough that I value . . . more than, say, a morning at a shopping mall.")¹

But unlike many lovers of the natural world, Fred also had the capacity to draw upon both idealism and realism. In some respects, it was this combination of passion and pragmatism that truly set his vision apart. My former colleague Eric Freyfogle, Swanlund Emeritus Professor at the University of Illinois, a coauthor with Fred on the inaugural casebook in the field of wildlife law,² and, like Fred, one of that field's most distinguished scholars, described Fred's distinctive vision this way:

As a wildlife scholar, Fred Cheever had few peers, largely because, better than others, he mixed vision, ethics, and passion with solid science [and] with a keen sense of the practical. What he saw and yearned for, what he labored long to bring about, was a world in which wildlife and people thrived <u>together</u>, forging and sustaining complex communities of life that, he hoped, might flourish for generations. We needed

^{1.} Professor Federico Cheever, Univ. of Denver Sturm Coll. of Law, *Toward a Bigger Picture: Law and Nature on the Wildland-Urban Border*, Lecture at Mercer University (Nov. 2005) (transcript available at http://www2.law.mercer.edu/elaw/cheever.html).

^{2.} DALE D. GOBLE, ERIC T. FREYFOGLE, ERIC BIBER, FEDERICO CHEEVER & ANNECOOS WIERSEMA, WILDLIFE LAW: CASES AND MATERIALS (3d ed. 2016).

humility and restraint to get there, Fred knew well, and he told us so. We also needed practical guidance for the path ahead, and he offered it, again and again. His hope and fine character infuse his abundant scholarship. [And] they will live on together.³

Like many, I have struggled to come to terms with this incredible loss. Grief takes us down different paths. My journey led me to Henry David Thoreau—a writer whom Fred admired, whom he quoted, and with whom he shared much in common. A love of nature, to be sure. But also a passion for books; a penchant for bread making; a preference for human locomotion over mechanized transportation; and a conviction that we all exist on this earth to effect beneficial and enduring change.

In the concluding chapter of *Walden*, Thoreau reflects on the lessons learned from his grand "experiment"—his two years at Walden Pond, by the edge on an extensive New England woods, against the backdrop of the Green Mountains. He distilled his learning this way:

I learned . . . that if one advances confidently in the direction of his dreams, and endeavors to live the life which he has imagined, he will meet with a success unexpected in common hours. He will put some things behind . . . [but] he will live with the license of a higher order of beings.⁴

Like Thoreau, Fred Cheever "lived the life that he imagined"—one distinguished by conviction, courage, idealism, pragmatism, empathy, and love. Within the environmental and natural resources community, throughout the Rocky Mountain West, and for the students, alumni, faculty, and staff of the University of Denver whose lives he graced, he will always be remembered amongst the <u>highest</u> order of beings.

3. E-mail from Eric Freyfogle, Swanlund Emeritus Professor, Univ. of Ill., to Bruce Smith, Dean, Univ. of Denver Sturm Coll. of Law (July 1, 2017, 4:35 MDT) (on file with author).

^{4.} HENRY DAVID THOREAU, WALDEN 303 (Beacon Press 1997) (1854).

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LOYAL FRIEND, DISTINGUISHED SCHOLAR, AND DEVOTED CONSERVATIONIST: THE LEGACY OF FRED CHEEVER

SUSAN DAGGETT[†] & JUSTIN PIDOT^{††}

When news of Fred Cheever's death spread among his peers in the legal academy, the outpouring of sentiment was swift and sustained. He had a broad reach. He offered himself boundlessly. The stories related by friends and colleagues across the country, both those who had known Fred for years and those who had met him only once, affirm our own experience of Fred. He lived an examined, intentional life. His curiosity knew no limit. He carefully chose the things he valued, and lived those values every day.

Summing up a life as rich and multifaceted as Fred's is impossible. Instead, we offer reflections from the two of us on themes that we saw in our interactions with Fred. These reflections are not all profound; some try to capture Fred's playfulness. Our friendships with Fred differed in duration and context. Yet in talking together about Fred, how he affected us, and how we will try to carry on where he left off, these themes emerged. We offer them here in hopes that they will kindle recollections and reflections among others who were graced by Fred's presence.

Physical Place

JUSTIN. Upon meeting Fred, I could sense his palpable love of the history of the places that were important to him. I first encountered him when I came to Denver to interview for a teaching job. At the conclusion of a day's worth of interviews, Fred was tasked with driving me to and from a dinner with several people who would become my future colleagues. The dinner was pleasant, although because it came at the end of a long day, I don't specifically remember what we talked of. I can't forget, however, the delight Fred took at touring me through downtown Denver on his way to drop me off afterwards. The fifteen-minute drive from Larimer Street to the hotel turned into nearly an hour as we meandered by buildings and public art. I saw the Denver Gas and Electric Building, the giant blue bear peering into the convention center, the alien-like dancing figures on Speer Boulevard, the downtown light rail stations, the Tenth Circuit courthouse, city hall, and the capitol. I'm sure there were more. After each destination, he would exclaim that there was one more sight I just had to see. I particularly remember him describing the manner by which the federal land survey shaped downtown; with development prior to the survey running parallel to the river, and that occurring subsequently

[†] Executive Director, Rocky Mountain Land Use Institute.

^{††} Associate Professor, University of Denver Sturm College of Law.

according to the cardinal directions. I remember Fred commenting that the resulting forty-five-degree shift in perspective running through the city remains a testament to the relationship between early federal efforts to map the West and the built environment.

SUSAN. Fred's love of the West was a defining, and carefully cultivated, aspect of his being. Raised mostly in New York (with a stint at boarding school in New England), he struck out for college in California and never looked back. He adopted the West as his chosen homeland, and loved this place—and particularly its rivers—with a passion. He spent a lifetime studying its history and culture, exploring its remote corners, fighting to protect its precious resources, and teaching others about the laws that govern it. One of the hallmarks of his early career as a public interest litigator for Sierra Club Legal Defense Fund (SCLDF) (later Earthjustice) was his work to protect Western rivers and the ancient desert fish that once thrived there. My earliest memories of him go back almost thirty years to a rafting trip that he helped lead for young law students interning at SCLDF, part of his quest to share the enchantments and lessons of our Western landscapes with other newcomers to the region. It is no surprise that, when planning a celebration of family milestones, he was drawn to the Green River as a place of refuge and inspiration, and that his preferred family vacation involved rafting into the most remote reaches of Colorado. I hope he recognized his own role and enduring legacy in helping to protect that particular place for future generations.

Scholarly Commitment

JUSTIN. There is a tradition among law professors that the first footnote in an article includes a thanks to those who read your work. Other academic disciplines have similar traditions. I routinely thank the handful of people to whom I have sent a working draft. Reflecting upon this practice, I see how thoroughly it undervalues some vital contributions, including those of Fred. Fred received his share of thanks in my footnotes, representing the occasions I sent him my prose and asked him to share his thoughts. But I often didn't avail myself of this opportunity, although I knew he would never have refused to read my work. For every paper I wrote, however, and for many ideas that I have not yet written, at some point I would spring into his office with cluttered thoughts and an inkling of an academic article I might like to pursue, or a case I might like to bring, or something I might like to write for the popular press. And in a calm, supportive, and ever curious fashion, Fred would drop whatever other work he was doing and help me sort myself out. Invariably, I would leave with a list of books or articles to read-and more importantly-Fred would impart to me some of his vast knowledge and wisdom.

SUSAN. Fred's academic scholarship is legendary. He was brilliant. And prolific. And a real leader in thinking about land conservation. For me, however, he was a mentor and teacher, helping me to find my way in the academic world. We first met when I was a summer intern in the Denver office of SCLDF. A guarter-century later he recruited me to the University of Denver (DU) to run the Rocky Mountain Land Use Institute. More advocate than academic, I needed a lot of guidance in how to think about my new role, how to develop a course curriculum, and how to teach others about land use in the West. He was there for me every step of the way, offering advice when I asked for it and providing a sounding board whenever I needed to brainstorm or think out loud about some (potentially ill-advised) new idea. When I wondered how to handle a particularly vexing problem. I turned to Fred. When I was tempted to dream big about some new project. I turned to Fred. And when I wanted to complain about a disappointment, I turned to Fred. Sometimes we went for coffee. More often than not, he lingered outside my door on his way to or from his office, sometimes multiple times a day. He always had time to listen, he asked the perfect questions to help me find the right decisions for myself, and he offered encouragement and support unconditionally. Although the quintessential scholar himself, one of his real gifts was in cultivating the scholar in others.

Living Sustainability

JUSTIN. Fred's biking outfit was, for me, one of the most visible manifestations of his dedication to sustainability. Most mornings, Fred would arrive at the law school clad in spandex, a biking shirt, and a bit of sweat. Before heading to his office, he would often take a lap around the fourth floor, seeing who was about and greeting those he happened upon with a contagious smile and often an invitation to talk about, well, just about whatever occupied the mind of his conversant. Sometimes these conversations lasted. All the while law students scurried by a bit perplexed by Fred's attire. While I hesitate to imbue this almost-daily ritual with an outsized importance, it reminded me, and I think others too, that the grand ideas we have about sustainability have humbler but equally important counterparts. Fred's view of sustainability was not dogmatic. It allowed both for vegetarianism as a means of reducing our impact on the planet, and an occasional burger. He sought to transform the world, and us, his fellow travelers, through acceptance and compassion, not judgment or shame.

SUSAN. More than just about anyone I know, Fred lived his values. His passion for protecting the West translated into personal routines centered on gardening, cooking, biking, and living lightly on the planet in countless other ways. That passion drove him to advocate relentlessly (some would say) for sustainability at DU. He founded the Sustainability Council a decade ago to serve as a vehicle for students, faculty, and staff to come together and to push the university to embed sustainability into its operations, and he was the Sustainability Council's most ardent member, serving as chair for many years. In that capacity, I watched him use his advocacy skills to great effect, doggedly pushing the DU Trustees and administration to step up their commitment to sustainable practices. He was charmingly persuasive most of the time, using his winning smile and soft humor to bring others around. However, he didn't hesitate to adopt a sharp tone in his critique, when necessary, and he famously and frequently voiced concerns on behalf of others with less power. His final accomplishment—and one that I'm sure meant the world to him—was getting a commitment from the DU Board of Trustees, the day before he died, to step up DU's efforts on sustainability.

Our lives are richer for knowing Fred. He left us better teachers, scholars, mentors, friends, and citizens of the world. Fred had an unflagging faith that conversation and connection could lead to change. In discussing thorny questions about wilderness areas, and what it means to leave nature untouched in an era where humans have reshaped the natural world, he once wrote that "[f]or years, I have shied away from discussions of the meaning of wilderness. I am not alone in doing this. I feared that the elusiveness of wilderness may lead good-hearted skeptics to conclude that it was an illusion, a sham, a sanctimonious pretext for depriving federal land management agencies of discretion. However, . . . I decided that I have been wrong to avoid the subject. We need to talk about wilderness far more than we have."¹ Fred had a way with words. He believed in their power. We will keep faith with that vision.

1. Federico Cheever, Talking About Wilderness, 76 DENV. U. L. REV. 335, 336-37 (1999).

FRED CHEEVER-WESTERN PROBLEM SOLVER

GREGORY J. HOBBS, JR.[†]

SIMPLE TALK

Spilling themselves in the sun bluebirds wing-mention their names all day. If everything told is so clear a life, maybe the sky would come, maybe heaven; maybe appearance and truth would be the same. Maybe whatever seems to be so, we should speak so from our souls, never afraid, "Light" when it comes, "Dark" when it goes away.

William Stafford, western poet¹

T 4 . 2 .

Simply speaking, Fred Cheever devoted his most observant work to the creatures, peoples, and landscapes of the West. A problem solver, he was never afraid to lead from his soul and his intellect in law practice, teaching, writing, and in helping students navigate into the profession and the communities they would serve.

It's tragic but fitting he passed before us in the late spring of the year 2017 on the Green River inside Dinosaur National Monument. Earlier in the year, he'd traveled to Patagonia with his beloved wife, Mary, celebrating in the hemisphere of the Southern Cross his Sixtieth birth year. With their daughters, Elizabeth and Laurel, in early June they launched into the Gates of Lodore running the traces of John Wesley Powell. They were heading downriver for Echo Park where the Green and Yampa Rivers join within Dinosaur.

THE CREATURES

As a lawyer with the Sierra Club Legal Defense Fund, Fred helped with a lawsuit leading to the 1994 critical habitat designation for conser-

 [†] Gregory J. Hobbs, Jr., a Justice of the Colorado Supreme Court from May 1, 1996, to August 31, 2015, served with Professor Cheever as Co-Director of the Environment and Natural Resources Program at University of Denver Sturm College of Law beginning in September of 2015.
 J. William Stafford, Simple Talk, in OREGON MESSAGE (1987).

⁹

vation of the endangered Colorado River fishes—the endangered razorback sucker, pikeminnow, humpback chub and bonytail chub.² The Green and Yampa Rivers are essential components of the fishes' habitat. Two years later as a University of Denver law professor in a 1996 law review article centering on its recovery provisions, Fred re-characterized the Endangered Species Act as a "problem-solving" statute, instead of the project-stopper others criticized the Act for being:

[A] new emphasis on the concept of recovery can help us reconceive the act in a way that better addresses the dynamics of extinction and reestablishes its role as a problem-solving law . . . The concept of recovery has provided the courts with an interpretive key, linking the terms of the Act with its purpose: the conservation of species and the ecosystems on which they depend.³

His 1996 law review analysis tapped familiarity with the upper Colorado River endangered fishes recovery planning process. ⁴ Commenced in the mid-1980s, this partnership brought the states of Colorado, New Mexico, Utah, and Wyoming together with federal agencies and water and environmental interest groups. Unprecedented in its big river system reach, this novel alliance focused on means to conserve and recover the fishes without presuming to rearrange the water allocations preserved to the states under the 1922 Colorado River Compact and 1948 Upper Basin Compact. The recovery-plan umbrella covered all existing depletions to river water plus an increment of additional depletions, subject to an annual finding of sufficient progress.

Primary measures evolved to include habitat restoration, operation of reservoirs for instream flows as well as their other uses, control of nonnative fish that prey on the endangered fish, design of water diversion devices for fish passage, and, when indicated, introduction of hatchery-bred natives to encourage sustainable populations in the wild. Adjustments to the program continued to occur through monitoring and responsive actions in consultation with the many interested participants.⁵

In a 2016 statement reflective of Fred's view of the Endangered Species Act, the U.S. Fish and Wildlife Service "remains convinced that the best chance for success, i.e., recovery, results with this collaborative Recovery Program."⁶

^{2.} Endangered and Threatened Wildlife and Plants; Determination of Critical Habitat for the Colorado River Endangered Fishes: Razorback Sucker, Colorado Squawfish, Humpback Chub, and Bonytail Chub, 59 Fed. Reg. 13,374 (Mar. 21, 1994) (codified at 50 C.F.R. pt. 17).

^{3.} Federico Cheever, The Road to Recovery: A New Way of Thinking About the Endangered Species Act, 23 ECOLOGY L.Q. 1, 10, 48 (1996).

^{4.} Id. at 70-71.

^{5.} See Noreen E. Walsh, FISH & WILDLIFE SERV., U.S. DEP'T OF THE INTERIOR, FINAL 2015— 2016 ASSESSMENT OF SUFFICIENT PROGRESS UNDER THE UPPER COLORADO RIVER ENDANGERED FISH RECOVERY PROGRAM IN THE UPPER COLORADO RIVER BASIN 41–45 (2016).

^{6.} Id. at 44-45.

THE PEOPLES

Not just once in his lifetime did Fred pull on the oars of history. In the early twenty-first century, he helped San Luis Valley descendants of Mexican land-grant settlers regain their valuable easements rights in a large tract of Sangre de Cristo mountain land Jack Taylor bought in 1960 and closed off to access. The descendants sued for rights of entry their ancestors exercised for over a hundred years. They lost in Colorado district court and the court of appeals.

A good argument before the Colorado Supreme Court must resonate in the facts and law of the case. The court welcomes amicus briefs, especially when they assist with the broader ramifications of the dispute and bring expertise to bear on the issues appealed. By then a nationally-recognized expert in real property law, Fred worked with the Hispanic Bar Association to craft influential amicus briefs in the two *Lobato* decisions the court issued.⁷

In *Lobato I*,⁸ the court had before it the meaning of an 1863 document written and recorded by Carlos Beaubien, owner of the grant.⁹ It confirmed rights of access to common lands of the Sangre de Cristo Grant to settlers receiving deeds to their farmsteads ("varas") on the grant: "[A]ll the inhabitants will have enjoyment of benefits of pastures, water, firewood and timber, always taking care that one does not injure another."¹⁰

A year later, Beaubien sold a large portion of the mountain tract to William Gilpin (who had just stepped down as Colorado's first Territorial Governor). The 1864 Beaubien-Gilpin agreement contained a condition confirming that "settlement rights before then conceded... to the residents of the settlements . . . shall be confirmed by said William Gilpin as made by him."¹¹ Finding the 1863 Beaubien document ambiguous about which lands these rights of access applied to, the court construed the Gilpin agreement to include the immense mountain tract he was purchasing.¹²

Chief Justice Mullarkey's opinion singled out the hefty assistance the amicus briefers brought to the court's work:

It would be the height of arrogance and nothing but a legal fiction for use to claim that we can interpret this document without putting it in its historical context... We agree with the amici. From the trial court findings, expert testimony, the documents associated with the grant, and a review of the settlement system under which Beaubien and the settlers were operating, we draw two conclusions. First, we conclude

^{7.} Lobato v. Taylor (*Lobato I*), 71 P.3d 938 (Colo. 2002); Lobato v. Taylor (*Lobato II*), 70 P.3d 1152 (Colo. 2003).

^{8. 71} P.3d 938.

^{9.} Id. at 946-47.

^{10.} *Id.* at 943.

^{11.} Id.

^{12.} Id. at 947, 949-50.

that the location for the settlement rights referenced in the Beaubien Document is the mountainous area of the grant on which the Taylor Ranch is located. Second, we conclude that Beaubien meant to grant permanent access rights that run with the land.¹³

The court relied on Colorado state law, not Mexican law, in giving effect to the Beaubien and Gilpin documents, as well as access on the mountain lands exercised by land grant settlers and their descendants for over a hundred years.¹⁴ Although the Mexican Government made the grant to Beaubien's predecessors to attract settlers, they moved into the upper San Luis Valley after the 1848 Treaty of Guadalupe Hidalgo.¹⁵ On April 10, 1852, Hispano settlers on the Sangre de Cristo grant commenced construction of the San Luis People's Ditch, which predates the 1861 creation of Colorado Territory and remains the oldest irrigation water right in Colorado in continuous use.¹⁶ The 1863 Beaubien and 1864 Gilpin documents followed the 1861 creation of Colorado Territory.

The Colorado Supreme Court's decision held in favor of three kinds of implied rights of access across a 77,000 acre stretch of the Taylor Ranch under Colorado law: a prescriptive easement, an easement by estoppel, and an easement from prior use for grazing, firewood, and timber.¹⁷ These are valuable "dominant" rights in subservient lands otherwise held in fee simple ownership. Such rights were absolutely essential to settlement of Colorado and the West. For example, they included irrigation ditch rights-ofway necessary for the diversion and conveyance of water from the streams across intervening public and private lands to its place of use.¹⁸ The San Luis farmers could not graze their animals on irrigated cropland without destroying critical food supplies, nor did the San Luis Valley's high alpine desert environment support forest growth for timber and firewood harvesting. Instead, they depended upon Sangre de Cristo forested mountain lands just as Beaubien and Gilpin knew they had to.¹⁹

Lobato II^{20} ruled that landowners enjoyed these access rights if settlement of their property occurred at least at the time of William Gilpin's

19. For an excellent in-depth analysis of a San Luis Valley Hispano settlement centered upon its acequia culture, see Gregory A. Hicks & Devon G. Peña, *Community Acequias in Colorado's Rio Culebra Watershed: A Customary Commons in the Domain of Prior Appropriation*, 74 U. COLO. L. REV. 387 (2003).

20. 70 P.3d 1152 (Colo. 2003).

^{13.} Id. at 947–48.

^{14.} See id. at 946.

^{15.} See id. at 946 n.4, 955.

^{16.} See id. at 952 n.9.

^{17.} See id. at 946.

^{18.} Lobato I cites the court's irrigation ditch right-of-way servitude case Yunker v. Nichols for the proposition that "water rights are necessary for enjoying land." Id. at 953 (citing Yunker v. Nichols, 1 Colo. 551, 554 (1872)). Lobato I goes on to explain that the law will imply grant of an easement for ditch construction, maintenance and use arising out of "pre-existing and higher authority of laws of nature, of nations, or of the community to which the parties belong." Id. (quoting Yunker, 1 Colo. at 554).

ownership.²¹ Fred was an expert in real property servitudes and easements. His heart must have flown like a bluebird when he read these two supreme court decisions, for he could see therein the handiwork of generations so clearly told, upheld.

THE LAND

Fred was an ardent student of the West's public lands—in particular the 14 million acres of national forest lands existing within the state of Colorado. His article about the 2002 Hayman wildfire southwest of the Denver metropolitan area, the worst in Colorado's history, explores its multiple causations: (1) Terry Barton's liability in starting it, (2) a long tradition of Forest Service fire-suppression policy, (3) climate change impacts, and (4) local land-use decisions allowing residential construction within the forest interface.²² This fire took a month to suppress, burned nearly 138,000 acres, destroying 133 homes, a commercial building, and 466 other structures; it was fortunate that no one died because of it.²³ This article is remarkable in both its content and tone, thoughtful without hurling invective at individuals and governments

At the outset, Fred gives credit to the expertise of Dr. Stephen Pyne, "[O]ur greatest chronicler of the historical and social aspects of wildfire."²⁴ "Fire," Fred says, "is one of the consistent forces shaping life on this planet. It is ubiquitous, powerful, frequent, and inevitable . . . many policy makers still desperately want fire to be unforeseeable."²⁵

A Forest Service employee, Barton set fire to a letter from her estranged husband, left the scene of the fire ring she had used thinking the letter was no longer burning, and soon turned back only to find the forest uncontrollably burning. She reported the fire, made up a story about discovering it, then recanted and admitted her role in igniting it. Convicted in state and federal court, she incurred six years in federal prison and a \$14 million restitution order for re-vegetation of the forest.

Fred questions why Barton stands alone as a foreseeable cause of the Hayman Fire: "Terry Barton's act was a catalyst that transformed reality, a summoning of forces. Her burnt letter was a necessary but certainly not a sufficient condition for what followed."²⁶ He points to other significant causal chains: "Climate change increased the probability of ignition outside the fire ring and the rapid spread of the fire. Forest Service fire suppression policy increased the fuel available to feed the fire... Residential development in the wildland urban interface dramatically increased the

^{21.} Id. at 1156.

^{22.} Federico Cheever, The Phantom Menace and the Real Cause: Lessons from Colorado's Hayman Fire 2002, 18 PENN. ST. ENVTL. L. REV. 185, 188, 191, 193–94 (2010).

^{23.} Id. at 185–86.

^{24.} Id. at 186.

^{25.} Id.

^{26.} Id. at 196.

damage the fire could cause."²⁷ He calls for balance in our perspective and actions. Forests must play a significant role in capturing carbon and wild-fire is a natural part of the life cycle of forests. While the U.S. Forest Service "has generally gotten the rap as the great hoarder of forest fire fuels[,]" the transformation of private land from farms and pastures to wooded subdivisions has added to the fuel load.²⁸

He urges us to rethink "[t]wo uniquely American conditions [that] distort our view."²⁹ The federal government is responsible for the forest and private land-use regulation is a matter of purely local concern.³⁰ Instead of invoking jurisdictional boundaries, we should act and work with each other as part of the same community. We have a responsibility "to modify human behavior in ways that will create a substantial likelihood of improving human welfare" and we have to stop "thinking about fire as the unforeseeable calamity or the curable disease rather than part of the fabric of life itself."³¹

We should look to our forested watersheds and interact with federal, state, and local authorities to cultivate remedial relationships implementing effective measures, instead of depending upon lawsuits for sorting out issues of damages or invoking sovereign immunity as a shield against their imposition.

CONCLUSION

This is vintage Fred Cheever, writing—teaching and out in this great land among us. He's about recovering our ability to problem-solve. We will miss him greatly, of course we will. But, his compassionate resolute way of doing his part and urging us on to ours shines in the light.

 ^{27.} Id. at 201.

 28.
 Id. at 204.

 29.
 Id. at 207.

 30.
 Id.

 31.
 Id. at 210.

FRED CHEEVER—THE DENVER LAW IDEAL

MARTIN J. KATZ[†]

Fred was a mythical figure at Denver Law. Truly. I arrived at the school in the fall of 2000, while Fred and his family were overseas on sabbatical. From the first day I arrived, people would say, "You have to meet Fred. He is the greatest." He was billed as the greatest mentor, the greatest teacher, the greatest scholar, and the most thoughtful addition to any endeavor we might be contemplating. As the accolades for Fred-in-absentia piled up, I became convinced that Fred did not actually exist; that he was a mythic hero created by my colleagues to describe their ideal of the law professor. And I bought into the myth. We should all aspire to those qualities.

Sure enough, Fred did exist. He returned to the law school one day, and poked his smiling face into my office to introduce himself. And I quickly understood why his colleagues loved and respected him so much. He was all they said he was, and more.

There is so much to say about Fred's contributions to our school. But I will focus on three.

First, he was an amazing mentor and friend. From the perspective of an individual faculty member, this was an incredible blessing. But from the perspective of our community, it is important to understand that Fred served these roles for so many of us. And by doing so, he set an example for all of us—a mythic ideal. At times when a colleague was in need, even if I felt overwhelmed with other obligations, Fred's example would often cause me to step up and help. It was infectious in the best of ways.

Second, Fred was often the glue that held our faculty together. Faculty politics can be intense (an understatement). Our law faculty is wonderful. They are smart and highly dedicated. But they can also occasionally be divided over issues that are extremely important to them and often to our school. On those occasions, it is sometimes easy to focus on the division and the rightness of one's cause. To make these debates healthy and constructive, rather than destructive, it is important to have a leader who subtly but steadfastly reminds us of our ideals and provides perspective on what is most important—including our common values and the bonds of our community. So often, Fred was that leader. I know that others will step up to play this role in his absence. But they will have big shoes to fill.

[†] University of Denver Chief Innovation Officer and Senior Advisor for Academic Innovation and Design, Former Dean of the Sturm College of Law, and Professor of Law.

Third, Fred was one of the best associate deans that I can imagine. As dean at the time, I feel amazingly lucky to have had the opportunity to work with Fred in this role. But Fred's impact went far beyond our small office. His work in this role had a positive and lasting impact on our school and on legal education across the nation.

His work as associate dean always began with humility, curiosity, and love. He continually sought to learn about every person, every job, and every system at the law school. He had long applied this curiosity in his scholarly work and in his voracious approach to reading. Yet, when he turned it to the law school, two great things happened. First, he understood the law school and its workings—its soul—in a way that few others have ever done. Second, he made the people who work and study here feel truly understood and appreciated. We always knew that we had a champion in Fred. He brought out the best in so many of us.

Fred's deep understanding of our school, combined with his unwavering commitment to fairness and excellence, resulted in some of the most thoughtful and innovative policies in the nation. For example, he constructed a workload policy that aligned our most important resource—our faculty's time and energy—with our values and our strategic plan. Instead of allocating teaching relief haphazardly, Fred's policy made sure that teaching relief went to those who had carried the highest teaching loads in prior semesters, those who were our most productive scholars and innovative teachers, and those who contributed most to our school through their service. The policy provided "Credit Hour Equivalents" or "CHEs" to these hard-working faculty members, which could be accumulated and later used for teaching relief. (We still joke that CHE stands for "Cheever Credits.")

This workload policy produced great benefits at our school. I believe that policy (in addition to Fred's enthusiastic support for our faculty and students) played a significant role in the progress our school made while he was associate dean. During that time, our faculty's scholarly productivity doubled, innovative course offerings proliferated, and we were able to offer a full year of experiential learning to every one of our students. These things could not have happened without Fred.

Upon seeing the accomplishments at our school, many deans across the country wanted to know our secrets. So often, the answer was an initiative that Fred had created. Because Fred believed in the power of open-source administration, he willingly shared his thoughtful ideas and policies with deans and associate deans across the country, and many U.S. law schools have now adopted similar policies. In this way, Fred not only helped our school; his legacy lives on in legal education in our country.

In all of these ways, Fred—though very real—lived the life of a mythical figure. He exemplified compassion, curious humility, excel-

lence, fairness, and a strong dedication to our community and the people who work and study in that community. At the personal level and at an institutional level, he made our lives so much better. I miss him.

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PROFESSOR FRED CHEEVER—BELOVED TEACHER AND TRUSTED ADVISOR

BRITTANY WISER[†]

I was deeply touched to find out that the *Denver Law Review* is dedicating its first issue to our beloved teacher and trusted advisor, Professor Federico Cheever, who passed away on June 10, 2017, while vacationing with his family in his home state of Colorado.

Professor Cheever was universally adored by his students. I am grateful that I had the opportunity to be one of them. From the moment Professor Cheever walked into my first-year Property class with a beaming smile on his face and an "I \checkmark Property" mug in his hand, the entire class was drawn to his compassionate demeanor and contagious enthusiasm for the law. At that moment, we knew nothing about adverse possession, easements, or the rule against perpetuities, however, we all knew one thing beyond a shadow of a doubt—by the end of the semester, we would love Property, too.

Sixteen weeks and one ten-hour take-home exam later, the class was even more enamored with our funny, brilliant, and humble professor than before. It was blatantly obvious that one class with Professor Cheever would not be enough. Some students, even those pursuing careers in corporate or criminal law, enrolled in his Federal Wildlife and Public Lands courses, while others followed Professor Cheever to the *Denver Law Review*.

It's true, I wrote onto the *Denver Law Review* largely because of Professor Cheever's involvement as a faculty advisor. He was an enthusiastic supporter during my 2L year as a Staff Editor, and during my 3L year, he was the guiding light that helped me navigate my role as Editor in Chief. When the journal secured a prestigious author or met a publication deadline, Professor Cheever was my go-to cheerleader who celebrated our success. And when it felt like the weight of the world was on my shoulders, Professor Cheever was my go-to confidant who helped carry the burden. When current law review editors ask for advice and guidance, I still find myself thinking "Oh, you should ask Professor Cheever about that." I truly don't know what I would have done without him.

Professor Cheever profoundly impacted my life, as he did the lives of all his students. Therefore, I know I speak for all of Professor Cheev-

[†] Associate attorney at Otten Johnson Robinson Neff + Ragonetti PC. Brittany currently serves on the Sturm College of Law Alumni Council and the *Denver Law Review* Advisory Board. While in law school, she served as the Editor in Chief of the *Denver Law Review* for Volume 93.

er's students when I say thank you. Thank you for teaching us, thank you for inspiring us, and thank you for making the world a better place.

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U.S. INTERVENTION IN SYRIA: A LEGAL RESPONSIBILITY TO PROTECT?

DANIELA ABRATT[†]

ABSTRACT

In August 2013, the Syrian government fired roughly fifteen rockets with a deadly chemical agent onto its streets, killing hundreds and wounding thousands. After the United States threatened to intervene militarily in Syria, the Syrian government agreed to sign the Chemical Weapons Convention and destroy its chemical weapons stockpiles. But Syria violated the terms of the Convention on April 4, 2017, when it launched another deadly chemical attack on its people. In response, the United States fired fifty-nine rockets at a Syrian airbase to warn Syria that its use of chemical weapons would not be tolerated. When the United Nations Security Council is either deadlocked by a veto or simply unwilling to intervene, what actions can an individual country take to halt gross violations of human rights? This Article asserts that under the emerging "Responsibility to Protect" doctrine, the United States' missile strike was legal—and morally required—under international law.

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INTRODUCTION

It was April 4, 2017, and the war in Syria raged on. The sleepy, rubble-ridden streets of the city of Khan Sheikhoun awoke to face another day with the hope that maybe, somehow, today would be different. And it was. As the sun peaked over the bomb-blasted skyline of her rebel-held hometown, a fourteen-year-old girl walked to school and felt her eves sting as she saw a "vellow mushroom cloud" erupting from the blast a few dozen yards away.¹ She saw people rush out of their cars to help the wounded, but they collapsed almost immediately.² They convulsed, gasped for their last breaths, and died.³ Nearby, a young father clutched his twin toddlers in his arms and kissed their lifeless bodies goodbye.⁴

It was April 4, 2017-almost four years after the Syrian government released its first major chemical weapons attack on its people-and again, accusations of the dropping of a toxic chemical agent spread.⁵ Shortly after the first rockets hit, a hospital in the region treating the victims was also bombed.⁶ The Organisation for the Prohibition of Chemical Weapons (OPCW) began collecting samples and evidence to determine whether chemical weapons were in fact used, and if so, what specific agent was utilized.⁷ The World Health Organization and Doctors Without Borders,⁸ two prominent organizations that have been working on the ground for several years now, stated that the attack likely involved a

^{.1.} Anne Barnard & Michael R. Gordon, Worst Chemical Weapons Attack in Years in Svria: U.S.Blames Assad, N.Y. TIMES (Apr. 4 2017), https://www.nytimes.com/2017/04/04/world/middleeast/syria-gas-attack.html.

^{2.} See id.

^{3.} See id.

^{4.} See Sarah El Deeb, A Father Bids Farewell to Twin Toddlers After Syria Attack, ASSOCIATED PRESS (Apr. 5, 2017), https://www.apnews.com/039901baa62d4486afd2a3054123f7c7. 5. Syria Conflict: 'Chemical Attack' in Idlib Kills 58, BBC (Apr. 4, 2017) [hereinafter

^{&#}x27;Chemical Attack' in Idlib Kills 58], http://www.bbc.com/news/world-middle-east-39488539.

^{6.} Syria 'Chemical Attack' Down to Assad, US Says, BBC (Apr. 4, 2017) [hereinafter Down to Assad], http://www.bbc.com/news/world-middle-east-39493854.

See Press Release, Organisation for the Prohibition of Chem. Weapons [OPCW], OPCW Press Release on Allegations of Chemical Weapons Use in Southern Idlib, Syria (Apr. 4, 2017), https://www.opcw.org/news/article/opcw-press-release-on-allegations-of-chemical-weapons-use-insouthern-idlib-syria.

Medicins Sans Frontieres, or Doctors Without Borders, is an international medical human-8. itarian organization that provides impartial medical assistance in more than sixty countries to people whose survival is ravaged by natural and manmade disasters. History & Principles, MEDICINS SANS FRONTIERES, http://www.doctorswithoutborders.org/about-us/history-principles (last visited Sept. 16, 2017).

chemical agent, such as sarin,⁹ based on the symptoms exhibited by the victims: choking, paralysis, foaming at the mouth, no external injuries, and pupils as small as a pinpoint.¹⁰ It is estimated that at least 92 people were killed, including 30 children, while hundreds were injured.¹¹

The international community immediately pointed the finger at Syrian President Bashar Al-Assad for the attack¹² and blamed his Russian ally for protecting him.¹³ British Foreign Secretary Boris Johnson stated that the attack "bears all the hallmarks" of the Assad regime and that Britain "will continue to lead international efforts to hold perpetrators to account."¹⁴ Britain appealed to "the Security Council members who have previously used their vetoes to defend the indefensible" and urged Russia and China not to block any actions sought against the Assad government.¹⁵ U.S. Secretary of State Rex Tillerson said that President Assad operates "with brutal, unabashed barbarism."¹⁶ He also criticized Russia for being either "complicit" or "incompetent" in ensuring the removal of chemical weapons from Syria.¹⁷

Both Syria and Russia shirked responsibility. Russia blamed an airstrike on a rebel-held storage facility allegedly housing the chemical weapons, but rebel leaders maintained that they lacked the capability and capacity to produce nerve agents.¹⁸ At an emergency United Nations Security Council meeting on April 5, 2017, the Syrian representative to the United Nations asserted that the Syrian government was not responsible and had complied with all of its obligations under the Chemical .;

Sarin is a nerve agent that blocks the "proper operation of an enzyme that acts as the 9. body's 'off switch' for glands and muscles. Without an 'off switch,' the glands and muscles are constantly being stimulated. Exposed people may become tired and no longer be able to keep breath-& PREVENTION. CONTROL CTRS. FOR DISEASE ing." Sarin (GB), https://emergency.cdc.gov/agent/sarin/basics/facts.asp (last updated Nov. 18, 2015). It is the "most volatile" of all nerve agents because it is colorless, odorless, and "can easily and quickly evaporate from a liquid into a vapor and spread into the environment." Id.

^{10.} Louisa Loveluck & Żakaria Zakaria, World Health Organization: Syria Chemical Attack Likely Involved Nerve Agent, WASH. POST (Apr. 5, 2017), https://www.washingtonpost.com/world/russia-blames-syrian-rebels-for-devastating-chemicalattack-in-northern-town/2017/04/05/ba173c76-196a-11e7-8598-9a99da559f9e_story.html; see also Barnard & Gordon, supra note 1 (stating that doctors found victims with "pinpoint pupils" that "characterize nerve agents and other banned poisons").

^{11.} OLE SOLVANG, DEATH BY CHEMICALS, HUMAN RIGHTS WATCH 21 (May 2017), https://www.hrw.org/report/2017/05/01/death-chemicals/syrian-governments-widespread-and-systematic-use-chemical-weapons.

^{12.} Down to Assad, supra note 6.

^{13.} Syria Chemical 'Attack': Russia Faces Fury at UN Security Council, BBC (Apr. 5, 2017), http://www.bbc.com/news/world-middle-east-39500319.

^{14.} The Latest: Russian Says Rebel-Held Town in Syria Exposed, ASSOCIATED PRESS (Apr. 5, 2017), https://www.apnews.com/69ede10b25e542268ebd5fbf1fe0fa42.

^{15.} *Id.*

^{16.} Down to Assad, supra note 6.

^{17.} Abigail Williams, Secretary Tillerson on Russia: 'Complicit or Simply Incompetent' on Syrian Chemical Weapons, NBC NEWS (Apr. 7, 2017, 2:15 AM), https://www.nbcnews.com/news/world/secretary-tillerson-russia-complicit-or-simply-incompetent-syrian-chemical-weapons-n743686.

^{18.} Loveluck & Zakaria, supra note 10.

Weapons Convention (CWC).¹⁹ Britain, France, and the United States put forward a resolution condemning the attack and calling for an investigation, but Russia vetoed the resolution as "unacceptable."²⁰ U.S. Ambassador to the United Nations Nikki Haley took a firm stance against Russia's repeated protection of Syria and issued the following warning: "When the United Nations consistently fails in its duty to act collectively, there are times in the life of states that we are compelled to take our own action. For the sake of the victims, I hope that the rest of the Council is finally willing to do the same."²¹

Two days after the attack, the United States launched a missile attack that sent fifty-nine rockets to the air base in Syria from which the United States claimed the chemical weapons were fired.²² Ambassador Halev justified the strike at the U.N., stating: "The moral stain of the Assad regime could no longer go unanswered. His crimes against humanity could no longer be met with empty words. It was time to say 'enough'—but not only say it. It was time to act."²³ The United States was praised by its allies, including Germany, Britain, and France,²⁴ but the Syrian government decried the attack as "reckless, irresponsible behavior" and stated that the United States was "naively dragged in by a false propaganda campaign."²⁵ Russia, as well as other non-permanent members of the Security Council such as Bolivia, sharply criticized the attack, calling it a violation of Syria's sovereignty, "an act of aggression against a sovereign state delivered in violation of international law under a far-fetched pretext" and suspending the "deconfliction channel" that was created to prevent unintentional encounters between U.S. and Russian forces operating within Syria.²⁶ Russian and Syrian officials alleged that nine civilians, including four children, as well as six servicemen were killed in the U.S. missile strike and that only twenty-three of the fifty-nine rockets hit their targets and destroyed six planes.²⁷

^{19.} U.N. SCOR, 72nd Sess., 7915th mtg., U.N. Doc. S/PV.7915 (Apr. 5, 2017).

^{20.} Russia: Proposed U.N. Syria Resolution Based on "Fake Information," REUTERS (Apr. 5, 2017, 7:18 AM), http://in.reuters.com/article/mideast-crisis-syria-zakharova-idINKBN1771OP.

^{21.} U.N. Doc. S/PV.7915, supra note 19.

^{22.} Syria War: US Launches Missile Strikes in Response to 'Chemical Attack,' BBC (Apr. 7, 2017), http://www.bbc.com/news/world-us-canada-39523654.

^{23.} Bill Chappell, Russia Says U.S. Broke International Law in Striking Syria, Citing 'Pretext,' NPR: THE TWO-WAY (Apr. 7, 2017, 8:27 AM), http://www.npr.org/sections/thetwoway/2017/04/07/522982477/russia-says-u-s-broke-international-law-in-striking-syria-citing-pretext.

^{24.} Chiara Palazzo & Peter Foster, 'Assad Bears Full Responsibility': How the World Reacted to Donald Trump's Missile Strike on Syria, TELEGRAPH (Apr. 7, 2017, 6:37 AM), http://www.telegraph.co.uk/news/2017/04/07/us-air-strike-syria-world-reacted-donald-trumps-decision-intervene.

^{25.} Harriet Alexander, Danny Boyle & Barney Henderson, US Launches Strike on Syria-How It Unfolded, TELEGRAPH (Apr. 7, 2017, 5:44 PM), http://www.telegraph.co.uk/news/2017/04/07/us-launches-strike-syria-unfolded.

^{26.} Chappell, supra note 23.

^{27.} Alexander, Boyle & Henderson, supra note 25.

To what extent was this use of force permitted under international law? When the world fails to act collectively, how far can an individual state go to fight against such brutality? These same questions were posed in August 2013, when the Syrian government under President Assad released rounds of the chemical agent sarin on its people.²⁸ Hundreds of civilians, including children, died and thousands were injured.²⁹ The Syrian government denied responsibility,³⁰ and the U.N. Security Council was incapable of acting because China and Russia vetoed every resolution.³¹ The United States then threatened to act on its own and conduct a targeted military strike to render Syria incapable of using chemical weapons, but when Syria agreed to sign the CWC and rid the country of its chemical stockpiles, it appeared that such a military strike was unnected as a strike was unnected as a strike was unnected as a strike was unnected by the Syria strike by the Syria strike was unnected

In 2013, if Syria had not acceded to the CWC, would the United States have been able to conduct its military strike legally under international law? Four years later, because Syria ostensibly violated multiple provisions of the CWC, particularly Article I (prohibiting the development, stockpiling, and use of chemical weapons and requiring their destruction) and Articles IV and V, and committed a crime against humanity, did the United States act legally when it took military action against Syria without the approval of the United Nations? The U.N. Charter, developed in response to the horrors of World War II, enables a state to use force against another only with the Security Council's approval or if the attacking nation is acting in self-defense.³³ These requirements uphold the ideals of a country's sovereignty. But in the face of gross humanitarian violations, what happens when the Security Council is deadlocked and fails to act? The U.N. Charter does not provide any other means by which a country, whether alone or in a group,³⁴ can take mili-

33. U.N. Charter art. 42, 51.

^{28.} Rep. of UN Mission to Investigate Allegations of the Use of Chemical Weapons in the Syrian Arab Republic, ¶¶ 27–29, U.N. Doc. A/67/997–S/2013/553 (Sept. 16, 2013) [hereinafter U.N. Mission Report].

^{29.} Syria Chemical Attack: What We Know, BBC (Sept. 24, 2013), http://www.bbc.co.uk/news/world-middle-east-23927399.

^{30.} Id.

^{31.} See Syria Resolution Authorizing Military Force Fails in U.N. Security Council, CBS NEWS, (Aug. 28, 2013, 4:48 PM), http://www.cbsnews.com/news/syria-resolution-authorizing-military-force-fails-in-un-security-council [hereinafter CBS NEWS].

Barack Obama, President of the U.S., Statement by the President on Syria (Aug. 31, 2013) 32. (transcript Statement by the President on Syria] available at hereinafter http://www.whitehouse.gov/the-press-office/2013/08/31/statement-president-syria); Barack Obama, President of the U.S., Remarks by the President in Address to the Nation on Syria (Sept. 10, 2013) [hereinafter Remarks by the President] (transcript available at http://www.whitehouse.gov/the-pressoffice/2013/09/10/remarks-president-address-nation-syria).

^{34.} Article 53 allows regional organizations to take military action, but this still requires Security Council approval. U.N. Charter art. 53, \P 1. There have been instances, however, when ex post facto authorization has occurred. Inger Österdahl, *Preach What You Practice. The Security Council and the Legalisation* Ex Post Facto of the Unilateral Use of Force, 74 NORDIC J. INT'L L. 231, 239 (2005).

tary action without Security Council approval, and no Article in the Charter specifically mentions humanitarian intervention.³⁵

In the U.N. report on the investigation of the 2013 alleged chemical weapons use in Syria, former Secretary-General Ban Ki-moon stated: "The international community has a *moral responsibility* to hold accountable those responsible and for ensuring that chemical weapons can never re-emerge as an instrument of warfare."³⁶ From the lessons learned through Kosovo, Somalia, Bosnia, and Rwanda, is there a "responsibility to protect" norm that now permits a country or the international community to act unilaterally—without U.N. authorization—to halt human rights violations? This Article utilizes the United States' attempt to intervene in Syria as an example to demonstrate how, under the emerging "responsibility to protect" doctrine, the United States, or any individual state, may be permitted to use military force against Syria in response to its use of chemical weapons.

Humanitarian intervention is defined simply as the threat or use of coercive action for the purpose of protecting or assisting people at risk.³⁷ Another classic definition is the "threat or use of armed force by a state, a belligerent community, or an international organization, with the object of protecting human rights."³⁸

This Article will analyze humanitarian intervention through the framework developed by the International Commission on Intervention and State Sovereignty (ICISS), which was created in 2000 in response to

^{35.} T. Modibo Ocran, *The Doctrine of Humanitarian Intervention in Light of Robust Peacekeeping*, 25 B.C. INT'L COMP. L. REV. 1, 15 (2002). The General Assembly, however, passed the "Uniting for Peace" resolution, stating that when the Security Council fails to fulfill its primary responsibility of maintaining peace, the General Assembly will take on such a responsibility. *See* Christian Tomuschat, Uniting for Peace, United Nations Audiovisual Library of International Law 3 (2008), http://legal.un.org/avl/pdf/ha/ufp/ufp e.pdf.

^{36.} Note by the Secretary-General, Report on Allegations of the Use of Chemical Weapons in the Ghouta Area of Damascus on 21 August 2013, U.N. Mission to Investigate Allegations of the Use of Chemical Weapons in the Syrian Arab Republic, ¶ 1, U.N. Doc. A/67/997–S/2013/553 (Sept. 16, 2013) [hereinafter Note by the Secretary-General] (emphasis added).

^{37.} INT'L COMM'N ON INTERVENTION & STATE SOVEREIGNTY, THE RESPONSIBILITY TO PROTECT, at VII (2001) [hereinafter ICISS].

Ian Brownlie, Humanitarian Intervention, in LAW AND CIVIL WAR IN THE MODERN 38. WORLD 217, 217 (John Norton Moore ed., 1974). "Humanitarian Intervention" has been defined in similar ways. For example, one definition is "the justifiable use of force for the purpose of protecting the inhabitants of another state from treatment so arbitrary and persistently abusive as to exceed the limits within which the sovereign is presumed to act with reason and justice." Ocran, supra note 35, at 8 (quoting E. STOWELL, INTERNATIONAL LAW 349 (1931)); Jean-Pierre Fonteyne, The Customary International Law Doctrine of Humanitarian Intervention: Its Current Validity Under the U.N. Charter, 4 CAL. W. INT'L L.J. 203, 204 (1974). Although this type of intervention is thought of primarily as military, it may also include material assistance (providing food, medical supplies, etc.) and economic sanctions. Ocran, supra note 35, at 8. Another, broader definition is limited to the instances when a state "unilaterally uses military force to intervene in the territory of another state for the purpose of protecting a sizable group of indigenous people from life-threatening or otherwise unconscionable infractions of their human rights that the national government inflicts or in which it acquiesces." David J. Scheffer, Toward a Modern Doctrine of Humanitarian Intervention, 23 U. TOL. L. REV. 253, 264 (1992).

former U.N. Secretary-General Kofi Annan's plea to the international community to develop responses to grave human rights violations.³⁹ The Canadian government initiated the Commission, comprised of representatives from Australia, Algeria, Russia, South Africa, Germany, Philippines, Switzerland, Guatemala, India, and the United States.⁴⁰

Part I of this paper will provide a brief history of the use of chemical weapons in Syria. Part II will examine the details of the broader Syrian conflict and the state's human rights responsibilities under international law. Part III will then discuss the United States' inability to act through collective action under the U.N. Charter. Part IV will analyze the self-defense claim as another mechanism for attack. Finally, Part V will explore the United States' responsibility to protect through the threeprong doctrine laid out by ICISS: responsibility to prevent, responsibility to react, and responsibility to rebuild. Under this doctrine, the United States was permitted to launch a limited military strike in Syria without Security Council approval to halt the gross violations of human rights. Hindsight is twenty-twenty, but the world can learn from the past to prevent tragedy in the future. When the world has witnessed a blatant recurrence of human rights violations, it must act to prevent history from repeating itself.

I. HISTORY OF CHEMICAL WEAPONS USE IN SYRIA

On August 21, 2013, at least fifteen rockets exploded on the streets of Syria.⁴¹ Videos showed dozens of bodies with no external injuries lying lifeless in the streets, in clinics, and in mosques.⁴² Adults and children convulsed and gasped for air, choking on their own saliva as their mouths foamed and fluids ran from their eyes and noses.⁴³ Based on the size and trajectory of the rockets' remnants, the United States and Human Rights Watch⁴⁴ accused the Syrian government of launching the attack and using the chemical agent sarin on innocent civilians.⁴⁵

Syrian President Assad denied responsibility: "How is it possible that any country would use chemical weapons, or any weapons of mass

^{39.} ICISS, supra note 37, app. b at 81.

^{40.} Id. app. a at 77–79.

^{41.} Syria Chemical Attack: What We Know, supra note 29.

^{42.} Id.

^{43.} Id.; Barnard & Gordon, supra, note 1.

^{44.} Human Rights Watch is an independent organization that focuses on researching and advocating against various human rights violations. It monitors conditions in eighty countries and publishes its findings in numerous reports and news releases. *See Frequently Asked Questions*, HUM. RTS. WATCH, http://www.hrw.org/node/75138#3 (last visited Sept. 16, 2017).

^{45.} See Press Release, The White House Office of the Press Sec'y, Gov't Assessment of the Syrian Government's Use of Chem. Weapons on August 21, 2013 (Aug. 30, 2013),

http://www.whitehouse.gov/the-press-office/2013/08/30/government-assessment-syrian-

government-s-use-chemical-weapons-august-21; Syria: Government Likely Culprit in Chemical Attack, HUM. RTS. WATCH (Sept. 10, 2013, 12:00 AM), http://www.hrw.org/news/2013/09/10/syria-government-likely-culprit-chemical-attack.

destruction, in an area where its own forces are located? . . . This is preposterous! These accusations are completely politicized^{**46} Instead, the Syrian government, along with its Russian ally, blamed rebel forces for the attack and for attempting to spur a U.S.-led invasion.⁴⁷ The United Nations led an independent investigation⁴⁸ on site,⁴⁹ conducting numerous interviews with survivors⁵⁰ and medical personnel,⁵¹ obtaining medical⁵² and environmental⁵³ samples, and documenting ammunitions.⁵⁴ It then released a report confirming that, chemical weapons, including sarin, had been used between the parties in Syria.⁵⁵

Britain introduced a draft proposal to the U.N. Security Council seeking authorization for military action against Syria⁵⁶ under Chapter VII of the U.N. Charter, which authorizes collective action measures that could include military intervention under the Security Council's guidance.⁵⁷ The five permanent members held an informal, closed-door meeting, but the parties could not come to an agreement.⁵⁸ Russia and China left the meeting after one hour; France, the United States, and the United Kingdom remained for another hour.⁵⁹ The draft resolution went back to each local government for consultation but never resurfaced, presumably

48. U.N. Mission Report, *supra* note 28, ¶ 1.

49. The investigation was focused in Moadamiyah in West Ghouta and Ein Tarma and Zamalka in East Ghouta. Id. \P 15.

50. The Mission interviewed thirty-six survivors who displayed severe symptoms. They underwent a clinical assessment, including a brief health history and a physical examination. The main symptoms consisted of "loss of consciousness (78%), shortness of breath (61%), blurred vision (42%), eye irritation/inflammation (22%), excessive salivation (22%), vomiting (22%), and convulsions/seizures (19%)." *Id.* ¶ 25, app. 4.

51. Clinicians who treated people in the field or at the hospital were asked questions regarding the symptoms they observed, treatments provided, and whether there was secondary contamination. Id. app. 4.

52. Sarin was present in 91% of 34 blood samples drawn. Out of 15 urine samples taken, 93% tested positive for sarin. *Id.*

53. Environmental samples included soil samples acquired near rocket warheads, clothing, pieces of fabric from beds and carpets, rubble, and rocket fragments. *Id.* app. 6.

54. The munitions research included collecting rocket heads, examining craters and other damage, obtaining rocket motors, and measuring all warheads. The Mission determined the trajectories and types of rockets used, some as variants of M14 artillery rockets that launched from a single, multi-barrel launcher and others as 330 mm caliber artillery rockets. *See id.* app. 5.

55. *Id.* at 8. President Assad told the Russian newspaper Izvestia that he feared the U.N. investigation results would be interpreted unfairly: "We are all aware that instead of being interpreted in an objective manner, these results could easily be interpreted according to the requirements and agendas of certain major countries." McDonnell, *supra* note 46.

56. CBS NEWS, supra note 31.

58. CBS NEWS, supra note 31.

59. Id.

^{46.} These remarks were translated by Syria's official news agency from an interview President Assad conducted with the Russian newspaper Izvestia. Patrick J. McDonnell, *Syria's Assad Denies Use of Chemical Weapons*, L.A. TIMES (Aug. 26, 2013), http://articles.latimes.com/2013/aug/26/world/la-fg-wn-syria-assad-denies-use-of-chemicalweapons-20130826.

^{47.} *Id.*; see also Vladimir V. Putin, Opinion, *A Plea for Caution from Russia*, N.Y. TIMES (Sept. 11, 2013), http://www.nytimes.com/2013/09/12/opinion/putin-plea-for-caution-from-russia-on-syria.html.

^{57.} U.N. Charter ch. 7.

because China and Russia would block the resolution if it were up for voting.⁶⁰ Russia, one of Syria's closest allies,⁶¹ and China have previously vetoed other proposals regarding action against Syria.⁶²

After failed peace talks with Russia and Syria, former President Barack Obama decided that, if Congress approved, a targeted military strike aimed at Syria's chemical weapons units, artillery, and aircraft, would send a message to President Assad and to other dictators that the international community would not tolerate the use of chemical weapons.⁶³ But the threat of military intervention seemed to be enough, for Russia agreed to help the United States forge an agreement with President Assad to give up the chemical weapons.⁶⁴ The plan entailed destroying all of Syria's stockpiles and chemical weapons facilities by June 30, 2014, and Russia would oversee the removal.⁶⁵ Syria acceded to the CWC on September 14, 2013, entering into force on October 14, 2013.⁶⁶ The U.N. Security Council then adopted a resolution on September 27, 2013, condemning Syria's use of chemical weapons.⁶⁷

Since Syria acceded to the CWC, progress had been made in the destruction of Syria's chemical weapons production facilities, with twentyfour of twenty-seven destroyed as of November 2015.⁶⁸ But the goal of ridding the country of all of its stockpiles was grossly unmet, with only eleven percent of the stockpiles removed by the deadline imposed by the OPCW.⁶⁹ However, the use of various chemical agents has consistently

64. Address to the Nation on the Situation in Syria, 2013 DAILY COMP. PRES. DOC. 615, at 3 (Sept. 10, 2013).

66. Org. for the Prohibition of Chem. Weapons [OPCW], Rep. of the Seventy-Fourth Session of the Executive Council, EC-74/5 (Oct. 2013).

69. Salma Abdelaziz & Jim Sciutto, OPCW: Only 11% of Chemical Weapons Removed from Syria, CNN (Feb. 13, 2014, 8:37 AM), http://www.cnn.com/2014/02/12/world/meast/syria-civil-war.

^{60.} Id.; see also Farnaz Fassihi, Peter Nicholas & Nicholas Winning, U.S., U.K. Face Delays in Push to Strike Syria, WALL STREET J. (Aug. 28, 2013, 1:43 PM), https://www.wsj.com/articles/uk-to-request-un-action-to-protect-syrians-from-chemical-weapons-1377685475; Syria Crisis: UK Puts Forward UN Proposal, BBC (Aug. 28, 2013), http://www.bbc.co.uk/news/world-middle-east-23864124.

^{61.} With regards to the potential of a biased interpretation of the U.N. results, President Assad stated, "Certainly, we expect Russia to block any interpretation that aims to serve American and western polices." McDonnell, *supra* note 46.

^{62.} See, e.g., S.C. Res. 77, (Feb. 4, 2012); S.C. Res. 612, (Oct. 4, 2011).

^{63.} Statement by the President on Syria, *supra* note 32. Former Legal Adviser to President Obama and Yale Law Professor Harold H. Koh argued that Congressional approval was not required to take limited military action because it did not rise to the level of "war" such that it would trigger the Declaration of War clause of the U.S. Constitution. Rather, he argued that President Obama's appeal to Congress was "politically prudent." *See* Harold Hongju Koh, *Syria and the Law of Humanitarian Intervention (Part I: Political Miscues and U.S. Law)*, JUST SECURITY (Sept. 26, 2013, 4:30 AM), https://www.justsecurity.org/1158/koh-syria.

^{65.} Org. for Prohibition Chemical Weapons [OPCW], OPCW Adopts Plan for Destruction of Syria's Chemical Weapons Programme in the First Half of 2014 (Nov. 15, 2013), http://www.opcw.org/news/article/opcw-adopts-plan-for-destruction-of-syrias-chemical-weapons-programme-in-the-first-half-of-2014.

^{67.} S.C. Res. 2118, (Sept. 27, 2013).

^{68.} Org. for the Prohibition of Chemical Weapons [OPCW], Report of the OPCW on the Implementation of the Convention of the Prohibition of the Development, Production, Stockpiling and Use of Chemical Weapons and on Their Destruction in 2015, ¶¶ 1–2, C21/4 (Nov. 30, 2016).

been documented since Syria signed the CWC.⁷⁰ The United Nations concluded from results of an independent investigation that the Syrian government had dropped chlorine gas bombs on its people on at least three separate occasions in 2014 and 2015.⁷¹

In response, the U.N. Security Council unanimously adopted Resolution 2235 to identify those responsible for the use of these weapons, also stating that it would impose certain measures if violations of the use of chemical weapons occurred.⁷² The OPCW reported that blood samples taken from victims of an attack in January 2016 indicated the presence of the agent sarin or a sarin-like substance.⁷³ Human Rights Watch reported at' least eight instances of chlorine gas bombs being dropped between November and December 2016.⁷⁴ Then, on April 4, 2017, the Syrian government launched its biggest chemical weapons attack since 2013.⁷⁵

II. SYRIA'S CRISIS AND ITS OBLIGATIONS UNDER INTERNATIONAL LAW

The overarching conflict in Syria began in 2011 when groups opposing President Assad's rule began protesting and demanding his resignation.⁷⁶ Rallies spread across the country as the people demanded a functioning democracy, and violence erupted as the government began using tanks, rockets, and bombs to try quell the opposition.⁷⁷ Since the uprisings, roughly 400,000 people have been killed,⁷⁸ thousands of whom are children.⁷⁹ The conflict has led to one of the greatest refugee crises in modern history, with over five million registered refugees having fled the country seeking shelter in Lebanon, Jordan, Turkey, Egypt,

74. Syria: Coordinated Chemical Attacks on Aleppo, HUM. RTS. WATCH (Feb. 13, 2017, 10:57 AM), https://www.hrw.org/news/2017/02/13/syria-coordinated-chemical-attacks-aleppo.

75. See 'Chemical Attack' in Idlib Kills 58, supra note 5.

76. Syria: The Story of the Conflict, BBC (Sept. 3, 2013), http://www.bbc.co.uk/news/world-middle-east-19331551 (follow "Protests" tab).

^{70.} See id.

^{71.} Press Release, Security Council Considers Fourth Report by Joint Investigative Mechanism, U.N. Press Release DC/3668 (Oct. 27, 2016).

^{72.} S.C. Res. 2235, ¶¶ 1-3, 15 (Aug. 7, 2015); Press Release, Security Council, Security Council Unanimously Adopts Resolution 2235 (2015), Establishing Mechanism to Identify Perpetrators Using Chemical Weapons in Syria, U.N. Press Release SC/12001 (Aug. 7, 2015).

^{73.} Down to Assad, supra note 6. For a full timeline and history of the civil war in Syria, see Syrian Civil War Fast Facts, CNN, http://www.cnn.com/2013/08/27/world/meast/syria-civil-war-fast-facts (last updated July 8, 2017, 10:12 AM).

^{77.} Id. (follow "Bombardment" tab).

^{78.} Syria Envoy Claims 400,000 Have Died in Syria Conflict, UNITED NATIONS RADIO (Apr. 22, 2016), http://www.unmultimedia.org/radio/english/2016/04/syria-envoy-claims-400000-have-died-in-syria-conflict/#.WOU4svnyu02.

^{79.} Syria War: 2016 Deadliest Year Yet for Children, Says Unicef, BBC (Mar. 23, 2017), http://www.bbc.com/news/world-middle-east-39252307.

and Iraq.⁸⁰ As of March 2017, another 6.3 million were internally displaced,⁸¹ and over 13.5 million were in need of humanitarian aid.⁸²

The U.N. confirmed that chemical weapons were used in Syria on August 21, 2013, and the Secretary-General called the act a "war crime" and "grave violation" of the 1925 Geneva Protocol and other customary international law.⁸³ Syria has been a member of the U.N. since 1945.⁸⁴ As such, it is obligated to uphold the human rights values set forth in the Charter of the United Nations and in the subsequent Universal Declaration of Human Rights (UDHR), which is now largely considered to be binding under customary international law.⁸⁵ For example, Article 3 of the UDHR states that everyone has the right to life.⁸⁶ Article 28 elaborates that people have the right to a social and international order in which that right to life can be realized.⁸⁷ Article 30 further prohibits all states from engaging in any act that would destroy this right.⁸⁸

Similarly, the International Covenant on Civil and Political Rights (ICCPR), an optional U.N. treaty to which Syria became a party in 1969, protects parallel rights.⁸⁹ Article 6 states that "Every human being has the inherent right to life. This right shall be protected by law. No one shall be arbitrarily⁹⁰ deprived of his life."⁹¹ This right to life has been considered the "supreme human right" because without guarantees to it, all other rights would lack any real meaning.⁹² This right has also been considered *jus cogens* under international law,⁹³ meaning that it is an overriding, fundamental principle of international law from which no state may deviate.⁹⁴ In fact, states must take active measures to uphold this right.⁹⁵ States have a supreme duty to prevent acts of mass violence that cause

80. Syria Regional Refugee Response, UNHCR (last updated Sept. 18, 2017), http://data.unhcr.org/syrianrefugees/regional.php; see also Syrian Arab Republic, OCHA, http://www.unocha.org/Syria (last visited Sept 21, 2017).

81. Syrian Arab Republic, supra note 80.

82. Id.

83. Note by the Secretary-General, supra note 36, ¶ 1.

84. Member States, UNITED NATIONS, http://www.un.org/en/members/index.shtml (last visited Sept. 21, 2017).

85. See ICISS, supra note 37, at 6, 14.

86. G.A. Res. 217 (III) A, Universal Declaration of Human Rights, art. 3 (Dec. 10, 1948).

87. Id. art. 28.

88. Id. art. 30.

89. See G.A. Res. 2200 (XXI) A, International Covenant on Civil and Political Rights, art. 1 ¶ 1, art. 5 ¶ 2, art. 6 ¶ 1 (Dec. 16, 1966).

90. The use of the term "arbitrarily" was criticized as being too vague. But the Human Rights Committee justified its use because the word encompasses both intentional and unintentional killings. See MANFRED NOWAK, U.N. COVENANT ON CIVIL AND POLITICAL RIGHTS CCPR COMMENTARY 127-28 (2d rev. ed. 2005).

91. G.A. Res. 2200 (XXI) A, supra note 89, at art. 6 ¶ 1.

92. NOWAK, supra note 90, at 121.

93. Id. at 122.

94. Jus cogens "is a norm accepted and recognized by the international community of States as a whole as a norm from which no derogation is permitted and which can be modified only by a subsequent norm of general international law having the same character." Vienna Convention on the Law of Treaties art. 53, May 23, 1969, 1155 U.N.T.S. 331.

95. NOWAK, supra note 90, at 122.

arbitrary loss of life.⁹⁶ The International Court of Justice (ICJ) stated that this inherent right exists in times of both war and peace and explained that whether loss of life from specific weaponry violates Article 6 is determined by examining the laws governing the use of that weapon.⁹⁷

The use of chemical weapons violates the right to life as set forth in the UDHR and ICCPR.98 In its General Comment to Article 6 of the ICCPR, the Human Rights Committee expressed its growing concern regarding the development and proliferation of "awesome weapons of mass destruction," citing nuclear weapons as among the greatest threats to the right to life.⁹⁹ Chemical weapons, though not specifically mentioned in the comment, create this same threat of mass annihilation. The U.N. recognized the extreme danger they pose because a single attack can inflict mass casualties.¹⁰⁰ Though the death toll from the chemical weapons attack was difficult to establish, Doctors Without Borders estimated that 3,600 people had been injured, of which 355 died.¹⁰¹ The Syrian Observatory for Human Rights confirmed at least 502 deaths.¹⁰² The United States government initially reported that 1,429 people had been killed but could not elaborate on the methods for determining that figure and why that number was so much higher than other reported esti-mates.¹⁰³ By killing indiscriminately and in mass, the weapons "arbitrarily deprive" human beings of their inherent right to life and human dignity, as explained by the laws prohibiting the use of chemical weapons and U.N. resolutions ascribing the importance of the prohibition.

Syria is a signatory to the 1925 Geneva Protocol, which is the Protocol for the Prohibition of the Use in War of Asphyxiating, Poisonous or Other Gases, and of Bacteriological Methods of Warfare.¹⁰⁴ The Protocol prohibits the use of chemical and biological weapons in war but does not restrict a country from producing or possessing them.¹⁰⁵ It states that the

102. Syria Chemical Attack: What We Know, supra note 29.

^{96.} Id. at 125.

^{97.} Legality of the Threat or Use of Nuclear Weapons, Advisory Opinion, 1996 I.C.J. 226, 240 (July 8).

^{98.} U.N. Human Rights Comm., General Comment No. 14, ¶ 1, HRI/GEN/1/Rev.9 (Vol. I) (Nov. 9, 1984).

^{99.} Id. ¶ 3; see also NOWAK, supra note 90, at 126.

^{100.} High Level Panel on Threats, Challenges, and Change, *A More Secure World: Our Shared Responsibility*, ¶ 114, U.N. Doc. A/59/565 (Dec. 2, 2004) [hereinafter High Level Panel].

^{101.} Syria: Thousands Suffering Neurotoxic Symptoms Treated in Hospitals Supported by MSF, MEDECINS SANS FRONTIERES (Aug. 24, 2013), http://www.msf.org/article/syria-thousands-suffering-neurotoxic-symptoms-treated-hospitals-supported-msf.

^{103.} The White House Office of the Press Sec'y, *supra* note 45; *see also* Ken Dilanian & Shashank Bengali, *U.S. Toll for Syria Higher than Others*', L.A. TIMES (Sept. 4, 2013), http://articles.latimes.com/2013/sep/04/world/la-fg-syria-casualties-20130904.

^{104.} Protocol for the Prohibition of the Use of Asphyxiating, Poisonous or Other Gases, and of Bacteriological Methods of Warfare. Geneva, 17 June 1925, INT'L COMM. RED CROSS, http://www.icrc.org/applic/ihl/ihl.nsf/States.xsp?xp_viewStates=XPages_NORMStatesParties&xp_tr eatySelected=280 (last visited Sept. 21, 2017).

^{105.} See Protocol for the Prohibition of the Use in War of Asphyxiating, Poisonous or Other Gases, and of Bacteriological Methods of Warfare, June 17, 1925, 26 U.S.T. 571 [hereinafter Gene-

use of these weapons in war has been condemned by the civilized world and that the prohibition shall be universally binding as international law.¹⁰⁶

In 1993, the OPCW developed the Convention on the Prohibition of the Development, Production, Stockpiling and Use of Chemical Weapons and on their Destruction, commonly called the CWC.¹⁰⁷ Article 1 prohibits each state party from developing, producing, acquiring, stockpiling, retaining, transferring, and using chemical weapons.¹⁰⁸

Syria was not a party to the CWC at the time of its chemical weapons use,¹⁰⁹ so it was not technically beholden to the Convention's provisions. However, Syria still had an obligation not to use chemical weapons because the nonuse of chemical weapons is almost universally accepted and is becoming an international norm.¹¹⁰ As of November 2013, 190 countries were parties to the Convention,¹¹¹ representing about ninety-eight percent of the global population and landmass.¹¹² As depositary of the Convention, the Secretary-General has long called for its universality and stated that "any use of chemical weapons by anyone under any circumstances is a grave violation of international law," referring to the Convention, the 1925 Geneva Protocol, and customary international law.¹¹³

Additionally, both the U.N. General Assembly and the Security Council have adopted a number of resolutions affirming the importance of the CWC.¹¹⁴ One General Assembly resolution from 2001, adopted without a vote, ¹¹⁵ emphasized the necessity of universal adherence to the Convention and called upon states not party to the Convention to become parties immediately.¹¹⁶ In a separate section of that same resolution, the

va Protocol]; Marian Nash (Leich), Arms Control and Disarmament, 88 AM. J. INT'L L. 323, 324 (1994).

^{106.} Geneva Protocol, supra note 105.

^{107.} Convention on the Prohibition of the Development, Production, Stockpiling and Use of Chemical Weapons and on Their Destruction, *opened for signature* Jan. 13, 1993, S Treaty Doc. No. 103-21, 1974 U.N.T.S. 317.

^{108.} Id. art. I.

^{109.} See Member State - Syria, ORG. FOR PROHIBITION CHEMICAL WEAPONS, https://www.opcw.org/about-opcw/member-states/member-states-by-region/asia/member-state-syria (last visited Sept. 22, 2017).

^{110.} See Note by the Secretary-General, supra note 36, ¶¶ 1, 4.

^{111.} Org. for the Prohibition of Chemical Weapons [OPCW], Note by the Technical Secretariat, Status of Participation in the Chemical Weapons Convention as at 14 October 2013, S/1131/2013 (Oct. 14, 2013), https://www.opcw.org/fileadmin/OPCW/S_series/2013/en/s-1131-2013_e_.pdf.

^{112.} Status of Participation, ORG. FOR PROHIBITION CHEMICAL WEAPONS, https://www.opcw.org/about-opcw/member-states/status-of-participation/ (last visited Sept. 22, 2017).

^{113.} Note by the Secretary General, *supra* note 36, ¶¶ 1, 3–4.

^{114.} See, e.g., G.A. Res. 55/33, at 13 (Jan. 12, 2001); S.C. Res. 2118, at 1 (Sept. 27, 2013).

^{115.} This resolution has multiple sections, and the General Assembly voted for each section separately. The section referred to in this Note is Section H, which the First Committee adopted without a vote and the General Assembly followed suit.

^{116.} G.A. Res. 55/33, at 13 (Jan. 12, 2001).

Assembly renewed its call to all states to "observe strictly" the principles of the 1925 Geneva Protocol.¹¹⁷ This section was adopted by 163 votes and five abstentions, including the United States.¹¹⁸ Another resolution signed in December 2012 expressed the same message of the "long-standing determination of the international community to achieve the effective prohibition" of the stockpiling and use of chemical weapons and to uphold the 1925 Geneva Protocol.¹¹⁹ This resolution was adopted by 181 votes with four abstentions, including the United States.¹²⁰ These aforementioned statements suggest that the non-use of chemical weapons is considered binding universal law, or if not, increasingly moving towards that direction.

Three months before the 2013 chemical weapons attack, the General Assembly adopted a resolution specific to the ongoing violence in Syria.¹²¹ The resolution demanded that the Syrian government "strictly observe their obligations under international law with respect to chemical and biological weapons," including the 1925 Geneva Protocol and Security Council resolution 1540 adopted in 2004.¹²² This Security Council resolution affirmed that the proliferation of chemical weapons is a threat to international peace and security and required that all states "take and enforce effective measures to establish domestic controls to prevent the proliferation of nuclear, chemical, or biological weapons and their means of delivery."¹²³ It also expressed concern about the trafficking of these weapons and the risk that non-state actors¹²⁴ will acquire them.¹²⁵ Acting under Chapter VII of the U.N. Charter, the Security Council decided that *all* states must make and enforce domestic measures to prevent the proliferation of such weapons and must promote the universal adoption and fulfillment of all treaties related to chemical weapons.¹²⁶

These resolutions demonstrate that the U.N. expected Syria to follow the international norms created by the 1925 Geneva Protocol and the Convention, even though it was not a party to the latter.¹²⁷ Article 25 of the Charter binds all states, by their membership in the United Nations, to accept and carry out the Security Council's decisions, regardless of

^{117.} Id. at 16.

^{118.} U.N. GAOR, 55th Sess., 69th plen. mtg. at 13-14, U.N. Doc. A/55/PV.69 (Nov. 20, 2000).

^{119.} G.A. Res. 67/35, at 1 (Jan. 4, 2013).

^{120.} U.N. GAOR, 67th Sess., 48th plen. mtg. at 10-11, U.N. Doc. A/67/PV.48 (Dec. 3, 2012).

^{121.} G.A. Res. 67/262 (June 4, 2013).

^{122.} *Id.* ¶ 11.

^{123.} S.C. Res. 1540, at 1 (Apr. 28, 2004).

^{124.} The resolution defines a "Non-State actor" as an "individual or entity, not acting under the lawful authority of any State in conducting activities which come within the scope of this resolution." Id. at 1.

^{125.} Id. at 2.

^{126.} Id. at 2–3.

^{127.} See Member State - Syria, supra note 109.

whether they agree.¹²⁸ Syria thus had an obligation under international law not to make and use chemical weapons in both wartime and in peacetime. Consequently, it can be argued that Syria violated international law and could be held accountable for its actions.

III. COLLECTIVE ACTION

The primary way for a country to attack another is through collective action and authorization by the U.N. Security Council.¹²⁹ If that does not work, a country can ask the General Assembly, which has the secondary responsibility to maintain international peace after the Security Council, to vote to put pressure on the Security Council,¹³⁰ or it can seek assistance from a regional international organization.¹³¹ The responsibility to protect doctrine arises when these options have failed and a state wants to act unilaterally.

The U.N. Charter expressly states that the United Nations is built upon the idea of sovereignty for all its members.¹³² Two Articles specifically illustrate the foundational principle of nonintervention: Articles 2(4) and 2(7). First, Article 2(4) prohibits U.N. members from threatening or using force against the "territorial integrity or political independence of any state, or in any other manner inconsistent with the Purposes of the United Nations."¹³³ This prohibition is a cornerstone of the Charter.¹³⁴ Article 2(4) does not define "use of force." But the word "force" is used to mean "armed force," as evidenced by Paragraph 7 of the Preamble to the Charter, which states that a goal of the United Nations is to prevent armed force; Article 44 of the Charter, which explains how the Security Council can use armed forces; and the travaux préparatoies of the Charter, which illustrate that military force is the primary concern of the prohibition against the use of force.¹³⁵ Moreover, if "force" could include political and economic force, countries would be left with no other means to pressure states that violate international law.¹³⁶ Article 2(4) also applies to the "threat" of force. But threats are often tolerated and not violative of the Article unless they directly threaten force to

^{128.} U.N. Charter art. 25 ("The Members of the United Nations agree to accept and carry out the decisions of the Security Council in accordance with the present Charter.").

^{129.} See id. art. 1, ¶ 1, art. 39.

^{130.} ICISS, *supra* note 37, ¶ 6.29.

^{131.} Ocran, supra note 35, at 48.

^{132.} U.N. Charter art. 2, ¶ 1.

^{133.} U.N. Charter art. 2, ¶4; see Ocran, supra note 35 at 16.

^{134.} Armed Activities on the Territory of the Congo (Dem. Rep. Congo v. Uganda), Judgment, 2005 I.C.J. 168, ¶ 148 (Dec. 19). The ICJ also reinforced the idea that a state cannot intervene in a country in order to support an internal opposition within the state. It held that Uganda's interference was of such great magnitude and duration to gravely violate Article 2(4)'s prohibition against the use of force. Id. ¶ 165.

^{135. 1} THE CHARTER OF THE UNITED NATIONS: A COMMENTARY 208-09 (Bruno Simma et al. eds., 3d ed. 2012).

^{136.} Id. at 209.

compel a state to give up territory or remove political leadership.¹³⁷ In the instant situation, the United States threatened force for neither of those reasons.

This prohibition on the use of force is considered customary law¹³⁸ and *jus cogens* and is a core value accepted by the international community.¹³⁹ Thus, to use unilateral force against a sovereign state, the intervening country must justify its use on an exception to the general rule. Two such exceptions are self-defense, discussed below in Part V, and humanitarian intervention, discussed below in Part VI.

Additionally, Article 2(7) prohibits the United Nations as an organization from interfering in those matters of a sovereign state that fall within its "domestic jurisdiction,"¹⁴⁰ with exceptions for threats and breaches of peace and acts of aggression.¹⁴¹ Sovereign states have exclusive jurisdiction over their territory, and other states have a duty not to intervene in another country's internal affairs, or its "domestic jurisdiction."¹⁴² If that duty is violated, the victim state can retaliate in self-defense.¹⁴³ But ideas of sovereignty and domestic jurisdiction are evolving as new international actors and issues emerge, including human rights violations.¹⁴⁴ As stated by the Permanent Court of International Justice, "The question whether a certain matter is or is not solely within the jurisdiction of a State is an essentially relative question; it depends on the development of international relations."¹⁴⁵ More specifically, it depends on whether the matter is governed by international law in certain respects.¹⁴⁶ Furthermore, as international treaties and organizations become more numerous. a state's international obligations penetrate into its domestic law all while affecting other states as well.¹⁴⁷ For example, ethnic groups striving for self-determination, displacement of refugees fleeing from war and other natural and manmade disasters, and multinational organizations working in and among a host of countries all underscore the idea that certain domestic issues have an international impact.¹⁴⁸

^{137.} Id. at 218.

^{138.} Military and Paramilitary Activities in and Against Nicaragua (Nicar. v. U.S.), Judgment, 1986 I.C.J. 14, ¶ 188 (June 27). Its place in customary international law is further evidenced by reports of the International Law Commission as well as statements of state representatives who refer to Article 2(4) as a "cardinal principle" of law. *Id.* ¶ 190.

^{139.} THE CHARTER OF THE UNITED NATIONS: A COMMENTARY, supra note 135, at 203.

^{140.} U.N. Charter art. 2, ¶ 7.

^{141.} Ocran, supra note 35, at 16.

^{142.} ICISS, *supra* note 37, ¶ 6.2.

^{143.} Id. ¶ 6.4.

^{144.} Thomas M. Franck, Lessons of Kosovo, 93 AM. J. INT'L L. 857, 857-58 (1999).

^{145.} Nationality Decrees Issued in Tunis and Morocco, Advisory Opinion, 1923 P.C.I.J. (ser. B) No. 4, at 24 (Feb. 7).

^{146.} THE CHARTER OF THE UNITED NATIONS: A COMMENTARY, supra note 135, at 292.

^{147.} Bartram S. Brown, *Humanitarian Intervention at a Crossroads*, 41 WM. & MARY L. REV. 1683, 1697 (2000).

^{148.} Scheffer, supra note 38, at 260.

There is growing acceptance that matters of life and death are no longer reserved for the country at issue but are of concern for the greater international community.¹⁴⁹ The Charter itself recognizes respect for human rights as one of the main purposes of the United Nations: "To achieve international co-operation in solving international problems of an economic, social, cultural, or humanitarian character, and in promoting and encouraging respect for human rights and for fundamental freedoms for all without distinction as to race, sex, language, or religion "¹⁵⁰ This language demonstrates that instances of human rights violations that occur within a sovereign state are of international concern and not only within the state's domestic jurisdiction.¹⁵¹ For instance, in the 1960s, South Africa claimed that the U.N. General Assembly's statements against the apartheid violated Article 2(7) because the apartheid was a domestic issue.¹⁵² But the United Nations determined that antiapartheid actions were beyond the scope of domestic jurisdiction, even though they involved domestic issues,¹⁵³ and called upon all states to conform their laws to the Charter's observance of human rights.¹⁵⁴ Professor Bruno Simma suggests that, although "domestic jurisdiction" is not obsolete, systematic and widespread violations of human rights do not need to be alleged to overcome Article 2(7).¹⁵⁵

Additionally, in response to the atrocities committed in Uganda by dictator Idi Amin, Ugandan President Museveni attacked the specific issue with the sovereignty argument:

Over a period of 20 years three quarters of a million Ugandans perished at the hands of governments that should have protected their lives . . . I must state that Ugandans . . . felt a deep sense of betrayal that most of Africa kept silent . . . the reason for not condemning such massive crimes had supposedly been a desire not to interfere in the internal affairs of a Member State, in accordance with the Charters of the OAU and the United Nations. We do not accept this reasoning because in the same organs there are explicit laws that enunciate the sanctity and inviolability of human life.¹⁵⁶ .:

^{149.} Jeremy Levitt, Humanitarian Intervention by Regional Actors in Internal Conflicts: The Cases of ECOWAS in Liberia and Sierra Leone, 12 TEMP. INT'L & COMP. L.J. 333, 340 (1998); Carsten Stahn, Responsibility to Protect: Political Rhetoric or Emerging Legal Norm?, 101 AM. J. INT'L L. 99, 101 (2007).

^{150.} U.N. Charter art. 1, \P 3 (emphasis added). The U.N. Charter Preamble reiterates this purpose: "to reaffirm faith in fundamental human rights, in the dignity and worth of the human person, in the equal rights of men and women and of nations large and small...." U.N. Charter pmbl.; see also id. arts. 55–56.

^{151.} Brown, supra note 147, at 1689; see also THE CHARTER OF THE UNITED NATIONS: A COMMENTARY, supra note 135, at 297.

^{152.} THE CHARTER OF THE UNITED NATIONS: A COMMENTARY, supra note 135, at 296.

^{153.} Scheffer, *supra* note 38, at 261–62.

^{154.} THE CHARTER OF THE UNITED NATIONS: A COMMENTARY, supra note 135, at 296.

^{155.} Id. at 297-98.

^{156.} Yoweri Museveni, Uganda President, Org. of African Unity [OAU], Maiden Speech to the Assembly of Heads of State and Government, Twenty-Second Ord. Session (July 1986).

This statement demonstrates the inherent conflict with the U.N. Charter in that it professes the fundamentality of human rights and vet has no express provisions to uphold those human rights. The U.N. Charter still generally requires a country to secure authorization from the Security Council before taking action within another state.¹⁵⁷ Article 1(1) of the Charter states that one purpose of the United Nations is to "maintain international peace and security, and to that end: to take effective *collec*tive measures for the prevention and removal of threats to the peace, and for the suppression of acts of aggression or other breaches of the peace"¹⁵⁸ This collective action refers to the joining of multiple states, including the use of regional organizations, to end acts of violence.¹⁵⁹ However, obtaining approval for collective action is difficult, if not impossible, in certain instances. Failure of the Security Council to authorize such collective action under circumstances of gross human rights violations may enable a single state to act unilaterally, provided it has met the other requirements of the ICISS framework, discussed in Part VI.

Article 24(1) of the U.N. Charter confers on the Security Council the "primary responsibility" for maintaining this international peace and security.¹⁶⁰ The Security Council has the power to authorize collective action when peaceful measures fail; "In other words, forceful action to prevent mass atrocity crimes is reserved to the Security Council."¹⁶¹ Such responsibility involves a political, moral, and legal requirement to act.¹⁶² It also includes the responsibility to protect its member states,¹⁶³ a residual responsibility that falls upon the international community when the state at issue cannot meet its primary responsibility.¹⁶⁴ But as Secretary-General Ban Ki-moon stated in 2009, "Within the Security Council, the five permanent members bear particular responsibility because of the privileges of tenure and the veto power"¹⁶⁵

The veto has become the primary obstacle that prevents the mitigation or termination of a grave humanitarian crisis.¹⁶⁶ ICISS expressed

^{157.} U.N. Charter art. 1, ¶ 1, art. 24.

^{158.} Id. art. 1, ¶1 (emphasis added).

^{159.} ICISS, supra note 37, ¶¶ 6.5, 6.31.

^{160.} U.N. Charter art. 24, ¶ 1.

^{161.} Dapo Akande, The Legality of Military Action in Syria: Humanitarian Intervention and Responsibility to Protect, EJIL: TALK!, (Aug. 28, 2013), http://www.ejiltalk.org/humanitarianintervention-responsibility-to-protect-and-the-legality-of-military-action-in-syria.

^{162.} See THE CHARTER OF THE UNITED NATIONS: A COMMENTARY, supra note 135, at 766. This legal responsibility, however, lacks a legal remedy if the Security Council fails to act. "It is however, perfectly enviseagable that the Council's responsibility will harden into a legal obligation of conduct which can be violated by the Council's complete passivity or its obviously inadequate reaction in the face of massive atrocity." *Id.* at 775.

^{163.} See *id.* at 775–76. Some commentators disagree that the Security Council's responsibility is to the U.N. members but argue rather that it is to the organization itself. *See id.*

^{164.} Id. at 767; see also U.N. Secretary-General, Implementing the Responsibility to Protect, ¶ 14, U.N. Doc. A/63/677 (Jan. 12, 2009) (indicating that the sovereign state has the primary responsibility to protect the human rights of its people).

^{165.} U.N. Secretary-General, supra note 164, ¶ 61.

^{166.} ICISS, supra note 37, ¶ 6.20.

concern that, despite the need to intervene in such a situation, a permanent member would use the veto power to advance its own national interests, not because of a genuine disagreement about the proposal.¹⁶⁷ ICISS offered a solution, a "code of conduct" whereby the permanent members would agree not to use the veto to obstruct a majority resolution in matters in which their vital national interests were not involved.¹⁶⁸ But this is unlikely to be successful because many issues can be tied to a vital national interest.

The veto power often deadlocks the Security Council, and ultimately it renders no assistance.¹⁶⁹ Countries that want to take action are then faced with a dilemma: do nothing and watch the atrocities occur, or take action without the Security Council's authorization and potentially face reprimand later or seek ex post facto approval.¹⁷⁰ For example, NATO did not seek prior Security Council permission to enter Kosovo for fear that Russia would veto the proposal; Russia later, in fact, proposed a resolution to declare the act unlawful.¹⁷¹ But NATO faced the above dilemma. Then-U.S. Assistant Secretary of State for Democracy, Human Rights, and Labor, Harold H. Koh, stated that most, if not all, of the NATO states relied on some form of humanitarian intervention as the legal justification for action.¹⁷² The United States did not claim the NATO action was legal but rather that it was "justified and necessary to stop the violence and prevent an even greater humanitarian disaster."¹⁷³ The UK claimed that "as an exceptional measure on grounds of overwhelming humanitarian necessity, military intervention is legally justifiable."¹⁷⁴ The Netherlands did not give a clear legal reason for its opinion other than that NATO action was "more than adequate."¹⁷⁵

171. Louis Henkin, Kosovo and the Law of "Humanitarian Intervention," 93 AM. J. INT'L L. 824, 825 (1999).

172. See Koh, supra note 170; Daniel Bethlehem, Stepping Back a Moment – the Legal Basis in Favour of a Principle of Humanitarian Intervention, EJIL (Sept. 12, 2013), http://www.ejiltalk.org/stepping-back-a-moment-the-legal-basis-in-favour-of-a-principle-ofhumanitarian-intervention.

173. Matthew Waxman, Intervention to Stop Atrocities: Kosovo History as Predictive, LAWFARE (Aug. 29, 2013, 2:12 PM), http://www.lawfareblog.com/2013/08/intervention-to-stop-atrocities-kosovo-history-as-predictive.

174. Id.

175. Id.

^{167.} *Id*.

^{168.} Id. ¶ 6.21.

^{169.} Id. ¶ 6.20.

^{170.} See id. ¶¶ 6.35-.36; Harold Hongju Koh, Syria and the Law of Humanitarian Intervention (Part II: International Law and the Way Forward), JUST SECURITY, (Oct. 2, 2013, 9:00 AM), https://www.justsecurity.org/1506/koh-syria-part2 ("By treating the veto alone as dispositive, the per se position denies any nation, no matter how well-meaning, any lawful way to use even limited and multilateral force to prevent Assad from intentionally gassing a million Syrian children tomorrow. In the name of fidelity to the U.N. and this rigid conception of international law, leaders would either have to accept civilian slaughter or break the law, because international law offers no lawful alternative to prevent the slaughter.").

Those opposing NATO action relied on the ideas of sovereignty and the nonuse of force in Article 2(4).¹⁷⁶

Critics, like Professor Simma, maintain that without Security Council authorization, any unilateral military action violates the Charter:

[1]f the Security Council determines that massive violations of human rights occurring within a country constitute a threat to the peace, and then calls for or authorizes an enforcement action to put an end to these violations, a "humanitarian intervention" by military means is permissible. In the absence of such authorization, military coercion . . . constitutes a breach of Article 2(4) of the Charter. Further, as long as humanitarian crises do not transcend borders . . . and lead to armed attacks against other states, recourse to Article 51 [self-defense] is not available.¹⁷⁷

At least 133 countries agree and oppose alteration of the standard in the Charter. 178

NATO's actions in Kosovo perhaps were illegal, as Professor Simma suggests, but ultimately, its actions protected human rights and elevated humanitarian law.¹⁷⁹ "Undoubtedly, the UN Charter has taken a hit, but perhaps not a very major one. Even an illegal action, if instrumental in bringing about results widely desired by a community, will not seriously undermine a resilient legal system, one with the elasticity to make allowances for mitigating circumstances."¹⁸⁰ Interestingly, NATO did not use humanitarian intervention as the legal justification for bombing Yugoslavia.¹⁸¹ Rather, it provided no legal reasoning at all and instead used humanitarian intervention as the moral and political justification for entering the state.¹⁸² This humanitarian intervention is certainly an exception to the rule, not an attempt to reconfigure or upend the rules.¹⁸³

Many small, militarily weak states oppose the idea of humanitarian intervention because they believe their sovereignty depends on the strict interpretation of Article 2(4).¹⁸⁴ For example, Yugoslavia sued the United States for illegal use of force and violating the state's sovereignty in Kosovo, but the ICJ never ruled on the issue because it said it lacked

^{176.} Id.

^{177.} See Franck, supra note 144, at 858 (alterations in original) (quoting Bruno Simma, NATO, the UN and the Use of Force: Legal Aspects, 10 EUR. J. INT'L L. 1, 5 (1999)).

^{178.} Ryan Goodman, Humanitarian Intervention and Pretexts for War, 100 AM. J. INT'L L. 107, 112 (2006) (citing Movement of the Non-aligned Countries, XIII Ministerial Conference, Final Document of the Thirteenth Ministerial Conference of the Movement of Non-Aligned Countries, ¶ 263, U.N. Doc. A/54/917 (June 6, 2000) ("We reject the so-called 'right' of humanitarian intervention, which has no legal basis in the UN Charter or in the general principles of international law.")).

^{179.} Franck, supra note 144, at 859.

^{180.} Id.

^{181.} Brown, supra note 147, at 1685.

^{182.} Id.

^{183.} Franck, supra note 144, at 859.

^{184.} See Brown, supra note 147, at 1702.

jurisdiction.¹⁸⁵ The situation is even trickier when the country desiring to act is a powerful, permanent member of the Security Council claiming to be entitled to act outside the Charter's framework.¹⁸⁶

Such is the case here. In 2013, the United States determined that a targeted military strike would be the best method to ensure that Syria could not use chemical weapons again.¹⁸⁷ But despite its attempts to comply with the U.N. Charter, it could not get authorization from the Security Council.¹⁸⁸ The United Kingdom introduced a draft proposal to the Security Council seeking authorization for military action, but Russia and China blocked it.¹⁸⁹ Russia in the past has vetoed seven Security Council resolutions condemning President Assad's government, requiring a cessation of violence, and threatening it with sanctions.¹⁹⁰ Thus, the United States was faced with the aforementioned dilemma: be a bystander to a human atrocity, or take action without U.N. support.¹⁹¹ In a statement to the American people, President Obama decided: "I'm comfortable going forward without the approval of a United Nations Security Council that, so far, has been completely paralyzed and unwilling to hold [President] A[s]sad accountable."¹⁹²

Fast forward to 2017, and the United States under the Trump Administration chose the latter.¹⁹³ President Trump remarked: "There can be no dispute that Syria used banned chemical weapons, violated its obligations under the Chemical Weapons Convention and ignored the urging of the UN Security Council. Years of previous attempts at changing Assad's behavior have all failed and failed very dramatically."¹⁹⁴ Russia yet again vetoed a Security Council Resolution condemning the chemical attack, bringing Russia's total vetoes of Syria-related Resolutions to eight.¹⁹⁵ U.S. Ambassador Haley remarked that with its veto,

Russia said no to accountability, Russia said no to cooperating with the UN investigation, Russia said no to helping keep peace in Syria, Russia chose to side with (Syrian President Bashar al-) Assad, even

^{185.} Yugoslavia found jurisdiction under Article IX of the Convention for the Prevention and Punishment of the Crime of Genocide. But the Court stated it has jurisdiction only over consenting parties, and the United States had a reservation on the Convention that required its consent for jurisdiction. Legality of Use of Force (Yugo. v. U.S.), Order, 1999 I.C.J. 916, ¶ 29 (June 2).

^{186.} ICISS, *supra* note 37, ¶ 6.20.

^{187.} See Remarks on the Situation in Syria, 2013 DAILY COMP. PRES. DOC. 596, at 1 (Aug. 31, 2013); Koh, supra note 63.

^{188.} See CBS NEWS, supra note 31.

^{189.} Fassihi, Nicholas & Winning, supra note 60.

^{190.} See Security Council - Veto List, UNITED NATIONS, http://research.un.org/en/docs/sc/quick (last visited Sept. 24, 2017).

^{191.} The United States' motives for taking action are discussed in further depth supra Part VI.

^{192.} Remarks on the Situation in Syria, *supra* note 187, at 2.

^{193.} Barbara Starr & Jeremy Diamond, *Trump Launches Military Strike Against Syria*, CNN (Apr. 7, 2017, 4:59 PM), http://cnn.it/2oGmkDQ.

^{194.} Id.

^{195.} See S.C. Res. 315, ¶1 (Apr. 12, 2017); Security Council - Veto List, supra note 190.

as rest of the world, even the Arab world, comes together to condemn the murderous regime.¹⁹⁶

Once again, the veto has been used to deadlock the Security Council. History serves as a keen indicator that no action will come from the U.N. Security Council; accordingly, collective action will fail.

IV. SELF-DEFENSE

The second main way a country can justify an armed attack another is through the self-defense doctrine. Article 51 of the U.N. Charter acknowledges "the inherent right of individual or collective self-defence if an armed attack occurs against a Member of the United Nations," though requiring that the measures taken be reported immediately to the Security Council.¹⁹⁷ This self-defense can be undertaken only in response to an armed attack.¹⁹⁸ Such attacks include invasions by armed forces, the sending of armed groups on behalf of the intervening state,¹⁹⁹ bombardment, blockades, attacks on military warships and aircraft, and largescale, cross-border use of weapons.²⁰⁰ Occupation and annexation typically are not considered armed attacks, even though they generally include the use of military force.²⁰¹ Article 51 also allows for collective self-defense, where the attacked state can request the help of other countries in its retaliation.²⁰²

A more contentious justification is that of preemptory self-defense. No international consensus exists as to when in time a country can launch a retaliatory attack.²⁰³ The debate reemerged in 2002 when the United States proclaimed the "Bush Doctrine"²⁰⁴ and invaded Iraq as a preemptive attack on terrorists.²⁰⁵ The government argued the United States was "defending the United States, the American people, and our interests at home and abroad by identifying and destroying the threat before it reaches our borders."²⁰⁶ As explained by the Secretary-General,

^{196.} Richard Roth, Russia Vetoes UN Resolution on Syria, CNN (Apr. 13, 2017, 12:20 AM), http://www.cnn.com/2017/04/12/politics/assad-syria-sarin-gas.

^{197.} U.N. Charter art. 51; see also Military and Paramilitary Activities in and Against Nicaragua (Nicar. v. U.S.), Judgment, 1986 I.C.J. 14, ¶ 200 (June 27).

^{198.} Nicar. v. U.S., 1986 I.C.J. \P 195; see also 2 THE CHARTER OF THE UNITED NATIONS: A COMMENTARY, supra note 135, at 1403.

^{199.} Nicar. v. U.S., 1986 I.C.J. ¶ 195.

^{200. 2} THE CHARTER OF THE UNITED NATIONS: A COMMENTARY, supra note 135, at 1410–11.

^{201.} Id. at 1410.

^{202.} Id. at 1420-21.

^{203.} Id. at 1421.

^{204.} See generally THE NATIONAL SECURITY STRATEGY OF THE UNITED STATES OF AMERICA (2002).

^{205.} Bush Declares War, CNN (Mar. 19, 2003, 11:05 PM), http://www.cnn.com/2003/US/03/19/sprj.irq.int.bush.transcript.

^{206.} THE NATIONAL SECURITY STRATEGY OF THE UNITED STATES OF AMERICA, supra note 204, at 6.

such a right arises only if the "threatened attack is *imminent*, no other means would deflect it and the action is proportionate."²⁰⁷

In justifying the threat of force or actual use of force in Syria, President Obama did not explicitly use the Bush Doctrine to justify an armed attack in Syria, but he did focus on the threat of Syria's chemical weapons use to national security.²⁰⁸ Although not a direct threat to U.S. borders, he argued chemical weapons could be transferred to terrorist groups that later could harm the American people.²⁰⁹ Moreover, inaction would cause other tyrants to acquire and use chemical weapons on the battlefield, potentially harming American soldiers.²¹⁰ Another danger is the risk to U.S. allies nearby, including Turkey, Jordan, and Israel.²¹¹ Regional stability is threatened when these "internal" events lead to refugee migrations, armed conflicts that spill over borders, scarcity of regional resources, and transnational environmental and health problems.²¹² Similarly, President Trump, while stating that the chemical weapons attack was a "disgrace to humanity,"²¹³ also used national security as a justification for the missile attack, stating: "It is in this vital national security of the United States to prevent and deter the spread and use of deadly chemical weapons.... As a result, the refugee crisis continues to deepen, and the region continues to destabilize, threatening the United States and its allies.^{,,214}

The type of self-defense the United States alleged could perhaps be found valid, but it is not the type of self-defense referred to in the U.N. Charter that grants a state the right to attack. Article 51 applies to a country's retaliation from a direct attack, whereas President Trump's use of self-defense is preemptive.²¹⁵ Perhaps the United States could have met the second and third prong required by the Secretary-General (no alterna-

213. Syria War: US Weighs Military Action Following Gas 'Attack', BBC (Apr. 7, 2017), http://www.bbc.com/news/world-middle-east-39522312.

^{207.} High Level Panel, supra note 100, ¶ 188. The Secretary-General maintained, however, that if a state has objective evidence of an anticipated attack, it must still seek approval from the Security Council because allowing one state to conduct a unilateral preemptive attack allows for more illegal uses of force. See id. ¶¶ 190–91. Two criteria—necessity and proportionality—for the use of preemptive military force arose in the infamous Caroline case. In 1837, when Canada was under British rule, the British burned a U.S. ship that was providing assistance to anti-British, Canadian rebels, claiming that it was acting in self-defense. See Anthony Clark Arend, International Law and the Preemptive Use of Military Force, 26 WASH. Q. 89, 90–91 (2003).

^{208.} Remarks on the Situation in Syria, supra note 187, at 1.

^{209.} Id.

^{210.} Address to the Nation on the Situation in Syria, supra note 64, at 2.

^{211.} Id.

^{212.} Scheffer, supra note 38, at 287.

^{214.} Michael R. Gordon, Helene Cooper & Michael D. Shear, *Dozens of U.S. Missiles Hit Air Base* in Syria, N.Y. TIMES (Apr. 6, 2017), https://www.nytimes.com/2017/04/06/world/middleeast/us-said-to-weigh-military-responses-tosyrian-chemical-attack.html; Anthony Capaccio, Illya Arkhipov, & Kambiz Foroohar, *Trump's Syria Missile Strike Ramps Up Tensions with Moscow*, BLOOMBERG NEWS (Apr. 8, 2017, 2:45 PM), https://www.bloomberg.com/politics/articles/2017-04-07/u-s-launches-missile-strike-on-syria-inresponse-to-gas-attack.

^{215.} See Akande, supra note 160.

tive means and proportionate action), but it is unlikely that the United States could justify an anticipatory attack because a threat to U.S. borders was not imminent. Nor does the Article allow retaliation as selfdefense when an ally is attacked. Thus, to strike Syria, the United States could not do so legally under Article 51. Accordingly, an attack on Syria could not be justified under collection action or self-defense. All that remains then as a legal doctrine is the responsibility to protect.

V. HUMANITARIAN INTERVENTION AND THE RESPONSIBILITY TO PROTECT

In 2013, President Obama addressed the American people regarding his proposed military strike and stated:

What message will we send if a dictator can gas hundreds of children to death in plain sight and pay no price? What's the purpose of the international system that we've built if a prohibition on the use of chemical weapons . . . is not enforced? . . . Out of the ashes of world war, we built an international order and enforced the rules that gave it meaning. And we did so because we believe that the rights of individuals to live in peace and dignity depends on the responsibilities of nations.²¹⁶

This statement reflects the idea behind humanitarian intervention. In the face of gross human rights violations, the international community has a responsibility to protect the victims and to prevent further abuses of power.²¹⁷ As such, a country may be permitted to act without authorization from the Security Council and not in self-defense under the emerging exception to the nonintervention doctrine from Articles $2(4)^{218}$ and 2(7) of the U.N. Charter.²¹⁹ The exception holds weight in that the intervention is directed neither toward the "territorial integrity" nor "political independence" of the targeted state,²²⁰ the two main reasons why the use of force is prohibited. The debate centers on whether humanitarian inter-

^{216.} Remarks on the Situation in Syria, supra note 187, at 2.

^{217.} ICISS, supra note 37, at VIII.

^{218.} See Koh, supra note 170. Professor Koh suggests that the "use of the word 'other' leaves open whether Article 2(4) would permit a threat or use of force against the territorial integrity of a state, in a case where that threat or action was critical or essential to effectuate the U.N.'s purposes." *Id.* (citing U.N. Charter art. 2(4) which states that "[a]ll Members shall refrain in their international relations from the threat or use of force against the territorial integrity or political independence of any state, or in any other manner inconsistent with the Purposes of the United Nations") (emphasis added).

^{219.} ICISS, supra note 37, at VIII.

^{220.} THE CHARTER OF THE UNITED NATIONS: A COMMENTARY, *supra* note 135, at 222. Professor Simma objects to this theory because it contradicts the purpose of Article 2(4): to prevent armed force. *See id.* He discusses the prevailing legal view that forcible humanitarian intervention cannot be justified under the U.N. Charter because the validity of the Articles is not conditioned on the effectiveness of collective action to protect against humanitarian atrocities. *Id.* at 222–23.

vention intrudes on the political independence of the state, or whether human rights are matters beyond a state's domestic jurisdiction.²²¹

ICISS defined the responsibility to protect as "the idea that sovereign states have a responsibility to protect their own citizens from avoidable catastrophe-from mass murder and rape, from starvation-but that when they are unwilling or unable to do so, that responsibility must be borne by the broader community of states."²²² It explained that this responsibility overrides nonintervention when a population is suffering serious harm-from civil war, repression, or state failure-and the home state is either unwilling or unable to end that harm.²²³ In other words, a state abrogates its right to sovereignty when it fails to protect its peonle.²²⁴ "When a State refuses to accept international prevention and protection assistance, commits egregious crimes and violations relating to the responsibility to protect and fails to respond to less coercive measures, it is, in effect, challenging the international community to live up to its own responsibilities²²⁵ By becoming a signatory of the United Nations, the state "accepts the responsibilities of membership flowing from that signature. There is no transfer or dilution of state sovereignty. But there is a necessary re-characterization involved: from sovereignty as control to sovereignty as responsibility in both internal functions and external duties."226

To be clear, the responsibility to protect is not a catchall doctrine that permits a state to invade another for no reason. The doctrine may be invoked only as a last resort where collective action cannot be obtained and for those types of suffering that are fundamentally against well-established human rights norms.²²⁷ The United Nations recognized this principle, explaining that states do not have a "right to intervene" but rather a "responsibility to protect" individuals whose state cannot or will not protect them.²²⁸ Furthermore, the doctrine's use is narrowed by the ICISS framework.

The doctrine of humanitarian intervention has early philosophical roots. Dutch jurist Hugo Grotius, one of the founders of international law, believed the law should include an exception for humanitarian intervention.²²⁹ He wrote:

^{221.} Ocran, *supra* note 35, at 15.

^{222.} ICISS, supra note 37, at VIII.

^{223.} Id. at XI.

^{224.} Rebecca J. Hamilton, The Responsibility to Protect: From Document to Doctrine-but What of Implementation?, 19 HARV. HUM. RTS. J. 289, 290 (2006).

^{225.} U.N. Secretary-General, supra note 164, ¶ 56.

^{226.} ICISS, supra note 37, at 13 (emphasis omitted).

^{227.} Ocran, supra note 35, at 25-26.

^{228.} High Level Panel, supra note 100, ¶ 201.

^{229.} Ocran, supra note 35, at 12.

Certainly it is undoubted that ever since civil societies were formed, the ruler of each claimed some especial right over his subjects . . . but if a tyrant . . . practices atrocities towards his subjects which no just man can approve, the right of human social connection is not cut off in such case.²³⁰

E.R.N. Arntz echoed that idea, stating:

When a government, even acting within the limits of its right of sovereignty, violates the rights of humanity, either by measures contrary to the interests of other [s]tates, or by excessive injustice or brutality, which seriously injure our morals or civilization, the right of intervention is legitimate. For, however worthy of respect the rights of sovereignty and independence of states may be, there is something even more worthy of respect, namely the law of humanity or of human society that must not be violated.²³¹

The African Union (AU) is the only regional organization that has enshrined this doctrine within its founding charter. Article 4(h) of the Constitutive Act of the African Union specifically provides for "[t]he right of the Union to intervene in a Member State pursuant to a decision of the Assembly in respect of grave circumstances, namely war crimes, genocide and crimes against humanity"²³² The AU later adopted the Protocol on Amendments to the Constitutive Act, which amended Article 4(h) by adding to the end of the Article "as well as a serious threat to legitimate order to restore peace and stability to the Member State of the Union upon the recommendation of the Peace and Security Council."²³³ The AU inserted a right to intervene into its charter after the failures of the region to respond to various genocides and atrocities in Africa, such as the genocide under Idi Amin in Uganda in the 1970s and in Rwanda in 1994.²³⁴ There was growing criticism that surrounding countries had watched idly as gross human rights violations occurred and chose not to intervene based on the principles of sovereignty.²³⁵

^{230.} Id. (alterations in original) (quoting HUGONIS GROTII, DE JURE BELLI ET PACIS LIBRI TRES 439-40 (William Whewell trans. 1853)).

^{231.} Id. (alteration in original) (quoting Rorin-Jacquemyms, Note Sur La Theorie du Droit d'Intervention, 8 REVUE DE DROIT INTERNATIONAL ET DE LEGISLATION COMPAREE 675 (1876)); see also DAVIDE RODOGNO, AGAINST MASSACRE: HUMANITARIAN INTERVENTIONS IN THE OTTOMAN EMPIRE, 1815–1914, at 55 (2011).

^{232.} Constitutive Act of the African Union, art. 4(h), July 11, 2000, 2158 U.N.T.S. 3, 37.

^{233.} Ben Kioko, *The Right of Intervention Under the African Union's Constitutive Act: From Non-Interference to Non-Intervention*, 85 INT'L REV. RED CROSS 807, 807 (2003). Mr. Kioko, a legal adviser to the African Union, explained in his article that this provision to the Constitutive Act was added in order to give the AU the "necessary flexibility in deciding on intervention" after many delegations pointed out that the threshold for intervention was too high and excluded too many situations that threatened national and regional peace and security. *Id.* at 812.

^{234.} Id. at 812.

^{235.} Id. at 812-13.

The AU is technically required to seek permission from the United Nations to intervene under Article 53 of the U.N. Charter.²³⁶ However, the AU has shown on prior occasions that it is willing to defy the United Nations and forgo the "legal niceties such as the authorization of the Security Council."²³⁷ Based on this law, the Eastern African Region countries intervened without Security Council approval in Burundi in 1996 where the AU imposed trade and economic sanctions on the country after a coup d'état that assassinated the democratically elected president.²³⁸ The actions of the AU and explicit adoption of the doctrine indicate a clear emerging practice of the use of humanitarian intervention, or "non-indifference,"²³⁹ where core international crimes against humanity have occurred.

The doctrine is perhaps becoming more widely accepted as more instances occur over time that require this type of intervention.²⁴⁰ NATO invaded Kosovo without Security Council permission to end the conflict between the Serbian military and Kosovar Albanian forces, using humanitarian necessity to prevent genocide as the primary rationale.²⁴¹ Other examples include Vietnam's invasion of Cambodia, which forced out communist Pol Pot's Khmer Rouge regime from power in Phnom Penh,²⁴² and Tanzania's invasion of Uganda in 1979 to overthrow dictator Idi Amin, whose reign led to the deaths of over 300,000 people.²⁴³

^{236.} Id. at 820; U.N. Charter art. 53.

^{237.} Kioko, *supra* note 233, at 821. Kioko adds that the AU will likely have to call upon the U.N. and request its assistance because it will be unable to meet the massive financial, logistical, and military demands of an intervention. *Id.* at 822.

^{238.} Id. at 821, 821 n.38.

^{239.} Id. at 819.

^{240.} Yassin El-Ayouty, International Action on the Doctrine of Humanitarian Intervention: The Case of Southern Iraq (1991-1992), N.Y. ST. B.J., Aug. 1996, at 12, 17 (1996); see also THE CHARTER OF THE UNITED NATIONS: A COMMENTARY, supra note 134, at 226. Professor Simma suggests that a rule of customary international law may develop over time as more instances occur whereby countries intervene in situations of gross humanitarian violations without Security Council approval. But he argues that if that occurs, the Security Council should extend its Chapter VII practice to such human rights violations, rather than creating a completely new customary law. Id.

ICISS, supra note 34, ¶ 2.25; NATO's Role in Relation to the Conflict in Kosovo, NATO, 241 http://www.nato.int/kosovo/history.htm (last updated July 15, 1999); Adam Roberts, NATO's 'Humanitarian War' Over Kosovo, SURVIVAL, Autumn 1999, at 102, 102. At the time, National Security Advisor Sandy Berger identified three criteria that enabled the U.S. to enter Kosovo: (1) presence of genocide or ethnic cleansing, (2) U.S. must have the capacity to act, and (3) U.S. must have a national interest at stake. Brown, supra note 147, at 1692. But professor Jack Goldsmith argues that Kosovo should not even be used as precedent because the U.S. had not accepted humanitarian intervention as the justification for the invasion. Jack Goldsmith, The Kosovo Precedent for Syria Isn't 2013. 8.02 AM), of Precedent, LAWFARE (Aug. 24, Much a http://www.lawfareblog.com/2013/08/the-kosovo-precedent-for-syria-isnt-much-of-a-precedent.

^{242.} STEPHEN J. MORRIS, WHY VIETNAM INVADED CAMBODIA 5, 219–20 (1999); Ocran, supra note 35, at 2.

^{243.} Ocran, supra note 35, at 2; Michael T. Kaufman, Idi Amin, Murderous and Erratic Ruler of Uganda in the 70's, Dies in Exile, N.Y. TIMES (Aug. 17, 2003), http://www.nytimes.com/2003/08/17/world/idi-amin-murderous-and-erratic-ruler-of-uganda-in-the-70-s-dies-in-exile.html.

The United States also used the doctrine to explain its invasion into Iraq in 1990 in the aftermath of the Iraq-Kuwait crisis.²⁴⁴

Additionally, the Economic Community of West African States (ECOWAS)²⁴⁵ used the doctrine to justify intervention in Liberia and Sierra Leone.²⁴⁶ The situation in Liberia involved the bloody clash between six ethnic groups that escalated into a massive civil war causing 200,000 casualties, 800,000 refugees, and about a million internally displaced residents.²⁴⁷ After the United Nations failed to take any action, ECOWAS decided to intervene without Security Council approval for the following reasons: (1) the extent of the violence affected Liberians and other nationals from ECOWAS countries; (2) neighboring states were bearing the huge burden of taking in the largest group of refugees in West Africa; and (3) ECOWAS "shared a collective responsibility of 'ensuring that peace and stability is maintained within the sub-region and in the African Continent as a whole, for ECOWAS believes that the tragic situation in Liberia poses a threat to international peace and securitv."248 The United States supported this intervention and drafted Security Council Resolution 788 that declared the deteriorating situation in Liberia "a threat to international peace and security" and welcomed "the continued commitment of the Economic Community of West African States (ECOWAS) to and the efforts towards a peaceful resolution of the Liberian conflict[.]"²⁴⁹ Resolution 788 further recognized the requests from ECOWAS to dispatch U.N. groups to observe "the encampment and disarmament of warring parties" and "to verify and monitor the electoral process" and commended and encouraged ECOWAS "to continue its efforts to assist in the peaceful implementation of this Accord[.]"²⁵⁰ The Security Council adopted this Resolution, among others, thereby legitimizing the legality of ECOWAS' actions, including ECOWAS' petroleum and arms embargoes against Liberia.²⁵¹

Libya is another example in which the responsibility to protect was used to justify a military invasion and was actually the first use of force with this rationale endorsed by the Security Council. Inspired by the uprisings in the Arab Spring, Libyan civilians began protesting the regime of Colonel Muammar Gaddafi, who used force and violence against his

^{244.} Ocran, supra note 35, at 2.

^{245.} ECOWAS was established by the Treaty of Lagos in 1975. Treaty of the Economic Community of West African States, May 28, 1975, 1010 U.N.T.S. 17.

^{246.} ICISS, *supra* note 37, ¶ 2.25.

^{247.} Binaifer Nowrojee, Joining Forces: United Nations and Regional Peacekeeping-Lessons from Liberia, 8 HARV. HUM. RTS. J. 129, 133-34 (1995).

^{248.} Id. at 135 (quoting ECOWAS Standing Mediation Committee, Final Communiqué of the First Session, Doc. 54 (Aug. 7, 1990)).

^{249.} S.C. Res. 788, at 1-2 (Nov. 19, 1992); Am. Soc'y of Int'l Law, U.S. Support for Multinational Intervention in Liberia, 98 AM. J. INT'L L. 193, 194 (2004).

^{250.} S.C. Res. 788, at 2 (Nov. 19, 1992).

^{251.} Levitt, *supra* note 149, at 366; *see also* IKECHI MGBEOJI, COLLECTIVE INSECURITY: THE LIBERIAN CRISIS, UNILATERALISM, AND GLOBAL ORDER 115 (2003).

opposition.²⁵² The protests, which began in small spurts in February 2011, escalated quickly and led to the deaths of an estimated 30,000 people, the wounding of 50,000, and the disappearance of over 4,000.²⁵³ The United States and Russia denounced Gaddafi, but politicians in each country expressed concern over intervening because of the long-term stakes in the oil-rich region.²⁵⁴ On February 25, 2011, the United States froze Libyan assets.²⁵⁵ The next day, with backing from the Arab League, the Security Council adopted a resolution demanding an end to the violence in Libya and imposing sanctions.²⁵⁶ When Gaddafi failed to heed to these demands, the Security Council adopted another resolution on March 17, 2011, imposing a no-fly zone over Libya and authorizing U.N. members to take "all necessary measures . . . to protect civilians" and halt violence.²⁵⁷

This was the first time in history the Security Council endorsed military action under the "responsibility to protect" doctrine.²⁵⁸ The United States and NATO used this authorization to launch a bombing campaign over the country, eventually leading to the assassination of Gaddafi by rebels and the end of the intervention in October 2011.²⁵⁹ Because Gaddafi was ousted, this bombing campaign was highly criticized as a means to enforce a regime change, a purpose prohibited by ICISS.²⁶⁰ This criticism is discussed further in the "Responsibility to React" Section below, but the framework ICISS has created should prevent these types of military interventions for a regime change and not for a "just cause."

Over time, as the Security Council begins to endorse further actions under the responsibility to protect doctrine, the doctrine may perhaps

255. 2011 Libya Civil War Fast Facts, CNN, http://www.cnn.com/2013/09/20/world/libyacivil-war-fast-facts (last updated Mar. 29, 2017, 4:38 PM).

260. African Leaders Oppose NATO over Gaddafi, NEWVISION (June 18, 2011, 3:00 AM), http://www.newvision.co.ug/new_vision/news/1009639/african-leaders-oppose-nato-gadaffi.

^{252.} Karin Laub, *Libyan Estimate: At Least 30,000 Died in the War*, CNSNEWS.COM (Sept. 8, 2011, 3:50 AM), https://www.cnsnews.com/news/article/libyan-estimate-least-30000-died-war. 253. *Id.*

^{254.} David Usborne, Russia Slams 'No-Fly Zone' Plan as Cracks Appear in Libya Strategy, INDEPENDENT (March 2, 2011), http://www.independent.co.uk/news/world/politics/russia-slamsnofly-zone-plan-as-cracks-appear-in-libya-strategy-2229621.html; Arab League Backs Libya No-Fly Zone, NEWS24, (March 7, 2013, 7:51 PM), http://www.news24.com/World/News/Arab-Leaguebacks-Libya-no-fly-zone-20110307.

^{256.} S.C. Res. 1970, ¶¶ 1, 9–17 (Feb. 26, 2011).

^{257.} S.C. Res. 1973, ¶ 4 (Mar. 17, 2011).

^{258.} Upon the unanimous adoption of the Resolution 1970, then-Secretary-General Ban Kimoon expressed "hope that the message that 'gross violations of basic human rights will not be tolerated and that those responsible for grave crimes will be held accountable' would be 'heard and heeded' by the Libyan regime and that it would bring hope and relief to those still at risk." Meetings Coverage, Security Council, In Swift, Decisive Action, Security Council Imposes Tough Measures on Libyan Regime, Adopting Resolution 1970 in Wake of Crackdown on Protesters, SC/10187/REV.1 (Feb. 26, 2011). The representative from France stated that the "resolution recalled the accountability of each State for the protection of its population and the role of the international community when that responsibility was not met." *Id.* The Libyan representative "thanked Council Members for their unanimous action, which represented moral support for his people, who were resisting the attacks." *Id.*

^{259.} See 2011 Libya Civil War Fast Facts, supra note 255.

become part of customary international law.²⁶¹ But a few hurdles remain before it can assume that label, namely that customary law usually does not override treaty law.²⁶² Accepting the idea that the responsibility to protect is international customary law necessitates accepting the premise that it has overridden other established international laws, including Article 53 of the Vienna Convention, which states that a rule of *jus cogens*, like the nonuse of force, can be modified only by another rule of *jus cogens*, and Article 103 of the U.N. Charter, stating that Charter prevails over other treaty obligations.²⁶³ Once the doctrine becomes customary law, it can more easily navigate around the provisions in the U.N. Charter. But the journey to that point is still far away.

The dilemma surrounding humanitarian intervention is complex. If an outside state takes no action, then it becomes a complicit bystander.²⁶⁴ But if a state intervenes, it may not be successful in mitigating the offenses.²⁶⁵ Furthermore, intervening could mean taking a side in a civil conflict, which could cause further state fragmentation.²⁶⁶ For example,

Interventions in the Balkans did manage to reduce the civilian death toll, but it has yet to produce a stable state order in the region. As both the Kosovo and Bosnian interventions show, even when the goal of international action is, as it should be, protecting ordinary human beings from gross and systematic abuse, it can be difficult to avoid doing rather more harm than good.²⁶⁷

However, the doctrine has been criticized as highly susceptible to abuse.²⁶⁸ States would, the argument goes, use humanitarianism as a guise to intervene for nonaltruistic purposes, such as expansionism or overthrow of government.²⁶⁹ Nothing would prevent states from using force against another for an easy-to-fabricate reason.²⁷⁰ For example, in 1938, Adolf Hitler justified the use of force in Czechoslovakia as humanitarian intervention to protect the German nationals living there from being

266. Id.

^{261.} In order to become a "custom," two elements need to be met: state practice (usus) and a belief that such practice is required (opinion juris sive necessitatis). Continental Shelf (Libyan Arab Jamahiriya/Malta), Judgment, 1985 I.C.J. 13, ¶ 27 (June 3) ("It is of course axiomatic that the material of customary international law is to be looked for primarily in the actual practice and opinio juris of States").

^{262.} See Akande, supra note 161.

^{263.} Id.

^{264.} ICISS, supra note 37, ¶ 1.22.

^{265.} *Id.*

^{267.} Id.

^{268.} Ocran, supra note 35, at 13.

^{269.} Dino Kritsiotis, Reappraising Policy Objections to Humanitarian Intervention, 19 MICH. J. INT'L L. 1005, 1020–21 (1998).

^{270.} Id. at 1021 (citing Louis Henkin, Remarks on Biafra, Bengal, and Beyond: International Responsibility and Genocidal Conflict, 66 PROC. AM. SOC'Y INT'L L. 95, 96 (1972)).

maltreated in the unworthiest manner, tortured, . . . [and denied] the right of nations to self-determination," that "[i]n a few weeks the number of refugees who have been driven out has risen to over 120,000," that "the security of more than 3,000,000 human beings" was in jeopardy, and that the German government was "determined by one means or another to terminate these attempts . . . to deny by dilatory methods the legal claims of oppressed peoples.²⁷¹

But countries trying to do real good should not be prevented from doing so just because of the possibility that a different country could use the doctrine for an improper purpose.²⁷² Judge Rosalyn Higgins, the first female judge and former president of the International Court of Justice, likens this idea to that of self-defense:

Many writers do argue against the lawfulness of humanitarian intervention today. They make much of the fact that in the past the right has been abused. It undoubtedly has. But then so have there been countless abusive claims to the right to self-defense. That does not lead us to say that there should be no right of self-defense today. We must face the reality that we live in a decentralized international legal order, where claims may be made either in good faith or abusively. We delude ourselves if we think that the role of norms is to remove the possibility of abusive claims ever being made.²⁷³

A balance must be struck between the sovereignty of states and the imperatives of humanitarianism. Achieving this balance and ensuring the lack of abuse is not a simple or easy endeavor and will be discussed further below in the "Right Intention" Section under the "Responsibility to React."

Another argument is that intervention will drastically affect the domestic country's political process and organization of the state.²⁷⁴ And another pits humanitarian intervention against state sovereignty. But as the former Secretary-General has suggested, sovereignty goes hand-inhand with the responsibility to protect.²⁷⁵ In his 2009 report "Implementing the Responsibility to Protect," he explained that respect for human rights is an essential part of being a responsible sovereign²⁷⁶ and that

^{271.} Goodman, *supra* note 178, at 113 (alterations in original) (quoting Letter from Reich Chancellor Hitler to Prime Minister Chamberlain (Sept. 23,1938), *in* THE CRISIS IN CZECHOSLOVAKIA, APRIL 24-OCTOBER 31, 1938, 19 INT'L CONCILIATION 433 (1938)); Kritsiotis, *supra* note 269, at 1021 (citing Thomas M. Franck & Nigel S. Rodley, *After Bangladesh: The Law of Humanitarian Intervention By Military Force*, 67 AM. J. INT'L L. 275, 284 (1973)). However, a state's use of force to protect its own nationals is often justified under self-defense because the doctrine is much clearer; for example, Israel used self-defense to explain its raid of the Entebbe airport in Uganda to rescue Israeli and Jewish hostages. Brown, *supra* note 147, at 1703–04.

^{272.} Ocran, supra note 35, at 26.

^{273.} Kritsiotis, *supra* note 269, at 1022 (quoting ROSALYN HIGGINS, PROBLEMS AND PROCESS: INTERNATIONAL LAW AND HOW WE USE IT 247 (1994)).

^{274.} Ocran, supra note 35, at 16.

^{275.} U.N. Secretary-General, supra note 164, ¶ 16.

^{276.} Id.

sovereignty itself is a responsibility.²⁷⁷ "By helping States to meet their core protection responsibilities, the responsibility to protect seeks to strengthen sovereignty, not weaken it. It seeks to help States to succeed, not just to react when they fail"²⁷⁸ The ICJ in *Nicaragua v. United States* stated that "[t]he principle of non-intervention involves the right of every sovereign state to conduct its affairs without outside interference; though examples of trespass against this principle are not infrequent, the court considers that it is *part and parcel of customary international law.*"²⁷⁹

The Secretary-General suggested a three-pillar, interrelated analysis of the responsibility to protect: "[t]he protection responsibilities of the [s]tate," "[i]nternational assistance and capacity building," and "[t]imely and decisive response."²⁸⁰ This analysis, however, does not provide specific guidance for a state wanting to take unilateral action against another state whose own leadership is responsible for the human rights violation.²⁸¹ ICISS came up with a framework to analyze the humanitarian intervention doctrine so that it could be effectively used only for the correct purposes.²⁸² This framework also includes some of the elements discussed in the three-pillar analysis. As framed by ICISS, the responsibility to protect includes the responsibility to protect includes peacemaking, peace enforcement, and postconflict peacebuilding.²⁸⁴ The next Sections of this Article will consider each of these criteria in turn.

A. Responsibility to Prevent

ICISS defined the responsibility to prevent as "address[ing] both the root causes and direct causes of internal conflict and other man-made crises putting populations at risk."²⁸⁵ This responsibility lies primarily with the sovereign state and with the organizations within it.²⁸⁶ International support then serves to bolster this prevention through development

^{277.} *Id.* ¶ 10(a).

^{278.} Id.

^{279.} Ocran, *supra* note 35, at 14–15 (alteration in original) (quoting Military and Paramilitary Activities in and Against Nicaragua (Nicar. v. U.S.), Judgment, 1986 I.C.J. 14, ¶ 202 (June 27)).
280. U.N. Secretary-General, *supra* note 164, ¶ 11(a)–(c).

^{281.}

If the political leadership of the State is determined to commit crimes and violations relating to the responsibility to protect, then assistance measures under pillar two would be of little use and the international community would be better advised to begin assembling the capacity and will for a "timely and decisive" response.

Id. ¶ 29.

^{282.} ICISS, supra note 37, at VIII.

^{283.} Id. ¶ 2.32.

^{284.} Ocran, supra note 35, at 4.

^{285.} ICISS, supra note 37, at XI.

^{286.} Id. ¶ 3.2.

assistance, local initiatives, mediation, and efforts to promote reconciliation.²⁸⁷

Prevention efforts must be exhausted before contemplating intervention.²⁸⁸ The main idea is as follows:

[T]he earlier the root causes of a potential conflict are identified and effectively addressed, the more likely it is that the parties to a conflict will be ready to engage in a constructive dialogue, address the actual grievances that lie at the root of the potential conflict and refrain from the use of force to achieve their aims.²⁸⁹

These efforts must include both short- and long-term measures involving the political, diplomatic, humanitarian, and institutional spheres of the sovereign, regional, and international actors.²⁹⁰

Conflict prevention is one of the United Nations' primary responsibilities.²⁹¹ Article 1(1) of the U.N. Charter specifically mandates that the United Nations "take effective collective measures for the prevention and removal of threats to the peace"²⁹² In the 2001 U.N. Report on Prevention of Armed Conflict, the Secretary-General stated, "[C]ollective security should imply an obligation for all of us to strive to address tensions, grievances, inequality, injustice, intolerance and hostilities at the earliest stage possible, before peace and security are endangered."²⁹³

The United Nations has recognized the importance of prevention methods. In 2000, it published the Report of the Panel on United Nations Peace Operations, in which it laid out suggestions for better long-term peace operations that prevent conflicts.²⁹⁴ The report stated that U.N. peace operations addressed only one-third of the conflicts in the 1990s.²⁹⁵ Most of the funds were used for intervention and postintervention assistance; according to the Carnegie Commission on Preventing Deadly Conflict, about \$200 billion was spent on conflict interventions in Bosnia and Herzegovina, Somalia, Rwanda, Haiti, the Persian Gulf, Cambodia and El Salvador, when the United Nations could have saved \$130 billion if it took effective preventative steps.²⁹⁶

ICISS puts forth three essential conditions that must be met to achieve effective prevention. First is "early warning," knowledge of a

^{287.} Id. ¶ 3.3.

^{288.} Id. ¶ 3.4.

^{289.} U.N. Secretary-General, Prevention of Armed Conflict, at 2-3, U.N. Doc. A/55/985-S/2001/574 (June 7, 2001).

^{290.} Id. at 2.

^{291.} *Id.*

^{292.} U.N. Charter art. 1, ¶ 1.

^{293.} U.N. Secretary General, supra note 289, ¶ 19.

^{294.} Rep. of the Panel on United Nations Peace Operations, U.N. Doc. A/55/305-S/2000/809 (Aug. 21, 2000).

^{295.} Id. ¶ 29.

^{296.} ICISS, supra note 37, ¶ 3.7.

dangerous situation, its fragility, and its risks.²⁹⁷ Investigating these crimes through on-site missions is just one way of discovering the degree of harm or potential harm.²⁹⁸ Second is the "preventive toolbox," comprehensive understanding of all the policy measures that can be taken to diffuse the situation.²⁹⁹ Finally, the "political will" actually to apply those measures must be present.³⁰⁰

Here, all three elements existed that could have effectuated preventative measures before Syria used chemical weapons. The United Nations certainly had "early warning" as to the fragile situation developing in Syria. The Syrian conflict began in 2011, and the amount of violence and number of deaths continued to increase as time went by. This understanding is expressed in the two resolutions the Security Council adopted in April 2012, condemning the violence and noting that Syria had begun to implement its commitments to cease fire.³⁰¹ Moreover, the United Nations deployed a mission to investigate allegations of the small-scale use of chemical weapons prior to and after the 2013 chemical weapons attack.³⁰²

But as the hostility intensified, those resolutions meant nothing, and further action needed to be taken to curb the violence. Multiple countries, including the United States, repeatedly submitted proposals to the Security Council to stop the ensuing violence before it escalated even further, but they were all vetoed.³⁰³ These proposals included measures that constituted the "preventive toolbox" and that would be implemented by the Security Council and various U.N. bodies and regional organizations.

One such proposal from October 2011 led by France, Germany, and the United Kingdom condemned the violence and urged Syria to halt its assault on civilians.³⁰⁴ The proposal also demanded that Syria comply with its international law obligations and called for an inclusive political process that addressed the public's concerns.³⁰⁵ But Russia and China vetoed the resolution.³⁰⁶ Another proposal from the United States in February 2012 condemned the Syrian government's gross human rights violations and its use of force against civilians.³⁰⁷ It demanded an end to the violence and called for Syria's cooperation with regional organizations to promote peace and stability in the region.³⁰⁸ But once again, Russia and

^{297.} Id. ¶ 3.9.

^{298.} U.N. Secretary-General, supra note 164, ¶ 53.

^{299.} ICISS, *supra* note 37, ¶ 3.9.

^{300.} *Id.*

^{301.} S.C. Res. 2043 (Apr. 21, 2012); S.C. Res. 2042 (Apr. 14, 2012).

^{302.} See U.N. Mission Report, supra note 28, ¶ 6, 15.

^{303.} See Security Council - Veto List, supra note 190.

^{304.} S.C. Res. 612, ¶¶ 1, 4 (Oct. 4, 2011).

^{305.} *Id.* ¶¶ 4–5.

^{306.} Security Council - Veto List, supra note 190.

^{307.} S.C. Res. 77, ¶¶ 1, 3 (Feb. 4, 2012).

^{308.} *Id.* ¶¶ 5, 9.

China vetoed it.³⁰⁹ In July 2012, the United Kingdom and United States again proposed a resolution to the Security Council, expressing grave concern about the escalating violence and death toll and condemning Syria's use of heavy weaponry, including tanks and helicopters indiscriminately to shell civilian populations.³¹⁰ The resolution also included a six-point plan to facilitate the political transition and ease humanitarian violations.³¹¹ This proposal was, yet again, vetoed by Russia and China.³¹² These proposals led or cosponsored by the Unites States indicate that it had the "political will" to carry out measures against Syria.

With the Security Council deadlocked, the General Assembly adopted a resolution in May 2013, three months before Syria's use of chemical weapons, encouraging the Security Council to take effective measures to stop the violence in the Syria.³¹³ The resolution also demanded that Syria strictly observe its international law obligations not to use or transfer chemical weapons.³¹⁴ This is the most blatant evidence of the United Nations' understanding of the possibility of chemical weapons use.

ICISS stated that collective, international preventative measures must be exhausted before intervention-especially through military force—may be undertaken.³¹⁵ That is exactly what happened here. Former National Security Advisor Susan Rice stated that the overall U.S. policy for Syria (not the military strike itself) involves this peace-making agenda: "[T]o end the underlying conflict through a negotiated, political transition in which Assad leaves power. The best way to achieve this is to keep the country and its institutions intact, but all parties have to be willing to negotiate."³¹⁶ The United States and other states tried to take preventative action through the Security Council, but their efforts were blocked.³¹⁷ President Obama addressed this very point in his statement to the American people about his plan for Syria: "Over the last two years, my administration has tried diplomacy and sanctions, warning and negotiations-but chemical weapons were still used by the Assad regime."³¹⁸ President Trump said that repeated pleas with the United Nations had failed.319

^{309.} Security Council - Veto List, supra note 190.

^{310.} S.C. Res. 538, at 1-3 (July 19, 2012).

^{311.} Id. ¶ 3; see also S.C. Res. 2042 annex (Apr. 14, 2012).

^{312.} Security Council - Veto List, supra note 190.

^{313.} G.A. Res. 67/262, ¶ 9 (June 4, 2013).

^{314.} *Id.* ¶ 11.

^{315.} ICISS, *supra* note 37, ¶ 3.1.

^{316.} Susan E. Rice, Nat'l Sec. Advisor, Remarks as Prepared for Delivery by National Security Advisor Susan E. Rice (Sept. 9, 2013) (transcript available at http://www.whitehouse.gov/the-press-office/2013/09/09/remarks-prepared-delivery-national-security-advisor-susan-e-rice).

^{317.} Fassihi, Nicholas & Winning, supra note 60; CBS NEWS, supra note 31.

^{318.} Remarks by the President, supra note 32.

^{319.} See Starr & Diamond, supra note 193.

The United States attempted to fulfill its responsibility to prevent. Because every preventative measure was attempted and blocked, it could do no more and could enter the "responsibility to react" phase only outside of the U.N. framework. The United States, as a world economic power, has the capacity to enter and fulfill the next phase.³²⁰

B. Responsibility to React

ICISS described the responsibility to react as the responsibility "to respond to situations of compelling human need with appropriate measures, which may include coercive measures like sanctions and international prosecution, and in extreme cases military intervention."³²¹ The Commission stated that countries must first seek Security Council authorization prior to carrying out any military intervention.³²² This is in part because nonintervention is always the starting point, for sovereign states must be allowed the opportunity to resolve the issues within their domestic sphere.³²³ But, as discussed in Part III above, it is difficult to get this authorization because of the permanent members' veto power. Consequently, as Professor David Scheffer suggests, when the Security Council is deadlocked, a state or group of states must act outside of the U.N. Charter and be guided by the ICISS framework for humanitarian intervention.³²⁴

When a state is either unable or unwilling to address the harm, and when international prevention efforts have failed, humanitarian intervention may be required.³²⁵ The General Assembly reiterated this notion through its resolution in the 2005 World Summit Outcome, stating that force may be used "should peaceful means be inadequate and national authorities are manifestly failing to protect their populations from genocide, war crimes, ethnic cleansing and crimes against humanity."³²⁶ Humanitarian intervention is the exception to nonintervention, an exception that exists for circumstances where domestic disputes spill over into the international realm, causing disruption to the region, and also where gross human rights violations are occurring.³²⁷

Military action is allowed, but only in extreme and grave cases.³²⁸ These cases of violence must "so genuinely 'shock the conscience of

^{320.} The United States' powerful position in the world alone does not justify a unilateral attack on another state. Rather, its economic and political stature ensures, or at least makes it more likely, that it can be successful in carrying out a limited attack and then providing funds to rebuild any damage it creates, as will be discussed further below.

^{321.} ICISS, supra note 37, at XI.

^{322.} Id. ¶ 6.15.

^{323.} Id. ¶4.11.

^{324.} Scheffer, supra note 38, at 290-91.

^{325.} ICISS, supra note 37, ¶ 4.1.

^{326.} G.A. Res. 60/1, 2005 World Summit Outcome, \P 139 (Sept. 16, 2005); see also U.N. Secretary-General, supra note 164, \P 49.

^{327.} See ICISS, supra note 37, passim.

^{328.} Id. ¶ 4.1.

mankind" or present a profoundly "clear and present danger to international security" to permit the use of military force.³²⁹ Such cases arise when broken-down states and civil conflicts become so violent and repressive that citizens are faced with actual or potential large-scale genocide, massacre, or ethnic cleansing.³³⁰ ICISS further elaborates on how this level is measured in the "just cause" analysis below. These types of interventions have occurred in the past, primarily due to the Security Council's failure to act where gross humanitarian violations are present and the need for assistance is overwhelming.³³¹ "[I]n the face of a conscience shocking situation but inaction by the Council, it is not a stretch of legal reasoning to say that the responsibility to protect admits of a narrowly tailored right of ad hoc action for a proper purpose."³³²

To ensure that these military interventions are not abused, ICISS created a narrow framework that ought to be followed in assessing whether a country can lawfully use military force against another. There are six elements for intervention: (1) right authority, (2) just cause, (3) right intention, (4) last resort, (5) proportional means, and (6) reasonable prospects.³³³

1. Right Authority

ICISS stated that Security Council authorization must first be sought prior to any military intervention.³³⁴ It also stated that the permanent members should agree not to use their veto in matters that do not affect their national interests, but where the intervention would greatly ease the violations.³³⁵ But practically speaking, even if the permanent members did make this agreement, it is highly unlikely to prevent the veto from being used. Here, Russia is one of Syria's strongest allies, even providing the country with Russian weaponry.³³⁶ Russia could assert that a resolution taken against Syria would also hurt its own domestic interests and therefore it can rightfully veto the proposal. In an op-ed to the *New York Times*, Russian President Vladimir Putin asserted that any action taken without Security Council approval would plainly violate the U.N. Charter, stating, "We are not protecting the Syrian government, but international law. . . . It is alarming that military intervention in in-

^{329.} Id. ¶ 4.13.

^{330.} Id.

^{331.} Scheffer, supra note 38, at 290.

^{332.} Bethlehem, *supra* note 172.

^{333.} ICISS, *supra* note 37, ¶ 4.16.

^{334.} Id. ¶ 6.15.

^{335.} Id. ¶ 6.21.

^{336.} Elisabeth Bumiller, *Military Points to Risks of a Syrian Intervention*, N.Y. TIMES (Mar. 11, 2012), http://www.nytimes.com/2012/03/12/world/middleeast/us-syria-intervention-would-be-risky-pentagon-officials-say.html.

ternal conflicts in foreign countries has become commonplace for the United States. Is it in America's long-term interest? I doubt it."³³⁷

ICISS partly recognized the veto problem and suggested that a country seeking to intervene should look to the General Assembly and then to regional organizations for assistance.³³⁸ In the case of Libya, the African Union, Arab League, Gulf Cooperation Council, and Organization of the Islamic Conference all supported the condemnation of Gadda-fi.³³⁹ The regional support certainly helps, but it also takes time. These situations often require immediate action, and acquiring approval from these other large organizations could waste precious time. ICISS also warned the Security Council that if it fails to take action, states wishing to intervene may do so on their own, an action which would affect the credibility of the United Nations as a peace-keeping organization.³⁴⁰ That is why, as a practical matter, if the Security Council is unwilling to authorize military intervention, a state may do so without its approval if all the other elements for intervention are present.³⁴¹

Moreover, instances have occurred in which action has been taken legally without Chapter VII authorization. For example, the forcible policing of no-fly zones in Iraq in 1999 by the United States, United Kingdom, and France lacked Security Council approval under Chapter VII.³⁴² Though the Security Council did pass resolution 688 to condemn the suffering of Iraqi civilians, the resolution was not passed under Chapter VII.³⁴³ Thus, the Security Council did not authorize the policing actions under the Charter but rather under a humanitarian intervention principle.³⁴⁴

Regarding Syria, the United Kingdom proposed a resolution to the U.N. Security Council in 2013 seeking its authorization for military action, but the members could not agree to its terms.³⁴⁵ Because the proposal failed, no official record exists of whether the United States cosponsored it. But it is reasonable to assume that the United States supported the U.K.'s proposal based on their allied relationship.³⁴⁶ The

^{337.} Putin, supra note 47.

^{338.} ICISS, supra note 37, ¶ 6.29-.31.

^{339.} Justin Morris, Libya and Syria: R2P and the Spectre of the Swinging Pendulum, 89 INT'L AFF. 1265, 1272 (2013); Ved P. Nanda, From Paralysis in Rwanda to Bold Moves in Libya: Emergence of the "Responsibility to Protect" Norm Under International Law – Is the International Community Ready for It?, 34 HOUS. J. INT'L L. 1, 39 (2011).

^{340.} ICISS, supra note 37, ¶ 6.40; see also U.N. Secretary-General, supra note 164, ¶ 60 ("[T]he international community's failure to stem the mass violence and displacements in Darfur, as well as in the Democratic Republic of the Congo and Somalia, has undermined public confidence in the United Nations and our collective espousal of the principles relating to the responsibility to protect.").

^{341.} Scheffer, supra note 38, at 290-91.

^{342.} See Bethlehem, supra note 172.

^{343.} Id.

^{344.} Id.

^{345.} See Fassihi, Nicholas & Winning, supra note 60.

^{346.} See, e.g., CBS NEWS, supra note 31.

countries then came together again in condemning the attacks in April 2017 and urging Russia not to block any U.N. actions.³⁴⁷ Under the ICISS framework, this is enough to satisfy the element of right authority.

2. Just Cause

Military intervention can be justified only if the circumstances in the sovereign state so grossly violate human rights and cause "serious and irreparable harm" to human beings.³⁴⁸ Professor Scheffer identifies a number of elements as requiring intervention: "(1) [t]o rescue or protect citizens abroad . . . whose lives are at risk[;] (2) [t]o protect religious or ethnic minorities from genocide or violent oppression[;] (3) to [stop] internal . . human rights atrocities[;] (4) [t]o contain mass migration," assist internally displaced people, and to improve life-threatening conditions for refugees; (5) to curtail gross human suffering from "man-made or natural disasters"; and (6) to aid oppressed rebels in their fight for self-determination against tyrants who grossly violate human rights.³⁴⁹

ICISS stated that this harm must be either (1) "large scale loss of life, actual or apprehended, with genocidal intent or not, which is the product either of deliberate state action, or state neglect or inability to act, or a failed state situation," or (2) "large scale 'ethnic cleansing,' actual or apprehended, whether carried out by killing, forced expulsion, acts of terror or rape."³⁵⁰ Such loss includes crimes against humanity and war violations as defined by the Geneva Conventions and other international laws.³⁵¹

ICISS did not define "large scale" in numbers but stated that intervention can be anticipatory when clear evidence exists of the likelihood of mass killing.³⁵² If countries could not act on this likelihood, they would have to wait until a human rights violation rose to the level of mass genocide.³⁵³ Even so, some extreme humanitarian violations to a smaller population may warrant the same intervention.³⁵⁴

The Commission listed a number of circumstances that would not meet the "just cause" requirement for military intervention: systematic racial discrimination, systematic imprisonment, repression of political opponents, overthrow of government, rescuing own nationals on foreign

^{347.} Down to Assad, supra note 6; The Latest, supra note 14.

^{348.} ICISS, supra note 37, ¶ 4.18; see also Scheffer, supra note 38, at 291.

^{349.} Scheffer, *supra* note 38, at 265. But Professor Scheffer notes the problem with this list: all purposes are difficult to justify under a traditional reading of the U.N. Charter. These purposes, he argues, can be addressed using non-consensual, non-forcible methods, which include the work of non-governmental organizations that provide aid, rather than military force. *See id.* at 266.

^{350.} ICISS, supra note 37, ¶ 4.19 (emphasis omitted).

^{351.} Id. ¶ 4.20.

^{352.} Id. ¶ 4.21.

^{353.} *Id.*

^{354.} Ocran, supra note 35, at 45.

soil (covered by U.N. Charter Article 51), and responding to terrorist attacks (also covered by Article 51).³⁵⁵

Syria's use of chemical weapons clearly fits the just cause requirement because the attack caused large scale loss of life to adults and children. The U.N. Secretary-General's High Level Panel on Threats, Challenges, and Change in 2004 specifically stated that chemical weapons are similar to nuclear weapons in that they pose a serious threat for their ability to indiscriminately kill masses with one shot.³⁵⁶ The Secretary-General's report on the U.N.'s chemical weapons investigation even stated that "chemical weapons were used on a *relatively large scale*, resulting in numerous casualties³⁵⁷ The Syrian Observatory for Human Rights confirmed at least 502 deaths and thousands more injured in 2013.³⁵⁸ The April 2017 attacks killed about 100 and left hundreds more injured.³⁵⁹ Furthermore, because Syria had huge stockpiles of the weapons,³⁶⁰ the intervention could be further justified as anticipating more deaths.

3. Right Intention

"The primary purpose of the intervention," whatever other motives intervening states may have, "must be to halt or avert human suffering."³⁶¹ It cannot be, for example, to help a rebel group overthrow a government or to change international borders.³⁶² It may be difficult to ascertain what the true motivation is, but the intention is better affirmed when multiple states intend to intervene, or when one state has backing from regional organizations and support from the victims themselves.³⁶³

Realistically, a country is always going to have additional motivations, like economic interests, political strategies, or even expansionism.³⁶⁴ While ideally this should not be so, a state must be able to justify to its own people the reason for expending the country's resources and

^{355.} ICISS, *supra* note 37, ¶¶ 4.25–.27.

^{356.} High Level Panel, supra note 100, ¶ 114.

^{357.} U.N. Mission Report, *supra* note 28, ¶1 (emphasis added).

^{358.} Syria Chemical Attack: What We Know, supra note 29.

^{359.} Somini Sengupta & Rick Gladstone, Nikki Haley Says U.S. May 'Take Our Own Action' on Syrian Chemical Attack, N.Y. TIMES, (Apr. 5, 2017), https://www.nytimes.com/2017/04/05/world/middleeast/syria-chemical-attack-un.html; Lena Masri, Death Toll in Syrian Chemical Attack Rises to 72, ABC NEWS, (Apr. 5, 2017, 1:36 PM), http://abcnews.go.com/International/death-toll-syrian-chemical-attack-rises-72/story?id=46591764.

^{360.} Report of the OPCW, supra note 68.

^{361.} ICISS, *supra* note 37, ¶ 4.33.

^{362.} Id.

^{363.} Id. ¶ 4.34; see also Scheffer, supra note 38, at 291.

^{364.} Ocran, *supra* note 35, at 44; Kioko, *supra* note 233, at 823 (areas of interest could include a desire to prevent cross-border refugee flow or strategic and economic interests in establishing order in the target state); Amy E. Eckert, *The Responsibility to Protect in the Anarchical Society: Power, Interest, and the Protection of Civilians in Libya and Syria*, 41 DENV. J. INT'L L. & POL'Y 87, 91 (2012).

taxpayers' money and for taking the risk to intervene.³⁶⁵ Though domestic approval is separate and apart from international obligations, leadership will be held accountable domestically for its actions abroad. Therefore, it is natural to have some state interest, other than just a moral one. These interests, in fact, serve as a check on prolonged interventions and a compass that keeps the alleged purpose for intervention on the humanitarian path because the intervening state is using its own resources to intervene.³⁶⁶ Moreover, because of international interdependence, "international citizenship is a matter of national self-interest."³⁶⁷ The question here is not how many intentions the intervening country has but rather what the primary reason is.

This prong in the analysis is perhaps the highest hurdle to overcome because it is the most susceptible to abuse.³⁶⁸ How do we know when a country is being disingenuous? And how do we prevent countries from taking advantage of the doctrine and using it as a pretext to wage war? Many leading scholars reject unilateral humanitarian intervention for just this reason.³⁶⁹ For example, Richard Bilder argues that "historically, claims of humanitarian intervention have typically served simply as a pretext for what are, in fact, selfish assertions of national interest, power, and greed³⁷⁰ Similarly, Jane Stromseth, who believes in a gradual acceptance of the doctrine, asserts that it should not be codified because that "would provide another theory under which states determined to use force can seek to justify their actions."³⁷¹

Such was the case in Libya. Only France referred to the responsibility to protect during deliberations about the resolutions, but the doctrine's ideals were discussed subsequent to the adoption of the resolutions.³⁷² The AU, while it condemned Gaddafi, actually opposed the resolutions, arguing that intervention in Libya—particularly without AU approval—would make the situation worse and was not necessary because the situation did not involve genocide; further, the AU believed that if a regime change were to occur, the Libyan people must make that decision, not external forces.³⁷³ After the NATO bombings, Human

^{365.} ICISS, *supra* note 37, ¶ 4.35.

^{366.} Kritsiotis, supra note 269, at 1026.

^{367.} ICISS, supra note 37, ¶ 4.36; see also Franck, supra note 143, at 857.

^{368.} See Brown, supra note 146, at 1727; Goodman, supra note 177, at 113; Kritsiotis, supra note 268, at 1020-23.

^{369.} See Goodman, supra note 177, at 108-09.

^{370.} Richard B. Bilder, Kosovo and the "New Interventionism": Promise or Peril?, 9 J. TRANSNAT'L L. & POL'Y 153, 160 (1999).

^{371.} Jane Stromseth, *Rethinking Humanitarian Intervention: The Case for Incremental Change, in* HUMANITARIAN INTERVENTION 232, 257 (J. L. Holzgrefe & Robert O. Keohane eds., 2003).

^{372.} See supra, note 258.

^{373.} African Leaders Oppose NATO Over Gaddafi, supra note 260; see also 2011 Libya Civil War Fast Facts, supra note 255; see supra note 258. The AU's opposition is particularly important given the fact that Article 4(h) of the AU's founding charter specifically delineates the right to intervene in "grave circumstances" like war crimes and genocide. Constitutive Act of the African

Rights Watch called for an investigation of the campaign, asserting that the act was illegal and caused far too much collateral damage.³⁷⁴ Since then, during the ten publicly recorded meetings regarding the situation in Libya between February 2011 and May 2013, express references to the responsibility to protect were made by the United States, France, Germany, Colombia, France, Lebanon and Rwanda.³⁷⁵

President Obama mentioned a number of reasons why he wanted to strike Syria for its chemical weapons use. He discussed the potential harm to U.S. allies, the disruption of regional peace from refugee migrations, the spilling of violence across border lines, and national securitythe potential harm that could occur from Syria providing chemical weapons to terrorist groups and other tyrants who could then use the weapons against U.S. soldiers on the battlefield.³⁷⁶ Clearly, the United States had many self-interests to intervene. But President Obama also discussed the attack as "an assault on human dignity" and his primary purpose to "hold the Assad regime accountable for their use of chemical weapons, deter this kind of behavior, and degrade their capacity to carry it out."³⁷⁷ Former President Bill Clinton gave a similar reasoning for the U.S. invasion of Macedonia in 1999.³⁷⁸ Ms. Rice explained that the strikes on Syria would not be an attempt to topple President Assad or to effect a change in regime because that would require a much more extensive military campaign.³⁷⁹ While the overarching U.S. plan for Syria did include a peaceful change in government, the narrowness of the strikes indicates that the action would not likely result in such a change.³⁸⁰ In Libya, NATO claimed humanitarian intervention as its justification for action.³⁸¹

Union, *supra* note 232, art. 4(h). Its opposition to the resolutions thus indicates that the trigger for humanitarian intervention is extremely high and the right is highly limited, and the AU believed that the circumstances in Libya did not reach that bar.

^{374.} NATO: Investigate Civilian Deaths in Libya, HUM. RTS. WATCH, (May 14, 2012, 12:00 AM), http://www.hrw.org/news/2012/05/14.

^{375.} See Morris, supra note 339, at 1272-73.

^{376.} Statement by the President on Syria, *supra* note 32; *see also* U.N. Secretary-General, *supra* note 164, \P 58 (stating that special attention must be paid to the prevention of arms flows to repressive regimes).

^{377.} Statement by the President on Syria, supra note 32.

^{378.} William J. Clinton, President of the U.S., Remarks to Kosovo International Security Force Troops in Skopie. (June 1999) (transcript 22, available at http://www.presidency.ucsb.edu/ws/?pid=57770) ("[P]eople who come from different racial and ethnic and religious backgrounds can live together and work together and do better together if they simply respect each other's God-given dignity-and we don't want our children to grow up in a 21st century world where innocent civilians can be hauled off to the slaughter, where children can die en masse, where young boys of military age can be burned alive, where young girls can be raped en masse, just to intimidate their families. We don't want our kids to grow up in a world like that. ... But never forget, if we can do this here and if we can then say to the people of the world, whether you live in Africa or central Europe or any other place, if somebody comes after innocent civilians and tries to kill them en masse because of their race, their ethnic background, or their religion, and it's within our power to stop it, we will stop it."); see also Brown, supra note 147, at 1691.

^{379.} Susan E. Rice, supra note 316.

^{380.} See Statement by the President on Syria, supra note 32.

^{381.} See NATO and Libya, NATO, https://www.nato.int/cps/en/natolive/topics_71652.htm (last updated Nov. 9, 2015).

The bombing campaign did in fact lead to a regime change, though Gaddafi was killed by rebel forces, not NATO forces.³⁸² But NATO's strike lasted seven months;³⁸³ the strike on Syria would be much shorter, making it much more difficult to achieve such a change in government had that been the underlying intention. President Trump also cited national security as a reason for using military force; however, he emphasized that Assad's use of chemical weapons was "egregious"³⁸⁴ and had to be stopped: "It was a slow and brutal death for so many. . . . Even beautiful babies were cruelly murdered at this very barbaric attack. No child of God should ever suffer such horror."³⁸⁵

4. Last Resort

A country can use military force to intervene only when every other preventative option for diplomatic resolution of the crisis has been explored.³⁸⁶ This does not mean that each and every one must have been tried and failed, but it does mean that each conceivable option would have likely been unsuccessful.³⁸⁷ Moreover, if the intervention does not have Security Council approval and it is undertaken by a single state, the country must have made efforts to create a multinational force.³⁸⁸

After the first large scale attack in 2013, Ms. Rice reiterated President Obama's plan, explaining the multiple attempts to resolve the Syrian crisis before a mass use of chemical weapons.³⁸⁹ She stated that the United States had consistently supported the U.N. diplomatic process to talk to Syria and the formation of the United Nations Commission of Inquiry to document the violence in Syria.³⁹⁰ She asserted that the United States also publicly admonished Syria when it started using chemical weapons on a very small scale a few months before the main attack and provided evidence of the use to Congress and the United Nations.³⁹¹ Moreover, the United States provided non-lethal assistance to the civil opposition and pushed for over six months for a U.N. team to visit Syria to investigate the chemical weapons situation.³⁹²

392. Id.

^{382.} See 2011 Libya Civil War Fast Facts, supra note 255.

^{383.} See id.

^{384.} Dana Bash et al., Trump on Syria's Assad: 'Something Should Happen,' CNN (Apr. 6, 2017), http://www.cnn.com/2017/04/06/politics/donald-trump-syria-options/index.html.

^{385.} Tony Capaccio, Nicholas Wadhams & Toluse Olorunnipa, U.S. Launches Missile Strike on Syria After Gas Attack, BLOOMBERG QUINT (Apr. 6, 2017), https://www.bloombergquint.com/markets/2017/04/07/u-s-launches-missile-strike-on-syria-inresponse-to-gas-attack.

^{386.} ICISS, supra note 37, ¶ 4.37; see also U.N. Secretary-General, supra note 164, ¶ 40.

^{387.} ICISS, *supra* note 37, ¶ 4.37.

^{388.} Scheffer, supra note 38, at 291.

^{389.} Susan E. Rice, supra note 316.

^{390.} Id.

^{391.} Id.

Three times the Security Council took up resolutions to condemn lesser violence by the Syrian regime. Three times we negotiated for weeks over the most watered-down language imaginable. And three times, Russia and China doubled vetoed almost meaningless resolutions. Similarly, in the past two months, Russia has blocked two resolutions condemning the use of chemical weapons that did not even ascribe blame to any party. Russia opposed two mere press statements expressing concern about their use. A week after the August 21 [2013] gas attack, the United Kingdom presented a resolution that included a referral of war crimes in Syria to the International Criminal Court, but again the Russians opposed it, as they have every form of accountability in Syria.³⁹³

When Syria acceded to the CWC, Russia assumed the role to oversee its ally's compliance and destruction or removal of its chemical weapons stockpiles.³⁹⁴ By agreeing to permit Russia to serve as Syria's supervisor, the United States made an accommodation to Syria as a compromise for not using force. When Syria launched its April 2017 attack. Secretary Tillerson accused Russia of being either "complicit" or "incompetent" in carrying out its duties to ensure Syria's adherence to the CWC.³⁹⁵ Before launching a military strike, the United States could have threatened to sanction Russia for its role in the attack and to pressure Russia to compel Syria to halt its use of chemical weapons. The United States also could have used economic sanctions to pressure President Assad directly to give up the chemical weapons stockpile. The United States currently maintains sanctions against Syria for its support of terrorism and weapons of mass destruction,³⁹⁶ but neither former President Obama nor President Trump made any efforts to sanction Syria specifically for its use of chemical weapons. It can be argued, however, that such sanctions against Russia or Syria would have had no real effect because history shows a lack of compliance and because the sanctions could not literally destroy the stockpiles like a military strike would.

Under the ICISS theory explained above, evidence of the likelihood of failure would be sufficient to rule out all conceivable options that were

393. Id.

395. See Williams, supra note 17.

^{394.} See David Filipov & Anne Gearan, Russia Condemns U.S. Missile Strike on Syria, Suspends Key Air Agreement, WASH. POST (Apr. 7, 2017), https://www.washingtonpost.com/world/europe/russia-condemns-us-missile-strike-on-syria/2017/04/07/c81ea12a-1b4e-11e7-8003-f55b4c1cfae2 story.html.

^{396.} The U.S. has placed sanctions on Syria but not any directly related to its use of chemical weapons in August 2013. The sanctions include the Syria Accountability Act of 2004, which imposes sanctions on Syria for its support of terrorism, weapons of mass destructions programs, and its role in Iraq. Syria Accountability and Lebanese Sovereignty Restoration Act of 2003, Pub. L. No. 108-175, §§ 2(4)–(5), (20)–(22), (26)–(34), 117 Stat. 2482 (2003).

Another sanction is imposed against the Commercial Bank of Syria (CBS) and prohibits U.S. banks from maintaining accounts with CBS. The final sanction is imposed on Syrian individuals and entities for their association with al Qaida, the Taliban, or Osama bin Laden, involvement in the proliferation of weapons of mass destruction, or receipt of any benefit from public corruption. *See* SYRIA SANCTIONS PROGRAM, OFFICE OF FOREIGN ASSETS CONTROL 4 (2013).

not attempted. As a result, a U.S. military strike would be the last resort. For years, the Obama Administration tried peace talks with Syria and attempted to have U.N. resolutions passed. Though Syria ultimately agreed to give up its chemical weapons stock, it did so only under this U.S. threat of force. Moreover, the United States attempted to gain support and create a multinational force, as ICISS requires. British Prime Minister David Cameron backed President Obama's plan, but the British Parliament voted not to intervene,³⁹⁷ based not on the legality of humanitarian intervention but rather on the wisdom of such a mission.³⁹⁸ Given this history, Ambassador Haley warned that the United States would take action given the consistent failure of the United Nations to act.³⁹⁹ Accordingly, President Trump's strike was a last resort.

5. Proportional Means

Any military intervention undertaken should be the minimum necessary to achieve the desired result of halting violence and protecting people from suffering.⁴⁰⁰ The scale, duration, and intensity should be commensurate with the original provocation.⁴⁰¹ Any effect on the political system and structure of the targeted country must be limited to only that intervention necessary.⁴⁰² For example, in 1914, two German officers and one German official were killed at an outpost in Portuguesecontrolled Angola.⁴⁰³ The Germans retaliated by destroying several Portuguese outposts.⁴⁰⁴ The case's arbitrators found that the German retaliation was greatly disproportionate to the instigation.⁴⁰⁵

Another example is the NATO bombing campaign in Kosovo. Scholar John Janzekovic criticized NATO's seventy-eight-day air campaign as disproportionate to fight the decade-long slaughter of Kosovars by the Serbs because it did not halt the killing.⁴⁰⁶ In fact, he argued, once the air attacks began, the Serbs began a massive killing campaign of Kosovars.⁴⁰⁷ About 100,000 Kosovars and only 8,000 Serbs were killed as a result of the air campaign.⁴⁰⁸ He asserted that NATO's strikes should have been aimed at Serb forces instead of command and communications

402. Ocran, *supra* note 35, at 45.

404. *Id*.

407. Id. at 53-54.

408. Id.

^{397.} Syria Crisis: Cameron Loses Commons Vote on Syria Action, BBC (Aug. 30, 2013), http://www.bbc.co.uk/news/uk-politics-23892783.

^{398.} See Bethlehem, supra note 172.

^{399.} Read Nikki Haley's Remarks About Syria at the U.N., TIME (Apr. 5, 2017), http://time.com/4727499/nikki-haley-unsc-transcript-syria.

^{400.} ICISS, *supra* note 37, ¶¶ 4.39–.40.

^{401.} Id. ¶ 4.39; see also Ocran, supra note 35, at 45.

^{403.} Brown, supra note 147, at 1729 (citing Naulilaa Arbitration (Port. v. F.R.G.), 2 R.I.A.A. 1011, 1028 (1949)).

^{405.} Id.

^{406.} JOHN JANZEKOVIC, THE USE OF FORCE IN HUMANITARIAN INTERVENTION: MORALITIES AND PRACTICALITIES 52–55 (2006).

systems, water and power supplies, and army and police barracks.⁴⁰⁹ Accordingly, the attack was not proportionate to achieve the intended result.⁴¹⁰

Here, the Senate bill approving President Obama's plan stipulated that the strike is for the "limited and specified" use of the armed forces in Syria only to respond to the use of chemical weapons, deter Syria's use of the weapons to protect the interests of the United States and its allies, degrade Syria's capacity to use chemical weapons in the future, and prevent the transfer of the weapons to terrorist organizations.⁴¹¹ Section III of the bill explicitly limited the intervention: "[T]he authority granted . . . does not authorize U. S. Armed Forces ground combat operations in Syria."⁴¹²

President Obama explained that the military intervention would have been very narrow.⁴¹³ No soldiers would have been placed on the ground, and it would have targeted the chemical weapons stockpiles to deter their use generally and prevent Syria from using them again.⁴¹⁴ The strike would have been deliberately limited in time and scope,⁴¹⁵ and it would target the chemical weapons in a range of ways that would debilitate Syria's ability to manage, deliver, and develop chemical weapons.⁴¹⁶

President Trump's missile launch was highly limited as it was aimed at hangars, planes, fuel tank ammunition, storage, and air defense systems.⁴¹⁷ The strike was not intended to overthrow the Assad regime. Secretary Rex Tillerson stated: "The process by which Assad would leave is something that I think requires an international community effort."⁴¹⁸

6. Reasonable Prospects

A proposed military intervention must have some reasonable chance of success without inflicting more harm than good.⁴¹⁹ An intervening state has a duty not to make the situation worse.⁴²⁰ In the United States,

^{409.} Id. at 54.

^{410.} For further examples of proportionality issues, see id. at 54-55.

^{411.} An Official Joint Resolution to Authorize Limited and Specified Use of the United States Armed Forces Against Syria, S.J. Res. 21, 113th Cong. § 2 (2013).

^{412.} Id. § 3.

^{413.} Statement by the President on Syria, *supra* note 32.

^{414.} *Id.*

^{415.} Susan E. Rice, supra note 316.

^{416.} Id.

^{417.} Capaccio, Wadhams & Olorunnipa, supra note 385.

^{418.} Rex W. Tillerson, Sec'y of State, Remarks on China Summit (Apr. 6, 2017) (transcript available at https://www.state.gov/secretary/remarks/2017/04/269540.htm).

^{419.} Scheffer, supra note 38, at 291.

^{420.} Brown, *supra* note 147, at 1735. For example, the International Criminal Tribunal for the former Yugoslavia launched a pre-investigation into NATO's intervention in Kosovo after allegations that its bombing campaign caused hundreds of deaths and great damage to the environment. The Tribunal ultimately found that an in-depth investigation of the bombings was not necessary because it was unlikely to find enough evidence to substantiate claims of human rights violations.

domestic law imposes no duty upon a passer-by to intervene and provide aid to someone in need.⁴²¹ If the bystander chooses to intervene and inflicts more harm, however, that person may be held civilly liable. Humanitarian intervention imposes a similar burden.⁴²² If a state chooses to intervene and does more damage, it has a duty to fix what it has done.⁴²³ This type of responsibility acts as a deterrent to providing necessary aid.⁴²⁴

Here, military action would be used as a deterrent, not to stop current fighting, so it would have to have a reasonable chance of success of destroying the weaponry and deterring further use. President Obama's plan was to destroy Syria's capacity to use chemical weapons in the future and deter other dictators from employing them as well.⁴²⁵ President Trump specifically fired at artillery and aircraft to destroy Syria's capability to spread these chemical gases.⁴²⁶ Eliminating the stockpile and their modes of dissemination would have a reasonable chance of success in achieving the stated goals because it would literally destroy the weaponry and make it impossible for President Assad to use those weapons again. Of course, the strike would not eliminate the intellectual property and human resources required to develop the weapons, but it is a start. And it still sends a message to President Assad and other tyrants that the international community will not tolerate their attempts to use these weapons.

A chance exists, however, that a strike could do some harm.⁴²⁷ It could potentially kill innocent civilians located in the vicinity of the stockpiles, damage unrelated infrastructure, and perhaps even ignite some chemical gases.⁴²⁸ These types of harms are not minor, and they must be prevented or minimized. But the question is not whether the strike would cause *any* amount of harm; rather, the question is whether the act would make the country's situation worse and inflict more harm than good. While some harm is a possibility, based on the targeted nature of the military strike, inadvertent damage was not great. Furthermore, steps were taken to ensure that minimal damage was done.⁴²⁹ Prior to

See INT'L CRIMINAL TRIBUNAL FOR THE FORMER YUGOSLAVIA, COMM. ESTABLISHED TO REVIEW THE NATO BOMBING CAMPAIGN AGAINST THE FED. REPUBLIC OF YUGOSLAVIA, FINAL REPORT TO THE PROSECUTOR ¶ 90 (2000), http://www.icty.org/x/file/Press/nato061300.pdf.

^{421.} See, e.g., FLA. STAT. § 768.13(2)(a) (2017).

^{422.} Brown, *supra* note 147, at 1736.

^{423.} See id. at 1737.

^{424.} Id.

^{425.} Statement by the President on Syria, supra note 32.

^{426.} Capaccio, Arkhipov & Foroohar, supra note 214.

^{427.} See generally David Glazier, Ignorance is Not Bliss: The Law of Belligerent Occupation and the U.S. Invasion of Iraq, 58 RUTGERS L. REV. 121 (2005); Legality of U.S.-Led Invasion of Iraq, 99 AM. J. INT'L L. 269 (2005).

^{428.} In President Trump's airstrike, nine civilians, including four children, as well as six servicemen were allegedly killed, and six planes were destroyed. Alexander, Boyle & Henderson, *supra* note 25.

^{429.} Capaccio, Arkhipov & Foroohar, supra note 214.

President Trump's launch, the Pentagon informed Russia and also took various measures to minimize the risk to Russian planes or personnel in the airfield.⁴³⁰ This damage would pale in comparison to the benefit of ridding the world of a large stockpile of chemical weapons.

C. Responsibility to Rebuild

ICISS defined the responsibility to rebuild as the obligation "to provide, particularly after a military intervention, full assistance with recovery, reconstruction and reconciliation, addressing the causes of the harm the intervention was designed to halt or avert."⁴³¹ Without such assistance, countries are often left to deal with the underlying causes that initiated the conflict originally.⁴³² Rebuilding involves committing additional funds and resources and may require the intervening country to stay much longer than intended or desired.⁴³³

The most successful reconciliation processes do not necessarily occur at high level political dialogue tables, or in judicial-style processes (though we well understand the positive role that truth and reconciliation commissions can play in certain post-conflict environments). True reconciliation is best generated by ground level reconstruction efforts, when former armed adversaries join hands in rebuilding their community or creating reasonable living and job conditions at new settlements. True and lasting reconciliation occurs with sustained daily efforts at repairing infrastructure, at rebuilding housing, at planting and harvesting, and cooperating in other productive activities.⁴³⁴

In the 1998 U.N. report on the promotion of peace in Africa, the Secretary-General described postconflict relief as follows: "Peacebuilding may involve the creation or strengthening of national institutions, monitoring elections, promoting human rights, providing for reintegration and rehabilitation programmes, and creating conditions for resumed development."⁴³⁵

ICISS lists three major areas during the rebuilding stage that require attention: (1) security, (2) justice, and (3) economic development.⁴³⁶ First, security involves the protection of all nationals to prevent "reverse ethnic cleansing" of victims against oppressors.⁴³⁷ Security also involves

^{430.} Jordan Fabian, US Launches Missile Strike Against Syria in Response to Gas Attack, HILL (Apr. 6, 2017), http://thehill.com/homenews/administration/327728-us-launches-missile-strike-against-syria-in-response-to-gas-attack.

^{431.} ICISS, supra note 37, at XI.

^{432.} Id. ¶ 5.2.

^{433.} Id.

^{434.} *Id.* ¶ 5.4.

^{435.} U.N. Secretary-General, The Causes of Conflict and the Promotion of Durable Peace and Sustainable Development in Africa, ¶ 63, U.N. Doc. A/52/871-S/1998/318 (Apr. 13, 1998); see also U.N. Secretary-General, supra note 164, ¶ 31.

^{436.} ICISS, *supra* note 37, ¶ 5.7.

^{437.} Id. ¶ 5.8.

the reintegration of local police forces and disarmament of demobilized soldiers.⁴³⁸ Second, measures ought to be taken to install or rehabilitate a properly functioning justice system so that human rights violators can be tried and punished.⁴³⁹ These courts are the "first line of defence against impunity"⁴⁴⁰ and are necessary to help citizens regain and protect rights, such as property rights, that may have been unlawfully or physically destroyed.⁴⁴¹ Third, the intervening state should try to encourage economic development and market growth.⁴⁴² This includes helping eliminate any economic sanctions that may have been imposed on the state during the conflict.⁴⁴³

This rebuilding requirement is less of a legally imposed duty but rather a morally imposed one based on the basic premise of keeping promises.⁴⁴⁴ In the case of Kosovo, former British Prime Minister Tony Blair recognized this responsibility when he stated at a press conference after the NATO bombings, "[W]e said all the way through that we would help them to reconstruct the Balkans, to make the Balkans a place of peace and security.... Our job is to make sure that the promises that we made to them during the course of the conflict we now honor post-conflict."⁴⁴⁵ Further, in Libya, the Security Council adopted a resolution in September 2011 creating a U.N. support mission to help restore public security, promote national reconciliation, and initiate economic recovery.⁴⁴⁶

If the United States had intervened in Syria in 2013, it likely would have provided rebuilding assistance as it has done in the past. Since the United States invaded Libya, it has committed \$170 million in aid and has provided assistance to strengthen the election systems, justice sectors, and various nongovernmental organizations' efforts.⁴⁴⁷ Further, the United States has provided over \$1 billion to Kosovo since 1999⁴⁴⁸ and continues to provide assistance to develop the electoral system, agriculture and energy markets, and relationships between the Serbian majority and the Government of Kosovo.⁴⁴⁹ In this case, Secretary of State John

439. Id. ¶ 5.13.

^{438.} Id. ¶ 5.9.

^{440.} U.N. Secretary-General, supra note 164, ¶ 19.

^{441.} ICISS, *supra* note 37, ¶ 5.15.

^{442.} Id. ¶ 5.19.

^{443.} Id.

^{444.} Brown, supra note 147, at 1738.

^{445.} Remarks Prior to Discussions with Prime Minister Tony Blair of the United Kingdom and an Exchange with Reporters in Cologne, 35 WEEKLY COMP. PRES. DOC. 1132, 1134 (June 18, 1999).

^{446.} S.C. Res. 2009, ¶ 12 (Sept. 16, 2011).

^{447.} Office of the Special Coordinator for Middle E. Transitions, U.S. Government Assistance to Libya - Fact Sheet, August 14, 2012, RELIEFWEB (Aug. 14, 2012), http://reliefweb.int/report/libya/us-government-assistance-libya-fact-sheet-august-14-2012.

^{448.} U.S. Assistance to Kosovo, U.S. DEP'T ST., https://2001-2009.state.gov/p/eur/ci/kv/c26235.htm (last visited Oct. 1, 2017).

^{449.} OFFICE OF THE COORDINATOR OF U.S. ASSISTANCE TO EUR. AND EURASIA, FOREIGN OPERATIONS ASSISTANCE FACT SHEET (2013).

Kerry announced on January 15, 2014, that the United States would provide an additional \$380 million in humanitarian aid to the Syrian people, bringing the total U.S. funding for humanitarian assistance to the Syrian people to nearly \$1.7 billion since the crisis began.⁴⁵⁰ The aid included food, clean water, shelter, medical care, and relief supplies to over 4.2 million people inside Syria and to more than 2 million refugees across the region.⁴⁵¹ President Obama also stated that the United States will provide Jordan with \$1 billion in loans to alleviate the strain of over 600,000 Syrian refugees.⁴⁵²

President Trump has stated that more aid would be provided to countries like Jordan that are carrying the brunt of the refugees seeking escape from Syria.⁴⁵³ As of this writing, however, he has not made any statements regarding specific plans for Syria, and thus it is unclear whether President Trump will maintain the amount of aid President Obama promised. If history is any indicator, however, it is likely that a large amount of aid will still be provided, and thus the rebuilding prong should be met.

CONCLUSION

Syria's use of chemical weapons against its own people is undeniably a violation of international law. As a member of the United Nations, Syria was bound to uphold the values of the Universal Declaration of Human Rights, and as a signatory to the 1925 Geneva Protocol, Syria was prohibited from using chemical weapons. Moreover, the Chemical Weapons Convention is almost universally agreed to, so Syria was bound to those terms under customary international law.

The principles of nonintervention in the U.N. Charter should be preserved to maintain social and political order. But the terms of the Charter also constrain nations that truly want to make a difference when human rights atrocities occur. The doctrine of humanitarian intervention and the responsibility to protect allow very narrow flexibility from the confines of the Charter. While still developing, this emerging doctrine is a path-

^{450.} Press Release, The White House Office of the Press Sec'y, Fact Sheet: U.S. Humanitarian Assistance in Response to the Syrian Crisis (Sept. 24, 2013), http://www.whitehouse.gov/the-pressoffice/2013/09/24/fact-sheet-us-humanitarian-assistanceresponse-syrian-crisis.

^{451.} Id.

^{452.} Sarah Wheaton & Mark Landler, *Obama Promises New Aid to Jordan in Refugee Crisis*, N.Y. TIMES (Feb. 14, 2013), http://www.nytimes.com/2014/02/15/us/politics/syria-is-expected-to-be-main-topic-as-obama-meets-with-king-of-jordan.html.

^{453.} While President Trump has promised monetary support to assist refugees abroad, he has been clear that he will not permit the entry of thousands of refugees into the United States, arguing that he seeks to prevent entry of terrorists masquerading as refugees. Such a policy flouts U.S. obligations under international refugee law, but that issue is beyond the scope of this article. President Trump's overall policy regarding Syria is not clear as of this writing. For example, his administration has issued conflicting statements regarding his position on the overthrow of Syrian President Assad.

way to help ensure the safety and protection of innocent lives against tyranny.

The United States, not only as a permanent member of the Security Council but also as one of the most powerful nations in the world, is poised to intervene when gross human rights violations occur. Though the United States has not taken action in every instance of such violations, Syria provides a unique situation because the gravity of the crime has massive implications for the security of the entire globe. Thus, the United States and other nations should be able to intervene and fulfill their responsibility to protect when acts, like the use of chemical weapons, show extreme disregard for and brutality against the innocent and may be easily perpetrated across borders. As former President Obama said:

[T]he moral thing to do is not to stand by and do nothing. I would much rather spend my time talking about how every 3- and 4-year-old gets a good education than I would spending time thinking about how I can prevent 3- and 4-year-olds from being subjected to chemical weapons and nerve gas... I can't avoid those questions, because as much as we are criticized, when bad stuff happens around the world, the first question is, what is the United States going to do about it?⁴⁵⁴

President Trump called "on all civilized nations to join us in seeking to end the slaughter and bloodshed in Syria . . . [W]e hope that as long as America stands for justice, that peace and harmony will, in the end, prevail."⁴⁵⁵ Too many times in history, the United Nations has ignored blaring warning signs about human rights violations.⁴⁵⁶ It did so in Rwanda, Cambodia, and the Balkans because of ambivalence or political agendas.⁴⁵⁷ "The United Nations and its Member States remain underprepared to meet their most fundamental prevention and protection responsibilities. We can, and must, do better. Humanity expects it and history demands it."⁴⁵⁸

^{454.} Anne Gearen, Ed O'Keefe & William Branigin, Senate Committee Approves Resolution Authorizing U.S. Strike on Syria, WASH. POST (Sept. 4, 2013), http://www.washingtonpost.com/world/national-security/officials-press-lawmakers-to-approvesyria-strike-obama-invokes-congresss-credibility/2013/09/04/4c93a858-155c-11e3-804bd3a1a3a18f2c_story.html.

^{455.} Mark Katkov, Trump Order Syria Airstrikes After 'Assad Choked Out the Lives' of Civilians, NPR (Apr. 6, 2017), http://www.npr.org/2017/04/06/522948481/u-s-launches-airstrikesagainst-syria-after-chemical-attack.

^{456.} U.N. Secretary-General, supra note 164, ¶ 54.

^{457.} Id. ¶ 6.

^{458.} Id.

BACK TO THE BASICS: LESSONS FROM U.S. PROPERTY LAW FOR LAND REFORM

SHELLEY CAVALIERI[†]

ABSTRACT

Redistributive land reform programs are a central development approach in nations of the global south. For proponents of land reform, land redistribution is an obvious strategy, designed to reduce hunger and poverty, to bolster citizens' ability to support themselves and their families, and to shape the future of burgeoning democracies worldwide. But for land reform skeptics and opponents, land reform is something of a puzzle. While states routinely redistribute money, the choice to distribute land seems somewhat peculiar. On its face, it is not obvious why land is worthy of a separate, strange approach, when this is not how nations consider the allocation of many other crucial non-monetary resources. To invest money in reducing the concentration of land by purchasing from some in order to give or sell land to others seems far more complex than simply redistributing financial resources. Yet those who think about property know that land is different-land is unique and culturally important. It therefore warrants specific consideration as nations contemplate how to create the good society.

Essential theoretical insights about property should form the foundation of land reform efforts, but these too often go unstated, leaving land reform efforts' theoretical underpinnings unexplored. This Article serves to fill this gap, grounding market-compatible land reform in property's animating principles. The Article considers five different sources of lessons that property theorists can teach those implementing land reform. First, it observes that land is unique and therefore worthy of special treatment as a social good due to its rivalrous and nonfungible character. Second, it argues that land reform must recognize the shifting nature of

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land as a contextual, contingent resource that bears separate meanings in different communities, social classes, and nations. Third, it recognizes that land reformers must understand the role of land in constituting individual identity and personhood. Fourth, the Article examines the historical role of land in constructing social status and creating wealth. Fifth, the Article considers how land constitutes citizenship, both by shaping the individual and the relationship of the individual to the nation. The Article then makes two key arguments about how these lessons are useful in the context of land reform. First, the Article argues that these property lessons can explain why redistributive land reform matters. Second, the Article leverages these property lessons to make land reform more effective. The Article concludes by observing that these lessons about land will fundamentally alter the way land reform is undertaken, contributing essential knowledge to those eager to enact redistributive land reform initiatives.

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INTRODUCTION

Land reform has evolved as a key development strategy for nations in the developing world. The term "land reform" describes an array of public policy approaches including formalization of land titles and land tenure, resolution of land-related conflicts, and the provision of land to those who are landless. This Article will focus on the latter of these policies, known broadly as redistributive land reform initiatives. Redistribution of agrarian land to landless rural people serves central societal purposes including poverty eradication,¹ food security improvement,² wealth accrual,³ and community development goals.⁴ I have previously written on the purposes of land reform, arguing that the key pragmatic and expressive goals of land reform, which are designed to serve the needs of poor people in the developing world, are best served by crafting a land reform approach that does not wildly undermine the existing land market.⁵

^{1.} Krishna B. Ghimire, Land Reform at the End of the Twentieth Century, in LAND REFORM & PEASANT LIVELIHOODS 1, 1 (Krishna B. Ghimire ed., 2001); Timothy Besley & Robin Burgess, Land Reform, Poverty Reduction, and Growth: Evidence from India, 115 Q.J. ECON. 389, 392–94 (2000).

^{2.} Thembela Kepe & Danielle Tessaro, Integrating Food Security with Land Reform: A More Effective Policy for South Africa, CIGI-AFR. INITIATIVE POL'Y BRIEF SERIES, Aug. 2012, at 1–2.

^{3.} HERNANDO DE SOTO, THE MYSTERY OF CAPITAL: WHY CAPITALISM TRIUMPHS IN THE WEST AND FAILS EVERYWHERE ELSE 39-40 (2000).

^{4.} See generally Besley & Burgess, supra note 1, at 392–94. The international community has recognized the role of land reform in addressing development deficits and has dedicated resources to encouraging land access as a way of assisting with development goals. See, e.g., SATURNINO M. BORRAS JR. & TERRY MCKINLEY, INT'L POVERTY CTR., THE UNRESOLVED LAND REFORM DEBATE: BEYOND STATE-LED OR MARKET-LED MODELS 1, 3 (Nov. 2006) (Policy Research Brief No. 3).

^{5.} See Shelley Cavalieri, Grounding Land Reform: Toward a Market-Compatible Approach to Land Reform, 89 ST. JOHN'S L. REV. 1, 21–22 (2015).

Unfortunately, land reform efforts are often politically divisive and plagued by an array of problems. Even in the single instance when land reform was meaningfully undertaken in the United States—in Hawaii in the 1980s—it was subject to a serious legal challenge from prior owners that ultimately landed the program in the U.S. Supreme Court, which validated Hawaii's land redistribution program.⁶ In other places, land reform programs lack an underlying rationale for why they are worth-while. Such programs face strong opposition not only from landowners who fear that their land may be taken through eminent domain, but also from other members of privileged classes.⁷ Land reform proponents struggle to persuasively articulate why land is a unique resource that is worthy of being treated differently than money or any other social good.

To a property scholar, it might well appear that those implementing land reform have never learned the essential lessons from property law when they contemplate how to create programs that broaden access to the key resource of land. They forget that land is scarce and that its meaning shifts depending on the culture and community where the land is situated. They ignore land's relationship to social status. They overlook its centrality to the stable functioning of a nation's economy. They disregard its important relationship to citizenship and national identity. They neglect the role of land ownership in helping to stabilize societies that have struggled with civil and political unrest. To the extent that land reform programs are enacted without considering these profound meanings of land, they run the risk of failure. The refusal to properly theorize land reform and to analyze its roots in property law can prevent land reform programs from serving their central goal of eradicating poverty.⁸

This Article sets forth to offer property law solutions to some of the basic problems plaguing land reform initiatives. While land redistribution might be framed as a repudiation of basic private-property values, this Article suggests instead that property law and theory are crucial sources of insights to help land reformers succeed in their efforts to broaden access to land. In this Article, I prove both how key principles of property law apply to land reform and how property theory can explain much of the unstated significance of land reform. In Part I, I describe five key frameworks that emerge from property law and policy. I then argue that these property theory reveals why the effort to redistribute land through land reform programs is worthwhile. Second, in Part III, I argue that property law can offer insights into how to make land reform programs more successful.

^{6.} Haw. Hous. Auth. v. Midkiff, 467 U.S. 229, 241 (1984) (challenging land reform as a violation of the Takings Clause of the U.S. Constitution).

^{7.} AJ VAN DER WALT, PROPERTY IN THE MARGINS 3-4 (2009).

^{8.} I have previously discussed this aspect of redistributive land reform at length. See Cavalieri, supra note 5, at 6-8.

Property principles, therefore, are useful in this context by demonstrating both the value of redistributive land reform initiatives and how to make such programs more effective. Without these central theoretical insights, land reform is rootless and suggests that land is just another social good that a society might decide to redistribute. But rooted in property law, the profound import and difficulty of broadening access to land become clear. Prudentially, knowledge of these theories is essential to crafting effective land reform programs. This Article proves why land is different, and as a result, why land reform programs must reflect the meaning of land to succeed. All of these lessons reveal why property insights into the nature of land are integral to understanding the profound value of land reform as a focus of antipoverty, development, and human rights efforts.⁹

I. PROPERTY'S BASICS PROVIDE LESSONS FOR LAND REFORM

In this part of the Article I identify and explain five sources of lessons within property law. Section I.A describes how property law has come to address land's nonfungible nature and finite quantity. Section I.B explains how property scholars understand the shifting nature of land as a contextual, contingent resource whose meaning communities, social classes, and nations might comprehend in divergent ways. Section I.C sets forth the role of land in constituting individual identity and personhood. In Section I.D, I first examine the historical role of land in constructing social status and creating wealth; I then analyze the evolution of mechanisms in the Anglo-American legal system to prevent the establishment of dynastic wealth. Finally, in Section I.E, I consider thse role land plays in constituting citizenship.

A. Property Rights are Rivalrous and Land Itself is Scarce, so Law Evolved to Treat Land Differently

Real property is one of a group of resources known as rivalrous goods—those that "[i]f one person owns and controls them, others do not."¹⁰ Rivalrous goods are characterized by the fact that they are typically under the control of only one person at a time. When one person owns the property, it means that another person cannot have the same property right. In the context of land, rivalrousness requires "recognizing [that] a property right necessarily has the effect of limiting other property

^{9.} This project specifically undertakes to engage with scholars and policy makers in an effort to improve land reform. An important but separate project is a deeper engagement with the communities formed by land reform efforts, to invite those communities to contribute their own perspectives on how land reform might better meet their needs. Despite this Article's focus on using property law to speak to scholars and policy makers, my previous fieldwork interviewing recipients of redistributed land in Guatemala deeply informs the property discourse, see generally Rashmi Dyal-Chand, *Pragmatism and Postcolonialism: Protecting Non-Owners in Property Law*, 63 AM. U. L. REV. 1683, 1727–32 (2014).

^{10.} Joshua A.T. Fairfield, Virtual Property, 85 B.U. L. REV. 1047, 1049 (2005).

rights."¹¹ This statement reveals a profound truth about rights to land as they contrast with many other legal rights.¹² Professor Timothy Mulvaney observes that recognition of speech rights, for example, probably will not lead to the denial of others' right to speak.¹³ But granting a person property rights over a parcel of land usually limits the rights of others over the same land.¹⁴ Land ownership therefore creates a zero-sumgame scenario, in which one person's exclusionary property right denies others rights to that same parcel.¹⁵

While most tangible goods are rivalrous, land's rivalrous nature poses a particular problem because land is also scarce. Land is arguably the only visibly finite resource in the modern world. Although the supply for many resources is elastic, the supply of arable land is finite in practical terms.¹⁶ With most kinds of rivalrous goods, society or the market

13. Mulvaney, *supra* note 11, at 360 n.47; *see also* Laura S. Underkuffler-Freund, *Property: A* Special Right, 71 NOTRE DAME L. REV. 1033, 1038–39 (1996) (characterizing property rights as distinct because "they allocate rights to particular individuals in finite, non-sharable resources").

14. This claim is true insofar as title is held in the atomistic fashion that typifies Western models of landownership. However, collective forms of ownership or the creation of usage rights that are distinct from ownership may create forms of property that are less rivalrous than those that dominate most discussions of property rights. A group of contemporary property scholars are starting to focus on the burgeoning sharing economy, revealing that exclusivity need not be an inherent aspect of property regimes. See, e.g., Rashmi Dyal-Chand, Regulating Sharing: The Sharing Economy as an Alternative Capitalist System, 90 TUL. L. REV. 241, 266–71 (2015); Kellen Zale, Sharing Property, 87 U. COLO. L. REV. 501, 562 (2016) (observing that "sharing can temper the rivalrous nature of property to some extent" although "exclusivity of use or possession is necessarily embedded into property-sharing activities").

15. See Laura S. Underkuffler, Lessons from Outlaws, 156 U. PA. L. REV. PENNUMBRA 262, 267 (2007) ("When we are considering the fate of external, physical, finite resources, such as land and all that it yields, property is a zero-sum game. If we acknowledge the 'rights' of some individuals in these resources, we deny the 'rights' of others. When we decide (and decide we must) who owns a building, who will farm the land, and whose mouths are fed, we are making distributive decisions, whether we like it or not. Property law design and enforcement cannot avoid this. It is a continual process of serious, deliberate, distributional decision making.").

16. Joyo Winoto, Taking Land Policy and Administration in Indonesia to the Next Stage, in INNOVATIONS IN LAND RIGHTS RECOGNITION, ADMINISTRATION, AND GOVERNANCE 15 (Klaus Deininger et al. eds., 2010) [hereinafter INNOVATIONS IN LAND RIGHTS] ("While . . . [land supply] is seldom completely inelastic, the potential to increase its availability at the extensive margin is either non-existent or involves high costs."). In contrast, many other kinds of social goods that could be subject to redistribution are not inelastic. For example, nations can increase the availability of health care or education through policymaking and subsequent investment. Even situations of temporary, severe deprivations of social goods, such as the unavailability of food during a famine, are due not to inelasticity but to distribution problems. Douglas C. Long & Donald F. Wood, *The Logistics of Famine Relief*, 16 J. BUS. LOGISTICS 213, 213 (1995).

^{11.} Timothy M. Mulvaney, Progressive Property Moving Forward, 5 CAL. L. REV. CIR. 349, 360 & n.47 (2014); see also Laura S. Underkuffler, Property and Change: The Constitutional Conundrum, 91 TEX. L. REV. 2015, 2029 (2013) ("Property in physical, finite, nonsharable resources is inherently rivalrous in nature.").

^{12.} This trait is of course not characteristic of all kinds of property, especially with regard to intellectual property. The recognition of a property right in intellectual property does not necessarily limit the rights of others to use it, even though permitted widespread use of the intellectual property might reduce its economic value. An entire movement of intellectual property law and policy focused on creating a valuable commons has developed around spreading the value of intellectual property rights. See, e.g., Molly Schaeffer Van Houweling, Cultural Environmentalism and the Constructed Commons, 70 LAW & CONTEMP. PROBS. 23, 23 (2007) (analogizing the open access movement to environmentalism's focus on protecting access to resources for the public good).

resolves problems associated with rivalrousness by creating more of the good—in essence, by ensuring that the good will not also be scarce. For example, that food is rivalrous is not a problem, so long as food is not scarce. It is only under conditions of scarcity that food's rivalrousness becomes problematic.

Responding to the fact of land's rivalrousness and scarcity, real property law evolved to treat land as special by providing an extraordinary remedy for instances where property contracts are breached. The tradition of specific performance as the remedy for conflicts about land contracts reflects the reality of land's scarcity.¹⁷ Notions of property have long reflected this fundamental nature of land as different from other kinds of property because no two acres, or even lots, are identical; American property law has evolved to embrace this presumption.¹⁸ Likewise, the truly finite amount of land that is suitable for specific purposes, such as cultivation, only deepens the collective awareness that land is unusual. In the legal context, the rivalrousness and scarcity of land make it unique and therefore worthy of different treatment than other resources.¹⁹

B. Land is Contextual and Contingent

Property scholars similarly recognize that land's nature is not monolithic. While land is only one kind of property, real property's situatedness²⁰ means that it is distinct because it cannot be removed from a par-

^{17.} Specific performance has long been the traditional remedy for breach of land contracts. JOSEPH WILLIAM SINGER, PROPERTY 521 (3d ed. 2010) (observing that "[a]lthough damages are the usual remedy for breach of contract, specific performance is routinely awarded in land sale contracts because land is unique"); see also Tanya D. Marsh, Sometimes Blackacre is a Widget: Rethinking Commercial Real Estate Contract Remedies, 88 NEB. L. REV. 635, 649–50 (2010) (reviewing sources to explain why the equitable remedy of specific performance is appropriate for land). This may be changing as fungible housing has become more common, in some cases subverting the legal presumption that real property is nonfungible. A minority of American courts has concluded that the identical nature of condominiums defeats the presumption of the non-fungibility of land. See, e.g., Centex Homes Corp. v. Boag, 320 A.2d 194, 198 (N.J. Ch. 1974). But see Giannini v. First Nat'l Bank of Des Plaines, 483 N.E.2d 924, 933–34 (III. App. Ct. 1985) (rejecting Centex).

^{18.} RESTATEMENT (SECOND) OF CONTRACTS § 360 cmt. e (AM. LAW INST. 1979) ("A specific tract of land has long been regarded as unique and impossible of duplication by the use of any amount of money.").

^{19.} SINGER, supra note 17.

^{20.} The concept of situatedness is used by legal scholars to define the concurrent facts of location and context. For example, in her illuminative reflection on the confirmation hearings of Justice Sonia Sotomayor, Professor Kathryn Abrams employs the concept of situatedness to describe social location within a community. Her exposition is worth quoting at length:

When Judge Sotomayor, in her writings, lectures, or public statements, acknowledges the effect of her experience or group affinities on her adjudication, she is identifying judges as socially-situated beings. They are situated in a community or communities, and they are shaped by the perspectives and norms that structure life and relations in those communities. This situatedness militates against the notion that judges should be objective - that is, they should take a God's eye view of any given controversy by holding themselves at a distance not only from the case before them, but from any kind of affiliation that might prevent them from seeing all aspects of the dispute. If a judge is situated, this argument suggests, she may view a case through a particular kind of lens, thus limiting her ability to approach it in other ways or to grasp all dimensions of the controversy. Sit-

ticular location. In this regard, real property differs from other social goods because it bears unavoidably contextual and contingent characteristics.²¹ Understanding land as a purely market commodity disregards the role of physical, temporal, and cultural location in creating the meaning of land. Land's situatedness means that it belies simplistic market definition.

Two implications of this characteristic of property emerge as particularly relevant for helping policymakers construct effective, publicly accepted forms of land reform. First, property scholars work under the knowledge that property rules are not inevitable but rather are value laden and reflective of a particular society at a particular moment.²² Alterations to property systems therefore can reflect an evolution of a society's values over time.²³ Second, once society comes to acknowledge that property systems are infinitely varied, society must likewise recognize that the meaning of property itself will vary as well; well-ordered property systems therefore must not be based on the presumption of shared meanings. Rather, they must operate with complete recognition of the potentially multivalent cultural implications of land in a specific context.

1. Land is Value Laden

The most traditional view of property law suggests that property regimes are static, fixed, and inevitable.²⁴ This is in part rooted in the nature of property as bearing some characteristics of a market commodity.²⁵ If property is just another good for the economy to distribute, redistributive intervention is simply disruptive of the current distribution. One common critique of redistributive policies is that existing distributions of property are settled and therefore should not be interrupted, largely because legal systems are most stable when they confirm citizens' expecta-

uatedness also threatens the kind of detachment, or even insularity, which is often valued in American adjudication.

Kathryn Abrams, *Empathy and Experience in the Sotomayor Hearings*, 36 OHIO N.U. L. REV. 263, 269 (2010) (footnotes omitted).

My use of the word "situatedness" follows from this strain of thought in critical legal scholarship, that land, like people, has a social location and context.

^{21.} See Laura S. Underkuffler, Property as Constitutional Myth: Utilities and Dangers, 92 CORNELL L. REV. 1239, 1248 (2007) (arguing that U.S. law mythologizes property as an absolute individual right, while in reality it is a "socially contingent and obligated right").

^{22.} Ezra Rosser, *The Ambition and Transformative Potential of Progressive Property*, 101 CAL. L. REV. 107, 110 (2013) (arguing that progressive property scholars seek to "create more space to contest values" inherent in property systems).

^{23.} See id. (suggesting that progressive property focuses on "the underlying values that property serves and the social relationships it shapes and reflects" (quoting Gregory S. Alexander et al., A Statement of Progressive Property, 94 CORNELL L. REV. 743, 743 (2009))).

^{24.} Laura Underkuffler refers to this as the common conception of property. LAURA S. UNDERKUFFLER, THE IDEA OF PROPERTY 37-51 (2003).

^{25.} GREGORY S. ALEXANDER, COMMODITY AND PROPRIETY: COMPETING VISIONS OF PROPERTY IN AMERICAN LEGAL THOUGHT 1776–1970, at 1–2 (1997) (positing that our property norms are bifurcated by a dual meaning that is based in property's status as a market good and its role as the basis of social order).

tions.²⁶ Yet the presumption baked into this view is that the current system is just.

In the last twenty years, a robust alternative view of property has emerged, rooted in the recognition that the market-good characterization of property is far too simplistic since property bears many separate meanings and "resists generalization."²⁷ Known under the general framework of progressive property, this movement has generated a voluminous literature focused on several key aspects of property. Most notable for purposes of this Article is progressive property's fundamental intuition that "[p]roperty implicates plural and incommensurable values."²⁸ Progressive property as a movement attempts to expose the values imbued in and hidden within a property system, and the social relationships that the property system reflects.²⁹ Implicit in this effort is the goal to reject the characterization of property distributions as static or fixed. Instead, progressive property seeks to unearth alternative values hidden within the existing system, values that might support the possibility of new property allocations that decentralize the importance of stability and its resulting commitment to the status quo, and instead foreground considerations of distributive justice.³⁰

This movement within property scholarship reflects an operative conception of property in which property is a site for expressing other social values and priorities, rather than existing in a separate, value-free system.³¹ Under this conception, property is more than a mere market commodity because it plays roles in humans' economic, social, and physical lives.³² Once the value-laden nature of the property regime is unmasked, it becomes obvious that any given system is reflective of the values of the society in which it operates.³³

2. Because Land Is Situated, its Meanings Are Multiple and Divergent

Contingency has even greater import when contemplating differences in the meaning that land bears across societies. Localized property

^{26.} VAN DER WALT, *supra* note 7, at 3–4, 17–18 (describing opposition to post-apartheid redistribution as rooted in respect for existing rights and desires for stability and security, as well as in "the 'normal' tendency of law to entrench the status quo and protect existing property holdings").

^{27.} Eduardo M. Peñalver, Land Virtues, 94 CORNELL L. REV. 821, 828-29 (2009).

^{28.} Gregory S. Alexander et al., A Statement of Progressive Property, 94 CORNELL L. REV. 743, 743 (2009).

^{29.} Rosser, supra note 22, at 111.

^{30.} Ezra Rosser, *Destabilizing Property*, 48 CONN. L. REV. 397, 400 (2015) (describing progressive property as working "*with* property, showing how doctrine supports expanding property law to reach those who would otherwise be excluded and highlighting areas in which social values have created exceptions that deviate from an exclusion-centric understanding of property law" (emphasis added)).

^{31.} UNDERKUFFLER, supra note 24.

^{32.} Peñalver, supra note 27.

^{33.} Rosser, supra note 22.

regimes exist worldwide, both in formal and informal systems.³⁴ As progressive property scholars have shown, property itself is socially defined and open to shifting, evolving meanings even within the same nation.³⁵ These intuitions about land are more than theoretical—they have deeply practical aspects. Those who study land rights as they evolve in societies worldwide acknowledge that land is both an asset and "an issue of 'wealth, power, and meaning.'"³⁶ Questions of land rights "have to do with heritage, identity, citizenship, and governance."³⁷ Land therefore invokes some of the deepest questions facing a state.

Profound variation in the understanding of land's significance is even more pronounced in developing countries. In such places, there are two divergent realities about land, with a growing cultural divide between them.³⁸ Less privileged rural citizens who have spent their lives working on the land, whether their own property or that of an employer, occupy one side of this schism.³⁹ For such people, land is crucial to overcoming problems of poverty and food insecurity⁴⁰—land is the source of income and livelihood.⁴¹ Even within a rural community that might share some fundamental understandings of the social role of land, dramatic power differences divide traditional leaders, who form their own rural elite class, from the landless poor, who form the bulk of the same com-

37. Id.

39. My own qualitative research during 2006 and 2010, interviewing landless Guatemalan peasants about their experiences of land reform, demonstrated repeatedly the central role that land played in their lives. Having spent their lives hoping to gain access to arable land, the opportunity to own property and build stability for their families was a dream realized. For some who gained that land through occupation based in their religious beliefs in Catholic Liberation Theology, land symbolized literal and spiritual liberation from poverty. For others who had been guerilla fighters in the civil war, land meant that the struggle had served a purpose. But the land was paramount for all of them.

40. Besley & Burgess, supra note 1.

41. See Sam Moyo, Land and Natural Resource Distribution in Zimbabwe: Access, Equity and Conflict, 4 AFR. & ASIAN STUD. 187, 188–90 (2005).

^{34.} Abraham Bell & Gideon Parchomovsky, *Property Lost in Translation*, 80 U. CHI. L. REV. 515, 517–18 (2013).

^{35.} See, e.g., JOSEPH WILLIAM SINGER, THE EDGES OF THE FIELD: LESSONS ON THE OBLIGATIONS OF OWNERSHIP 22–29 (2000).

^{36.} Philippe Lavigne Delville, Registering and Administering Customary Land Rights: Can We Deal with Complexity?, in INNOVATIONS IN LAND RIGHTS, supra note 16, at 28, 28 (quoting Parker Shipton & Mitzi Goheen, Understanding African Landholding: Power, Wealth and Meaning, 62 AFR.: J. INT'L AFR. INST. 307, 307 (1992)).

^{38.} Professor Johanna Bond has made a more global observation about the rural-urban divide beyond the issue of land, noting in the context of her discussion of the drafting of the Convention on the Elimination of Discrimination Against Women ("CEDAW"), that urban elites dominate the drafting of most supranational agreements, and highlighting the fact that the divide between sophisticated, urban elites and poorer rural people is very real. She further observes that even trying to involve organizations that work with rural populations is often insufficient to overcome this urban, elite bias. See Johanna E. Bond, Gender, Discourse, and Customary Law in Africa, 83 S. CAL. L. REV. 509, 540-41 (2010). Professor Ezra Rosser has made a similar point about the metaphorical and sometimes physical distance that lies between rich and poor people and the racialized aspects of this gap. See generally Ezra Rosser, Getting to Know the Poor, 14 YALE HUM. RTS. & DEV. L.J. 66, 81-88 (2014).

munities' populations.⁴² On the other side exist the privileged but largely landless educated, urban elites who often occupy positions of influence and power in the government; paragovernmental organizations, such as the United Nations; or nongovernmental organizations.⁴³ The contemporary reality of different lived experiences in relation to land dwarfs any historically shared cultural understandings of the meaning of land, as the lives of individuals in developing countries increasingly differ based on some individuals' privilege afforded by education and family social station.⁴⁴ This urban–rural divide exists worldwide⁴⁵ but is perhaps most pronounced in the developing world, where access to education and other aspects of modern life remain largely absent from rural communities.⁴⁶

The anthropological literature on land further demonstrates how variation in meaning of land reaches far deeper than the urban–rural divide. Concrete examples illustrate how the meaning of property is not monolithic, even within a single nation. A few examples can help elucidate this distinction in practice.

In Central American nations, land has traditionally served the role of the generator of the stuff of life. For example, the Maya, the indigenous peoples of Guatemala and parts of Mexico, Belize, and Honduras, esteem land of adequate quality to grow corn and beans as the wellspring of their cultural and religious identity.⁴⁷ Yet as modern economic development has come to Central America, more and more people are moving to urban areas, destroying these traditional attachments to real property as the source of foodstuffs and cultural identity.⁴⁸ For urban people, food

^{42.} See Bond, supra note 38, at 568 (noting in the context of writing about CEDAW that this dynamic has a particular, gendered aspect, as "[t]raditional leaders represent an elite, largely male group that has benefited from considerable influence at the local level even in the postcolonial period," while "[r]ural women in many parts of Africa generally do not enjoy the same status within the community").

^{43.} See id. at 540-41.

^{44.} Professor Lisa Pruitt has observed that an array of differences animates the schism between urban and rural places: the presence of local sources of authority in rural areas, "relative social and cultural stasis" in rural communities, and the lack of penetration of law. Lisa R. Pruitt, Migration, Development, and the Promise of CEDAW for Rural Women, 30 MICH. J. INT'L L. 707, 751–52 (2009).

^{45.} Martha Nussbaum has observed the relative lack of interest in the rural-urban divide and how this division reveals inequality in access to power. *See* MARTHA NUSSBAUM, FRONTIERS OF JUSTICE: DISABILITY, NATIONALITY, SPECIES MEMBERSHIP 225 (2006).

^{46.} But see U.N. Conference on Trade and Development, Information Economy Report 2010: ICTs, Enterprises and Poverty Alleviation, 14–21 (observing that the penetration of cellular telephones into communities in rural parts of developing nations has significantly changed how these communities function). See generally Terence C. Halliday & Pavel Osinsky, Globalization of Law, 32 ANN. REV. OF SOC. 447, 447, 455–56 (2006) (arguing that "global penetration of law will require at least four elements—actors, mechanisms, power, and structures [or] arenas").

^{47.} EDWARD F. FISHER, CULTURAL LOGICS AND GLOBAL ECONOMIES: MAYA IDENTITY IN THOUGHT AND PRACTICE 143, 147, 256 n.9 (2001) (documenting that mother's milk, semen, and maize are "animizing substances" to the Maya and describing a Maya creation myth in which the "world tree" is a maize plant that is at the center of the cosmos but remains grounded in the land); JIM HANDY, GIFT OF THE DEVIL: A HISTORY OF GUATEMALA 46 (1984).

^{48.} See SHELDON ANNIS, GOD AND PRODUCTION IN A GUATEMALAN TOWN 33-37 (1987) (describing traditional peasant reliance on the "milpa" as a source of food and how the role of the

comes from markets, not the land; land and agriculture are the purview of people perceived as backward, parochial country residents.⁴⁹ As a result, while there remains the historic cultural definition of the role of land, modern understandings of land have diverged, with some individuals remaining dedicated to a traditional vision of land and others viewing real property in an urban setting as more or less fungible, detached from its role in human sustenance.⁵⁰

In Zimbabwe, substantial racialized differences in the meaning of land contribute to ongoing land conflicts.⁵¹ Black Zimbabwean culture understands land to belong to the ancestors, to be allocated to households and then returned to community leaders to be reallocated to another family when the original head of the household dies.⁵² Within Black Zimbabwean society, there is no cultural tradition of individual property rights; individuals cannot own land in a manner cognizable through Western property norms.⁵³ Land holds sacred meaning because it comes from the ancestors.⁵⁴ Even Zimbabwe's war of independence reflected this meaning, with the fighters referred to as "children of the soil."⁵⁵ In contrast, White Zimbabweans' culture of land derives from European legal rules, whereby parcels of fenced land are held with titles that demonstrate the existence of market-alienable individual property rights.⁵⁶

This Zimbabwean example reveals a deeper aspect of the problem with land rules. In many instances, property regimes serve to protect existing structures of privilege. In Zimbabwe, fencing practices reflect the importation of European usage of land distribution to establish social hierarchy.⁵⁷ While the system appears on its face to be neutral, it in fact

53. Degeorges & Reilly, *supra* note 51.

54. Id.

[&]quot;milpa" has changed as the population of towns has increased); cf. FISHER, supra note 47, at 4 (documenting that while rural elders who relocated to cities during the civil war missed their fields, young people quickly adapted to indoor urban life).

^{49.} See FISHER, supra note 47, at 159-60, 178 (discussing how rural Mayan communities view non-market food exchange at the hearth as central to identity; urban elites view villages as backwards).

^{50.} See *id.* at 111, 113 (describing a ceremony celebrating the transfer of rural land within a family as well as indigenous identity groups working to strengthen connections to land and reestablish communally held land after the civil war).

^{51.} Andre Degeorges & Brian Reilly, *Politicization of Land Reform in Zimbabwe: Impacts on Wildlife, Food Production and the Economy*, 64 INT'L J. ENVTL. STUD. 571, 573 (2007).

^{52.} Id. This set of norms too frequently renders widows, women whose marriages or relationships have ended, and single, never married women deeply vulnerable as they lack access to the primary source of income and stability in their rural communities. Rudo Gaidzanwa, *Women's Land Rights in Zimbabwe*, ISSUE: J. OPINION, Summer 1994, at 12, 12. Even outside of this particular cultural context, the landlessness of women is a pervasive development problem worldwide. See Sofia Monsalve Suarez, *Gender and Land, in* PROMISED LAND: COMPETING VISIONS OF AGRARIAN REFORM 192, 198 (Peter Rosset et al. eds., 2006).

^{55.} DAVID LAN, GUNS AND RAIN: GUERILLAS AND SPIRIT MEDIUMS IN ZIMBABWE 171-72 (1985).

^{56.} Degeorges & Reilly, supra note 51.

^{57.} See infra note 84 and accompanying text.

reflects the interests and values of the dominant portion of the population that already owns property. But it overlooks the needs of people with weaker property claims—what Professor Andre van der Walt called the people on the margins⁵⁸ or Professor Mark Roark would call underpropertied persons.⁵⁹ The rules are value laden; the property system reflects the existing set of social priorities.

C. Land Can Constitute Identity

In her seminal article *Property and Personhood*, Margaret Jane Radin posited the key insight that property can be central to individual identity.⁶⁰ While Radin has her critics,⁶¹ at its core the concept of personhood and property reveals that property ownership is intimately tied to our conceptions of ourselves, an argument that is based on a continuum of property that ranges from personal to fungible.⁶² Radin defines personal property as "a class of objects or resources necessary to be a person or whose absence would hinder the autonomy or liberty attributed to a person."⁶³ In contrast, fungible property is purely instrumental in nature, and it "is perfectly replaceable with other goods of equal market value."⁶⁴ This continuum "generates a hierarchy of entitlements: The more closely connected with personhood, the stronger the entitlement."⁶⁵ As a result, while the state owes deference to personal property rights, under appropriate circumstances the state may override fungible property rights to serve other purposes.⁶⁶

Complicating this continuum is fetish property, which is a relationship to property that "hinder[s] rather than support[s] healthy selfconstitution."⁶⁷ While owners may perceive their fetish property to capture their personhood, Radin rejects the ascription of personal, protected status to fetish property.⁶⁸ Instead, though she recognizes that fetish property is entitled to status as property, she argues that fetish property should be treated as fungible.⁶⁹ Implicit in the refusal to defer to fetish property rights is Radin's adoption of the Marxist analysis of the "fetish-

63. Id. at 960.

65. Id. at 986.

- 67. Id. at 969.
- 68. Id. at 970.

^{58.} VAN DER WALT, *supra* note 7, at 23–24 (2009).

^{59.} See Marc Roark, Under-Propertied Persons, 27 CORNELL J.L. & PUB. POL'Y (forthcoming Fall 2017) (manuscript at 6), https://ssrn.com/abstract=2918598.

^{60.} Margaret Jane Radin, Property and Personhood, 34 STAN. L. REV. 957, 959-61 (1982).

^{61.} See, e.g., Mary L. Clark, Reconstructing the World Trade Center: An Argument for the Applicability of Personhood Theory to Commercial Property Ownership and Use, 109 PENN ST. L. REV. 815, 816, 821–22 (2005); Jeanne Lorraine Schroeder, Virgin Territory: Margaret Radin's Imagery of Personal Property as Inviolate Feminine Body, 79 MINN. L. REV. 55, 110 (1994).

^{62.} See Radin, supra note 60, at 959-60.

^{64.} Id.

^{66.} See id.

^{69.} Id. Distinguishing fetish property is a challenge, however, for Radin, who appears to suggest that, like insanity, fetishism can be perceived through its deviance. Id. at 969.

ism of commodities," which means that an excessive obsession with the "control over a vast quantity of things" will "destroy[] personhood rather than foster[] it."⁷⁰

Radin is not without her detractors. Some suggest that she may have overstated her account of connection to the home,⁷¹ or that these attachments have more to do with connections people form with their communities and social networks than to property itself.⁷² Most relevant to the question of land reform, others have critiqued her reluctance to recognize personal attachment to fungible property⁷³ or to commercial property.⁷⁴ Despite these critiques, Radin's work helps elucidate the fact that, while property as a category bears important connections to identity, property can be further divided into classifications that warrant different levels of state protection. The result of the distinction between personal and fungible property is that state protection is more appropriate for personal property but often invalid for fungible property. Because the existence of fetish property may be harmful to society, a state may actually have to actively work to disaggregate it.

D. Property Law Reflects the Fact that Land Has a Historical Function of Creating Wealth and Status

Property law tells us that land serves different functions than money serves. Throughout history, land has played a substantial role as a primary source of wealth and social status. In some instances, this had negative, dynastic aspects, but it also served the function of establishing households' autonomy. Yet urbanization in many nations has led rural property to play a much more trivial current role in establishing substantial wealth. But in nations of the Global South today, land's significance as a source of wealth and stability is a far more substantial contemporary construct than it is at this point in most communities in developed nations.⁷⁵ While this largely bygone character of property continues to re-

74. See Clark, supra note 61, at 821–22. But see Radin, supra note 60, at 960 n.6 ("The distinction is not simply between consumer property and commercial property. While it is likely that most commercial property is not property for personhood but rather held instrumentally, a great deal of consumers' property is also not property for personhood in the special direct sense I am trying to bring out.").

75. This is largely due to the fact that only in 2008 did the global population become essentially evenly split between rural and urban communities. See Pruitt, supra note 44, at 709 (citing Lisa R. Pruitt, Did the World Become More Urban than Rural Yesterday?, LEGAL RURALISM BLOG (Dec.

^{70.} Id. at 970.

^{71.} See, e.g., D. Benjamin Barros, Home as a Legal Concept, 46 SANTA CLARA L. REV. 255, 277-82 (2006).

^{72.} See Mulvaney, supra note 11, at 370–71.

^{73.} See Stephen J. Schnably, Property and Pragmatism: A Critique of Radin's Theory of Property and Personhood, 45 STAN. L. REV. 347, 391 (1993) (criticizing Radin for overlooking the role of fungible property in self-constitution); Schroeder, supra note 61, at 110 (suggesting that Radin does not appreciate "the subjective experience of empowerment and satisfaction owners have in controlling fungible property and the feelings of pain they experience at the loss of control"). But see Radin, supra note 60, at 1008 ("While I have argued that personal property should be specially recognized, I do not argue that there is no personhood interest even in fungible property.").

verberate even today in rural communities in the developed world,⁷⁶ its strongest domestic resonance is in U.S. history.⁷⁷ Considerations of the historical role that land ownership has played in the United States and of the way that the law has served to recognize this role reveal that land can be an important and distinct form of social support for poor and disenfranchised persons.

The early English roots of the American property system and the subsequent evolution of that system demonstrate the initial source of land's meaning—one of wealth and status—in the United States.⁷⁸ The entire American system of conveyancing real property is an outgrowth of the English model, which began with the monarch owning great tracts of land and individuals having few permanent land rights.⁷⁹ As the feudal system evolved into the modern English property system, tenants gained more substantial control of their property.⁸⁰ The ownership of large tracts

^{17, 2008, 7:38} PM), http://legalruralism.blogspot.com/2008/12/yesterday-was-one-of-thosedays.html (discussing listserv report of Professor Ronald C. Wimberley to the Rural Sociological Society regarding United Nations data on rural and urban populations)). In contrast for example, in the United States, only one in five citizens today lives in a rural community. See Lisa R. Pruitt, *The Forgotten Fifth: Rural Youth and Substance Abuse*, 20 STAN. L. & POL'Y REV. 359, 361 (2009) [hereinafter Pruitt, *The Forgotten Fifth*]. In the United States, the nation has been more urban than rural since the 1920 Census. See id. at 362 n.9 (citing Ken Deavers, *What is Rural?*, 20 POL'Y STUD. J. 184, 184 (1992)]. As a result of this divergence, the reality of rurality has disappeared from the view of policy makers in developed countries like the United States, who are oblivious to the "rural manifestations of social problems." *Id.* at 362.

^{76.} Yet it is still the case that land remains an important productive resource and symbol of economic stability for people who are otherwise cash-poor in contemporary rural U.S. communities. See JENNIFER SHERMAN, THOSE WHO WORK, THOSE WHO DON'T: POVERTY, MORALITY AND FAMILY IN RURAL AMERICA 30 (2009) (discussing how one rural community's "economy has always been mostly land based" and how "[e]lements of their subsistence lifestyle endure there, as the local culture still highly values hunting, fishing, and gardening for food, building one's own housing, and gathering one's own wood for heat"). In the popular media, this meaning has most poignantly been captured in the film *Winter's Bone*, in which a family's timber lands were to be sold if they otherwise could not cover a substantial debt to a bail bondsman. The film's protagonist, a teenage girl, willingly subjected herself to violence and the risk of death, in order to prevent the loss of the family's timber lands and home; she even participated in the dismemberment of her father's corpse in order to support her young siblings and mentally ill mother. WINTER'S BONE (Roadside Attractions 2010).

^{77.} But see Lisa R. Pruitt, Rural Rhetoric, 39 CONN. L. REV. 159, 159 (2006) (observing that to the extent today's courts discuss rural people and places, it is often with an idealized, nostalgic image of rurality in mind, including such assumptions that rural areas are safe, that rural people are neighborly, and that rural communities are largely self-contained, so the law should play less of a role in rural lives and livelihoods).

^{78.} See NANCY ISENBERG, WHITE TRASH: THE 400-YEAR UNTOLD HISTORY OF CLASS IN AMERICA 19 (2016) ("Whether barren or empty, uncultivated or rank, the land [in colonial America] acquired a quintessentially English meaning.").

^{79.} Property rights under such a system were largely illusory; services rendered to the crown could result in accumulating a tract of land as a response to fealty, but the land was held subject to royal whim. See THOMAS F. BERGIN & PAUL G. HASKELL, PREFACE TO ESTATES IN LAND AND FUTURE INTERESTS 3 (2d ed. 1984).

^{80.} Id. at 7-9. This change included the establishment of heritable land rights. The evolution of the language needed to convey an estate in fee simple absolute demonstrates how this change occurred. At early common law, a conveyance was presumed to be only for the duration of the grantee's life. Somewhat later, the right to convey to heirs became part of the fee simple estate so

of land within this system and in colonial America⁸¹ came to signify wealth, status, and control of the practical resources necessary to securely maintain a position of privilege in society.⁸² As a result, the incentive for individuals to keep their land and pass it onto their children and other descendants became a pronounced means of entrenching privilege for generations.⁸³

In both the American and English contexts, land was even more useful than money to establish intergenerational wealth because the kinds of restraints that could be placed on land could prevent spendthrifts of future generations from squandering the family's accumulated wealth.⁸⁴ Owners constrained their property in these ways so they could encumber their descendants' ability to sell, segment, or otherwise disrupt the integrity of the entire assembled parcel.⁸⁵

Evolving democratic norms against dynastic wealth entrenched in land led to today's American property law rules, which have significantly limited the rights of owners to control property for generations.⁸⁶ These laws initially evolved as a means of liberating land from familyimposed constraints, instead shifting power into the hands of the present owner and away from the preferences of deceased prior owners.⁸⁷ These changes have substantially reduced the role of real property as the basis of dynastic wealth in the United States.⁸⁸ They are part of a more general

86. *Id.* at 325 (explaining the abolition of the fee tail); MORRIS & LEACH, *supra* note 83, at 11 (defining the purpose of the rule against perpetuities).

87. MORRIS & LEACH, *supra* note 83, at 3 ("From very early times the common law judges have shown a strong bias in favour of the free alienability of land."); SINGER, *supra* note 17, at 324–25 (noting the ways that modern law furthers alienability and why it does so).

long as the appropriate language was used. Modern law now presumes, barring other indication, that heritability is the nature of the default estate.

^{81.} ISENBERG, *supra* note 78, at 37 (describing the appeal of landed widows as marriage partners because they permitted men in Jamestown to "increase their acreage"). "Land held power because of its extent, potential for settlement, and future increase." *Id.* at 41.

^{82.} Marsh, *supra* note 17, at 647–48 (explaining that land meant political authority, social status, and food security in feudal England and colonial America).

^{83.} J.H.C. MORRIS & W. BARTON LEACH, THE RULE AGAINST PERPETUITIES 11–14 (1956) (explaining the social and legal climate in which the rule against perpetuities evolved).

^{84.} Owners could bind land to the family lineage with some degree of permanence via the fee tail, whereby ownership of the land could be restricted to lineal heirs for generations into the future, barring any of those heirs from selling even a portion of the land. *See* BERGIN & HASKELL, *supra* note 79, at 30–31. This of course led to its own set of problems, namely the existence of land-poor gentry, saddled with expensive estates to maintain without the cash resources to cover the related costs. Alternatively, owners could attach restrictions for future generations to allow only certain permissible uses and bar impermissible ones. For example, defeasible fees grant fee simple title that can endure forever, so long as a specified event does not occur. SINGER, *supra* note 17, at 304. Failure to obey the conditions would result in the forfeiture of the property.

^{85.} SINGER, *supra* note 17, at 324 ("If enforced, the fee tail could ensure the perpetuation of a landed estate and protect the family somewhat against a child who might squander the family fortune.").

^{88.} SINGER, *supra* note 17, at 325 (explaining the public policy behind the abolition of the fee tail); *see also* MORRIS & LEACH, *supra* note 83, at 11 ("[T]he Rule Against Perpetuities and its kindred succeeded in preventing enormous concentrations of land in the hands of a very few and thereby brought it about that England never suffered unbearably from those conditions which else-

contemporary shift toward broadening land ownership throughout society, in which the law supports freer conveyancing of land and policies that further the alienability of real property.⁸⁹

Beyond these arcane rules regarding estates, U.S. history is replete with additional examples of the centrality of land ownership, showing how the law helped people gain access to land as a primary source of wealth and social status. The U.S. government privileged land ownership throughout its history, originally associating the rights of citizenship with the ownership of property and not merely with residence in the nation.⁹⁰ Later, the federal government prioritized land ownership as a value underlying many of its central policies. In nineteenth-century American society, the import of land ownership was a driving force behind much of the westward population push.⁹¹ Government recognition of land rights through homesteading sought to harness Americans' desires to own property as a means of populating the western states.⁹²

This trend of government support of real property ownership extends past the early days of the nation. Into the twentieth century, the system of tenant farming in the American South was widely recognized as a site of entrenched inequality, and the federal government responded by initiating a program of subsistence homesteading.⁹³ This governmental support of land ownership continues today. Scholars have documented the role of even modest home ownership as the source of most Ameri-

where have produced violent social revolution-land hunger, a class of serfs or peons and widespread destitution.").

^{89.} SINGER, supra note 17, at 281-86, 324-25.

^{90.} See generally Robert J. Steinfeld, Property and Suffrage in the Early American Republic, 41 STAN. L. REV. 335, 357–58 (1989).

^{91.} The Homestead Act of 1862 was part of a century-long series of government acts designed "to create a stable society whereby broad-based land ownership would provide individuals with a stake in the economy." Gary D. Libecap, *Bureaucratic Issues and Environmental Concerns: A Review of the History of Federal Land Ownership and Management*, 15 HARV. J.L. & PUB. POL'Y 467, 470 (1992). Congress initially intended homesteading to raise funds through land sales, but later focused on small-scale farming by creating 160-acre limits on claims; this policy shift also involved broadening access by allowing improvements instead of purchase as the basis of title. *Id.* at 469–70, 473.

^{92.} Id. at 470–71; see also Dana May Christensen, Securing the Momentum: Could a Homestead Act Help Sustain Detroit Urban Agriculture?, 16 DRAKE J. AGRIC. L. 241, 251 (2011) (noting that homesteading served "to promote development in the Western United States" and also played a substantial role as a centerpiece of government efforts to extirpate Native American tribes by treating land historically under native control as if it were unoccupied). But see ISENBERG, supra note 78, at 90 (documenting how Virginia, during the colonial era, "was content to dump the poor into the hinterland" by allowing squatters on unclaimed land in western Virginia and Kentucky to gain a right of priority for purchase, but that this harmed rather than helped the poor families who attempted to gain property because without the resources to purchase, they became trapped as tenant farmers).

^{93.} ISENBERG, *supra* note 78, at 214. When this program faced legal challenge, the New Deal Roosevelt administration issued an executive order to start a new bureau, the Resettlement Administration, which was charged with helping the rural poor by buying submarginal land, resettling tenant farmers, helping drought victims, restoring damaged land, and offering camps for migrant workers, all with a central goal of "help[ing] tenant [farmers] obtain better living conditions and learn how to become farm owners. *Id.* at 218.

can families' accumulated wealth.⁹⁴ The federal government continues to prioritize property ownership by subsidizing it through federal first-time homeowner programs⁹⁵ and advantaged tax status.⁹⁶

Yet as the primary locus of American life has shifted from rural communities to urban population centers within the last hundred years,⁹⁷ the land itself has lost much of its meaning as a principal signifier of wealth and social status in the United States.⁹⁸ Instead, education is perhaps the best analog to the prior function of land. Today, education functions as the central social good used to equip one's descendants to be

97. Debra Lyn Bassett, *Ruralism*, 88 IOWA L. REV. 273, 290 (2003); see also Pruitt, *The Forgotten Fifth, supra* note 75, at 359, 361 n.9 (observing that the 1920 Census was the first to document a more urban than rural nation).

98. John H. Langbein, *The Twentieth-Century Revolution in Family Wealth Transmission*, 86 MICH. L. REV. 722, 732–33 (1988). *But see supra* note 76 and accompanying citations (discussing the continued role of land as a source of wealth in rural American communities). Even if land itself does not currently signify status as it once did in many communities in the United States, the reality is that historical patterns of land ownership as the source of wealth and social status have been reified into a historically stagnant class structure in which whole groups of people are expendable in service of creating wealth for others. Nancy Isenberg has recently made this argument in a sustained and compelling fashion, where she notes that colonial America was typified by "waste people [who] wasted away, fertilizing the soil with their labor while finding it impossible to harvest any social mobility." ISENBERG, *supra* note 78, at 42. The remainder of her book offers a damning history of the maintenance of a poor white class throughout American history.

^{94.} The history of racial redlining demonstrates just how this kind of wealth developed in the United States. A formal policy of providing federally backed mortgages and mortgage insurance only for homes in white neighborhoods meant that African American families could not qualify to purchase homes on the same terms as white families of similar economic means. RICHARD ROTHSTEIN, THE COLOR OF LAW: A FORGOTTEN HISTORY OF HOW OUR GOVERNMENT SEGREGATED AMERICA 63–66 (2017). Worse yet, the federal government would only insure houses that were subject to racially restrictive covenants, thereby guaranteeing that the neighborhood could never be integrated, since the covenants barred sales to African Americans. See id. at 77–91; Ta-Nehisi Coates, The Case for Reparations, ATLANTIC, June 2014, at 9–10 (describing African American history"). Research has clearly documented redlining as a significant historical root of the racial disparity in wealth between white and African American families in the United States. MELVIN L. OLIVER & THOMAS M. SHAPIRO, BLACK WEALTH/WHITE WEALTH 4–5 (2006); ROTHSTEIN, supra, at 184–85.

⁹⁵ See Buying а Home. U.S. Dep't OF HOUS. & Urban DEV. https://portal.hud.gov/hudportal/HUD?src=/topics/buying_a_home (last visited Sept. 12, 2017) (listing federal programs that encourage homeownership such as FHA loans for first time homebuyers (lower interest rates), the Good Neighbor Next Door program (discounted housing to certain professions to revitalize areas through homeownership), homeownership for public housing residents (allowing public housing authorities to sell portions of public housing and convert rent payments into mortgage payments to create ownership), and Indian Home Loan Guarantee Program (program to "facilitate home homeownership and increase access to capital in Native American Communities")).

^{96.} Scholars view federal tax code provisions that allow for the deduction of interest paid on debt incurred to purchase primary residences, I.R.C. § 163(h)(3) (2012), and state and local real property taxes, *id.* § 164(a)(1), as motivated entirely by Congress's desire to promote homeownership. Roberta F. Mann, *The (Not So) Little House on the Prairie: The Hidden Costs of the Home Mortgage Interest Deduction*, 32 ARIZ. ST. L.J. 1347, 1352 (2000); Mark Andrew Snider, *The Sub-urban Advantage: Are the Tax Benefits of Homeownership Defensible?*, 32 N. KY. L. REV. 157, 174 (2005). These deductions are also subject to substantial criticism as tax expenditures targeted to favor upper-income households while leaving struggling households without meaningful housing assistance through the tax system. Stanley S. Surrey, *Federal Income Tax Reform: The Varied Approaches Necessary to Replace Tax Expenditures with Direct Governmental Assistance*, 84 HARV. L. REV. 352, 396 (1970).

self-supporting and privileged individuals who could maintain their social status into the future.⁹⁹ In the modern, knowledge-based American economy, land ownership can seem nearly irrelevant because farming as a way of life is so far removed from the current economic reality of the vast majority of Americans.¹⁰⁰ But the law continues to reflect this historical role of land as the source of wealth and power and its role in constituting social status.

E. Land Creates Citizenship

Property law and theory also reflect the role of land in constituting citizenship, likewise a strain of popular political theory running through American history. At the founding of the United States, citizenship largely equated with landownership.¹⁰¹ With few exceptions, suffrage rights were available solely to those who owned property during the colonial era.¹⁰² Only some decades later would newly founded states enter the

101. ISENBERG, *supra* note 78, at 14 ("It was the stigma of landlessness that would leave its mark on white trash from this day forward."). While her use of the pejorative phrase "white trash" is jarring, Isenberg's book persuasively argues that the American colonies were entirely predicated on wasteland being occupied by the discarded humanity of English society. *See id.* at 2–3, 22. The terminology of white trash evolved somewhat later. *Id.* at 135–36.

^{99.} Langbein, *supra* note 98, at 732-34; *see also* Geoffrey D. Korff, *Reviving the Forgotten American Dream*, 113 PENN. ST. L. REV. 417, 428 (2008) ("The modern American Dream is far more focused on the availability of education, health care, job opportunity, retirement security, and a general sense of social mobility, rather than on the concrete goal of ownership of productive resources."); Thomas B. Edsall, Opinion, *How the Other Fifth Lives*, N.Y. TIMES, Apr. 27, 2016, at 1 (marshaling substantial evidence that Americans in the upper socioeconomic quintile have effectively self-segregated from the other 80% of society).

Marsh, supra note 17 (land is not about food security, but sentimental attachment in 100. modern America); see also Jim Chen, Of Agriculture's First Disobedience and Its Fruit, 48 VAND. L. REV. 1261, 1282-83, 1315-16 (1996) (documenting how the system of entitlements generated by agricultural lawmaking continues to exist within a tradition of broad public support that increasingly has little relationship to most Americans' lived reality, while noting that "[s]tatutes providing price and income support for farmers epitomize the sort of legislation generated when the potential benefits are concentrated and the potential costs are distributed"). To the extent that farming is embraced as a political cause through the continued support for farm subsidies, the reality is that a large amount of these subsidies do not serve to bolster rural communities or family farms, but are provided to already-wealthy individuals who are usually urbanites. See Ron Nixon, Billionaires Received U.S. Farm Subsides, Report Finds, N.Y. TIMES, Nov. 7, 2013, at A23 (noting that 50 billionaires received farm subsidies totaling \$11.3 million from 1995 to 2012, including Paul G. Allen, cofounder of Microsoft, Charles Schwab, investment magnate, and S. Truett Cathy, owner of Chick-fil-A). The fifteen members of Congress who received \$237,921 in farm subsidies in 2012 became widely publicized during the 2013 battle over the Farm Bill, due to political efforts to substantially reduce funding levels for the Supplemental Nutrition Assistance Program for needy families. See Envtl. Working Grp., Members of Congress Received \$238K in Farm Subsidies, EWG (June 3, 2013), http://www.ewg.org/release/members-congress-received-238k-farm-subsidies.

^{102.} This requirement had evolved since the seventeenth century, when all freemen and adult male housekeepers had been eligible to vote. Steinfeld, *supra* note 90, at 339 n.13. In the eighteenth century, twelve of the thirteen colonies denied the franchise to those who lacked property. *Id.* at 339. Exceptions were provided in some colonies for residents of certain towns, householders, or tradesmen of long duration. *Id.* at 339 n.12. These eligibility criteria would not be abolished until far later—for example, 1834 in Tennessee, 1845 in Louisiana and Connecticut, 1851 in Virginia, and 1857 in North Carolina. ISENBERG, *supra* note 77, at 130.

Union without property qualifications for voting;¹⁰³ thereafter, existing states eliminated property restrictions on suffrage.¹⁰⁴

This evolution of land-related citizenship ties directly to the writings of Thomas Jefferson, which have come to play an outsize role in the American polity's conversations about land, access to property, and democracy. Despite an array of serious and damning critiques of Jefferson,¹⁰⁵ Jeffersonian property is a frequently appearing trope in legal scholarship,¹⁰⁶ and scholars continue to invoke Jeffersonian notions of property to represent a variety of positions. Some posit that Jefferson stood for strong private property rights,¹⁰⁷ protected against the actions of a despotic state.¹⁰⁸ Others suggest that Jefferson was a populist who sought to empower a wider range of people with the rights and privileges of citizenship through access to land.¹⁰⁹ As is often the case, the most

104. Onuf, supra note 103; see also Steinfeld, supra note 90, at 353.

105. Jefferson's hypocritical and racist actions regarding the ownership of enslaved people cast substantial doubt on the quality of his judgment as a legal thinker, but Jefferson's property writings remain an important modern touchstone in theoretical considerations of land and citizenship even today. See, e.g., Monica Eppinger, Property and Political Community: Democracy, Oligarchy, and the Case of Ukraine, 47 GEO. WASH. INT'L L. REV. 825, 845 (2015) (noting that Jefferson is out of fashion in part due to "repugnance at the contradiction between his views on property, virtue, and democracy and his own practices in using enslaved labor to cultivate his agricultural land"); Peter Onuf, Thomas Jefferson: Impact and Legacy, MILLER CTR., http://millercenter.org/president/jefferson/impact-and-legacy (last visited Sept. 2, 2017); see also DARREN STALOFF, HAMILTON, ADAMS, JEFFERSON: THE POLITICS OF ENLIGHTENMENT AND THE AMERICAN FOUNDING 245 (2005) ("Slavery was Jefferson's personal bête noire; it would haunt him throughout his career."). Nevertheless, because his thought remains influential in the field of property, Jeffersonian property warrants exploration.

106. See, e.g., Bret Boyce, Property as a Natural Right and as a Conventional Right in Constitutional Law, 29 LOY. L.A. INT'L & COMP. L. REV. 201, 235–39 (2007) (analyzing the approach of Jefferson, among other framers, as the basis of constitutional property law); Eppinger, *supra* note 105, at 843–47 (invoking Jeffersonian property as a coherent account of property and political community in her consideration of the role of property in the political evolution of Ukraine). Similarly, Jefferson is also often invoked in the context of intellectual property as an early progenitor of patent law. See, e.g., Graham v. John Deere Co. of Kan. City, 383 U.S. 1, 7–11 (1966) (noting that Thomas Jefferson "was not only an administrator of the patent system under the 1790 Act, but was also the author of the 1793 Patent Act"); Adam Mossoff, Who Cares What Thomas Jefferson Thought About Patents? Reevaluating the Patent "Privilege" in Historical Context, 92 CORNELL L. REV. 953, 958– 67 (2007) (explaining "the birth of the Jeffersonian story of patent law in Supreme Court decisions and how many intellectual property scholars today have adopted Jefferson's views of patents as a historical axiom").

107. JEAN M. YARBROUGH, AMERICAN VIRTUES: THOMAS JEFFERSON ON THE CHARACTER OF A FREE PEOPLE 55 (1998).

108. Id. at 99 (observing that some followers of Jefferson advocate adoption of "a libertarian economic program of low taxes and minimal government"); see also CHARLES A. MILLER, JEFFERSON AND NATURE 179 (1988) ("On balance, Jefferson chose to protect property.").

109. YARBROUGH, supra note 107, at 99 (noting that others who invoke Jefferson do so to "urg[e] the expansion of government power to enforce a moral vision of greater social and economic equality"); Carol Rose, Mahon Reconstructed: Why the Takings Issue is Still a Muddle, 57 S. CAL.

^{103.} Peter Onuf. Thomas Jefferson: The American Franchise, MILLER CTR http://millercenter.org/president/jefferson/the-american-franchise (last visited Sept. 2, 2017). Of course, they replaced property-based restrictions on suffrage with new requirements, usually based on taxpayer status. Steinfeld, supra note 90, at 335, 353. In many instances, these were accompanied by pauper restrictions that denied suffrage to "persons in receipt of poor relief" or who were inmates of poorhouses. Id. at 335, 353 n.59; see also ISENBERG, supra note 78, at 130. Some other states granted universal white manhood suffrage, with or without a pauper exclusion. Steinfeld, supra note 90, at 353 n.59.

accurate view is probably one between these oversimplified and instrumentalist perspectives.¹¹⁰ While Jefferson has come to mean all things to all people, this Article attempts to articulate a modest, textually supported Jeffersonian conception of property and to consider how that vision might shape contemporary considerations of land distribution.

The central aspect of Jeffersonian property ideals originates in the role of land ownership in constituting the virtuous citizen. Jefferson relied heavily on the image of the farmer as the idealized citizen of the agrarian republic,¹¹¹ whose status as a cultivator of the land¹¹² demonstrated his virtuous character and moral superiority.¹¹³ Jefferson, among many others of his day, believed human endowments of independence and freedom resulted from property ownership.¹¹⁴ According to Jefferson, land ownership allowed citizens to develop the kind of industry and thrift that would be the hallmark of the new American nation,¹¹⁵ rendering men independent and self-sufficient.¹¹⁶ Landownership was so important to this American vision that without it even free white men were denied suffrage.¹¹⁷ Jefferson believed that the combination of owning

L. REV. 561, 591 (1984) (arguing that Jefferson viewed agrarian land as fostering "civic character" and therefore rejecting extreme inequality in land because of the potential for corruption of the republic); see also MERRILL PETERSON, THE JEFFERSON IMAGE IN THE AMERICAN MIND 359 (1960).

110. See YARBROUGH, supra note 107, at 99 ("[I]n so doing, each side simplified and, to some extent, betrayed the distinctive moral vision that underlay Jefferson's economic program.").

111. ISENBERG, *supra* note 78, at 86–88; *see* YARBROUGH, *supra* note 107, at 57; *see also* STALOFF, *supra* note 105, at 283–84 (referencing repeatedly "Jefferson's agrarian idyll").

112. ISENBERG, *supra* note 78, at 88 (discussing Jefferson's preoccupation with those who were cultivators: "To cultivate meant to renew, to render fertile, which thus implied extracting real sustenance from the soil, as well as good traits, superior qualities, and steady habits of mind.").

113. YARBROUGH, *supra* note 107, at 57–59. Yarbrough notes that Jefferson never meaningfully expounded on these virtues, but he spoke highly of Adam Smith's 18th century tome of political economy, *The Wealth of Nations*. There, Smith postulated that industrial labor's repetitiousness atrophied men, while cultivation of one's own property made men their own independent masters. ADAM SMITH, 3 THE WEALTH OF NATIONS 160–64 (New York, P.F. Collier & Son 1909).

114. YARBROUGH, *supra* note 107, at 63–69 (on Jefferson's belief in the virtue-enhancing power of land ownership); Steinfeld, *supra* note 90, at 335, 338, 350 (discussing the ubiquity of belief in the transformative power of property ownership as the source of independence, which bestowed the right of suffrage and self-governance on individuals). This perspective stood in marked contrast to the fundamental value of human equality enshrined in the Declaration of Independence and the U.S. Constitution, both of which were drafted in this era. The evolution of who held the franchise in the early years of the republic demonstrates the crucial shift from suffrage for those deemed worthy to suffrage as a universal right.

115. YARBROUGH, supra note 107, at 91–92.

116. STALOFF, *supra* note 105, at 283; YARBROUGH, *supra* note 107, at 65–69. Jefferson assumed that land alone would create self-sufficiency for the newly landed. Of course lost in this assumption was the reality that in order to cultivate the land, these new landowners would need adequate capital to afford "slaves, overseers, draft animals, a plough, nearby mills, and waterways to transport farm produce to market." ISENBERG, *supra* note 78, at 90. In reality, failed smallholders would often sell to planters, deepening the concentration of land in the hands of the few. *See id*.

117. Robert J. Steinfeld has carefully documented how individual independence was central to the allocation of the right to vote in the early republic. *See generally* Steinfeld, *supra* note 90, at 335. In the early years of the nation, because land was viewed as creating independence, most states limited suffrage to white males who owned at least fifty acres. Onuf, *supra* note 103. For example, as late at 1829, Virginia still required voters to own either twenty-five acres with a house, or fifty unsettled acres. Steinfeld, *supra* note 90, at 355. Evolution of suffrage rights was underway in this era. Most new states eliminated the role of landownership and taxpayer status in granting suffrage.

property and education would allow citizens to cultivate personal virtues that would lead to the virtuous development of his agrarian republic,¹¹⁸ advocating in his private correspondence for "as few as possible [to] be without a little portion of land because [t]he small landholders are the most precious part of a state."¹¹⁹ To enact this plan to create the upright, landowning citizen, Jefferson drafted a new state constitution for Virginia, in which he advocated "his boldest constitutional proposal [of] government-mandated land reform" through the provision of fifty acres or enough land to create a fifty-acre estate for all men.¹²⁰

Despite the failure of these direct efforts to redistribute property, Jefferson did succeed in other legal reforms designed to broaden access to land within the new nation.¹²¹ Scholars have been quick to emphasize that the successful reforms "were less about promoting equality or democracy than moderating extremes" of ownership,¹²² the reforms were

122. ISENBERG, supra note 78, at 91.

Yet some revolutionary-era constitutions had included free African Americans in the franchise, and New Jersey had even granted women the vote, so long as the individual owned property. Changes to voting rules would universally remove property-related qualifications to vote, but simultaneously limit the franchise to white men. Onuf, *supra* note 103.

^{118.} ISENBERG, *supra* note 78, at 87, 91. Jefferson's effort to codify these rights to education in even a limited fashion never came to fruition because the landed gentry of Virginia refused to fund such programs.

^{119.} THE PAPERS OF THOMAS JEFFERSON, 1:133, 8:683 (Julian P. Boyd et al., eds., Princeton Univ. Press, 1950) (quoted in DAVID N. MAYER, THE CONSTITUTIONAL THOUGHT OF THOMAS JEFFERSON 83 (1994)).

^{120.} STALOFF, *supra* note 105, at 255; *see also* ISENBERG, *supra* note 78, at 89–90 (observing that this reform would provide the vote to all newly-landed men). Later, in an era of legal reform within the state, Jefferson again proposed land reform, this time as a seventy-five-acre distribution of property to all landless citizens, which likewise never came to pass.

¹²¹ Some of this work included efforts to abolish the role of hereditary title to land and to eliminate the role of primogeniture and entail in Virginia, YARBROUGH, supra note 107, at 94, thereby guaranteeing that all children, not merely firstborn sons, would take property equally from their fathers. MILLER, supra note 108, at 206. Jefferson perceived these "rules of inheritance as purely conventional and utilitarian." DAVID N. MAYER, THE CONSTITUTIONAL THOUGHT OF THOMAS JEFFERSON 78 (1994). This and other ways in which Jefferson presented flexible approaches to property rights demonstrates that while there is substantial scholarly debate over whether Jefferson believed property to be a natural right, at a minimum Jefferson did not view property rights as absolute. See id. at 77-80. These reforms led to more people owning land, but of course the resulting conveyances occurred as inheritances from landed parents; they therefore reified the existing class structure since only the children of landowners would receive property. While Jefferson often spoke of the new nation as a classless society, ISENBERG, supra note 78, at 98, this kind of effort should not be viewed as demonstrative of a radical egalitarianism. In fact, he advocated for his reforms in terminology that belied his egalitarian ideals, referring to those he intended to benefit from his educational scheme as "raked from the rubbish." Id. at 91. He embraced an ideology of natural differences among people and advocated careful breeding to solve the problems of slavery. Id. at 99-100. Isenberg has noted that Jefferson arguably personally undertook such a program of interbreeding, well-documented through the lineage he established with Sally Hemings, who Jefferson owned as an enslaved woman. Id. at 100. He further bred enslaved persons as chattels, much as he focused on breeding his livestock. Id. To pretend that Jefferson believed in human equality is factually inaccurate.

not suggestive of a broader effort to enact a radical egalitarianism through widespread property redistribution.¹²³

Yet perhaps the most profound aspect of Jefferson's reforming instinct toward property law had to do with his derision for intergenerational transfers of land. In correspondence with James Madison, Jefferson asked serious questions about whether nations may change land allocations that were established in perpetuity.¹²⁴ He noted that these arise from hereditary rights and "perpetual monopolies" and then argued that reimbursement for such reallocations is "a question of generosity and not of right."¹²⁵ Professor Ben Barros has argued that Jefferson's words can be read to suggest that "the state can make [changes to hereditary ownership of property] with or without [compensating] the owners because there is no right to pass these entitlements from generation to generation."126 But Professor Barros also maintains that in other contexts, Jefferson believed that "property owners were entitled to compensation for taken property as of right."¹²⁷ Yet in her research on legal protections of real property from creditors, Professor Claire Priest argues that Jefferson embraced "the English perspective that land was a natural family endowment and ideally a source of family prosperity through the generations," interpreting Jefferson's writings on usufruct to "reveal[] his assumption that real property, at least according to 'natural right,' involved not just the fee simple ownership of one person, but also the claims of family members."¹²⁸ While the precise contours of Jefferson's opinions are contested, it is abundantly clear that he advocated for some broadening of land ownership to foster citizenship.

This concern with how the lack of access to property hinders the lives of impoverished persons animates the work of contemporary property theorists and land use scholars, who have more directly addressed the role of land ownership in constituting citizenship today. While this is one strain in the progressive property school discussed above, concerns about the role of property in creating citizens are not limited to scholars within this school. Professor Jeremy Waldron has posited that property ownership is central to the development and exercise of liberty.¹²⁹ His theory of private property goes even further, however, to argue that it is

^{123.} STALOFF, *supra* note 105, at 259 ("Much of Jefferson's legal revision was also decidedly moderate. Primogeniture and entail were rarely invoked in Jefferson's day"); YARBROUGH, *supra* note 107, at 95.

^{124.} Letter from Thomas Jefferson to James Madison (Sept. 6, 1789), http://lcweb2.loc.gov/service/mss/mtj1/011/011_0912_0958.pdf.

^{125.} *I*

^{126.} Ben Barros, *Thomas Jefferson's Property Theory*, PROPERTYPROF BLOG (Nov. 9, 2006), http://lawprofessors.typepad.com/property/2006/11/thomas_jefferso.html.

^{127.} Id.

^{128.} Claire Priest, Creating an American Property Law: Alienability and its Limits in American History, 120 HARV. L. REV. 385, 450-51 (2006).

^{129.} See JEREMY WALDRON, THE RIGHT TO PRIVATE PROPERTY 329 (1990).

wrong for some individuals to have no private property at all,¹³⁰ which is a resounding statement in favor of a radical reconsideration of who gets to own property and who does not, and of how the state might intervene to rearrange property allocations. Urban planning scholar Ananya Roy has likewise considered how property structures modern citizenship, rendering the propertyless "marginal in the discourses and practices of citizenship."¹³¹

Along these same lines, progressive property scholar Professor Joseph Singer has expansively maintained that property rights must be understood to encompass not only "the right of owners to exclude others from their property," but also "rules that protect the liberty of persons to acquire property and thereby become owners."¹³² Elsewhere, Singer has compellingly argued that everyone deserves to have the right to private property because of its role in constituting the self.¹³³ More recently, he has taken up the relationship between freedom and property, noting the role of property ownership in providing the freedom that is a precondition for equality of citizenship.¹³⁴

II. PROPERTY'S BASICS DEMONSTRATE WHY LAND WARRANTS REDISTRIBUTION

A. Property Theory Reveals the Nature of Property and Property Systems

One of the key challenges facing those who advocate for broadening access to land is answering the central question of why this is a valuable public policy initiative. Redistribution of any kind is often subject to critique as an invalid denial of private property rights, while other opponents who may support redistributive governmental efforts in general remain skeptical of land as the focus of such programs, as Professor Andre van der Walt has compellingly revealed about the post-apartheid redistribution in South Africa.¹³⁵ A central reason for this skepticism is the fact that land is harder to redistribute than other goods because land is scarce and because its scarcity makes redistribution complicated. Yet property law can help conceptualize the nature of this scarcity, its social consequences, and possible methods to rectify these problems when conducting land reform.

^{130.} *Id.*

^{131.} Ananya Roy, Paradigms of Propertied Citizenship, 38 URB. AFF. REV. 463, 464 (2003).

^{132.} Joseph William Singer, After the Flood: Equality & Humanity in Property Regimes, 52 LOY. L. REV. 243, 272 (2006).

^{133.} See JOSEPH WILLIAM SINGER, ENTITLEMENT: THE PARADOXES OF PROPERTY 167–71 (2000) (asserting that everyone deserves the right to private property).

^{134.} Joseph William Singer, *Titles of Nobility: Poverty, Immigration, and Property in a Free and Democratic Society*, 1 J.L. PROP. & SOC'Y 1, 12 (2014) ("[B]ecause we *also* believe in equality, we must enable every person to become an owner so every person can be free.").

^{135.} VAN DER WALT, *supra* note 7, at 6–9; *see also* UNDERKUFFLER, *supra* note 24, at 121 (discussing the social and political issues of redistributive policies).

1. Existing Maldistributions of Land Reflect Tacit Acceptance of Injustice Yet Are Unlikely to Be Rectified Without State Involvement

Land is the paradigmatic scarce and rivalrous resource, as discussed in detail above. There is only so much land available, and it cannot be effectively shared in any meaningful way that resolves the problems of rivalrousness or scarcity. Even where land can be owned with a collective title or with a formal mechanism like a cooperative, in which the same piece of land is owned by a group of people, scarcity and rivalrousness remain. Those holding collective title still have the right to use the property to the exclusion of others, who may be entirely landless. That more than one person can collectively hold title to the land does not mean that all people have simultaneous rights to the land. This fact of rivalrousness combined with scarcity is one of the primary justifications for land reform-multiple people or groups cannot own land simultaneously and there is not enough to go around so that all have rights to land. When the market alone does not provide widespread land access, redistributive land reform provides one method to address the consequences of land's scarcity and rivalrousness by ensuring that more people gain rights to land. Yet the market alone, without state engagement, is unlikely to generate redistribution; state involvement is necessary to facilitate and subsidize these transfers.

2. Since Property Systems Are Value Laden and Property Rights Contingent, Redistribution Demonstrates State Support for Justice

Land redistribution is an implicit state recognition that existing property rules are not inevitable but rather are value laden and reflective of a particular society at a particular moment.¹³⁶ As a result, redistributive land reform policies both alter a property regime and can signify a change in underlying values as well.¹³⁷ One common critique of redistributive land reform policies is that the existing distributions of land are settled and therefore should not be interrupted, largely because legal systems are most stable when they confirm citizens' expectations.¹³⁸ Of course, to suggest in a postcolonial state that the current status quo should not be disrupted, while that allocation is reflective of the disruption caused by colonization, is the height of absurdity. Land reform,

^{136.} Rosser, *supra* note 22 (arguing that progressive property scholars seek to "create more space to contest values" inherent in property systems).

^{137.} See id. at 110–11 (suggesting that progressive property focuses on "the underlying values that property serves and the social relationships it shapes and reflects").

^{138.} See generally Rosser, supra note 30, at 427 (describing the status quo property system as successful and favored by a "status quo bias observable in celebrations of existing rules without regard either to how those rules are experienced by those excluded from enjoying property or to the possibility of improving on the existing structure," while arguing that property systems should be destabilized to address inequality).

however, assumes that the current distribution is unjust and seeks a new, fairer distribution, one that grasps the deeper meaning of land within a society. Properly conceptualizing the instrumentalist view of property therefore suggests that law can evolve in the interest of the public.¹³⁹ Without change to the property system, any preexisting injustice in distributions will endure through the continuation of the property system itself.¹⁴⁰ Property theorists can help explain the contested meanings of land and of its distribution, allowing those engaged in land reform to offer stronger arguments for why land warrants redistribution. Reconfiguration of the property system, therefore, is a necessary corrective of the ways that the property regime reflects misallocations of property. When land reform opponents suggest that stability should be the primary goal of a property system, they implicitly argue that continued injustices in distribution are less important than people's fixed expectations.¹⁴¹ Or, it is possible that they instead intend to suggest that the current distribution itself is just, though in the current state of economic inequality, this is not such a common perception.

Against this backdrop, the justification for land reform is simple: the current distribution is a maldistribution, and some of the rights currently held by landowners should justly be extended instead to the landless.¹⁴² As a result, property law should be used to promulgate government actions that rectify these injustices by reallocating property rights. While this observation may shake our traditional notions of what qualifies as a property right,¹⁴³ insofar as it is not fixed but subject to change, regulations of land are not unique in this regard. Government actions often limit the freedoms of some to protect the freedoms of others. Land reform presumes that the insights of progressive property are true, that property rights should be allocated to serve social values, not just to reify existing, fixed distributions that are also value laden.

B. Property Theory Reveals the Importance of Owning Land

1. Land Creates Sites for Self-Constitution

Radin's crucial work helps explain both why land is a much-desired social good in many poor, rural communities in the developing world and also why any efforts to disrupt existing property allocations, even by democratically legitimate means, can evoke suspicion and hostility with-

^{139.} Mulvaney, supra note 11, at 364 n.66.

^{140.} Id. at 364 n.67.

^{141.} VAN DER WALT, supra note 7, at 7.

^{142.} To state this concept more fully in the language of property theory: "[S]ome of [the] sticks in the bundle are in fact owned by others and not the person we conventionally think of as the owner of the property." Singer, *supra* note 132.

^{143.} That property regimes and land distributions are not valueless, but instead are value laden with the priorities and inequalities inherent throughout a society is a central tenet of the progressive property movement. See Alexander et al., supra note 28.

in the political and social order. Radin's concept of personhood and its relationship to property help to illuminate the importance of land reform and its complexity as a matter of social hierarchy and individual identity. Three different kinds of property owners warrant discussion. First, redistribution affects landless people who lack personhood connections to property but who could form them if land reform occurred. Second, land reform may also formalize the personhood connections of tenant farmers by giving them title to land that they have historically tilled but not owned. Third, land reform may be perceived as harming the personhood of those who own the land that is potentially subject to redistribution.

If the goal is for land reform to serve the needs of landless people, the central insight of Radin's theory is that an impoverished and landless individual's gaining rights to property under a land reform program might well represent something more significant than simply the receipt of a material good. In this way, land differs from other fungible resources that the state could provide, such as food, health care, or money.¹⁴⁴ Land ownership may more profoundly stand as a poignant symbol of one's humanity, of improving one's value and demonstrating one's status as a person in the community. In places where this set of claims rings true, the creation of a new right to property can bring about a shift in self-conception from a landless peasant who labors in a short-term fashion on the land of others, subject to the whims of the landed, to a new identity as a property-owning individual. Property owners may therefore qualify as more fully realized, autonomous individuals in a society that connects personhood to land ownership.¹⁴⁵

These insights are similarly applicable to the second category: tenant farmers who labor on a particular parcel of land owned by others, perhaps over generations, but never establish a legal interest in it. When land reform provides tenant farmers title to the land that they know and love, the redistribution of title serves to affirm and enhance the personhood connections that existed even without legal title. This was ultimately what occurred in the only U.S. Supreme Court case that considered

^{144.} UNDERKUFFLER, *supra* note 24, at 121 (observing that redistribution of money and other fungible property is far less contested than redistribution of land).

^{145.} I have seen this firsthand in Guatemala, where recipients of land through land reform were eager to tell me about the sense of pride and self-determination they derived from owning land for the first time. See Radin, supra note 60, at 968. This idea also connects in important ways to the capabilities approach, which is a model of development economics, as articulated by Amartya Sen, AMARTYA SEN, DEVELOPMENT AS FREEDOM 4, 10–11 (1999) and moral philosophy, as developed by Martha Nussbaum, MARTHA C. NUSSBAUM, WOMEN AND HUMAN DEVELOPMENT: THE CAPABILITIES APPROACH xiii, 5–6 (2000). The capabilities approach "posits that poverty alleviation depends on the expansion of the freedoms that people have to use their capacities in ways that satisfy their personal objectives." Rashmi Dyal-Chand & James V. Rowan, Developing Capabilities, Not Entrepreneurs: A New Theory for Community Economic Development, 42 HOFSTRA L. REV. 839, 884 (2014). Access to land may well serve as a capability that allows people to shape their own lives with an increased level of autonomy, an idea that I have previously explored. Cavalieri, supra note 5, at 10–12.

land reform. In *Hawaii Housing Authority v. Midkiff*,¹⁴⁶ the Supreme Court considered the decision by the government of Hawaii to enact a land reform program that took title from owners and gave it to the residential tenants of the property to reduce the concentration of land ownership and disrupt oligarchic distributions.¹⁴⁷ In such an instance, where landowners have lived on or farmed land for years, land reform supports the deepening of their personhood identified with specific land.

But the corollary of the relationship between land and personhood for the first two groups, who gain access to land and therefore personhood through a land reform initiative, is that those who lose their property might perceive land reform to rob them of a core aspect of their personhood.¹⁴⁸ If land is linked to identity for those who are recipients of land through a land reform program, it is likely even more so the case for people who have already established identity-based connections to their land.¹⁴⁹ The loss of land would cut still closer to identity in instances where the land qualifies as property that Radin would categorize as personal, not fungible. But even large-scale agricultural holdings that are mostly commercial in nature may evoke personhood connections for the owner, despite qualifying as fungible in Radin's typology.¹⁵⁰

The difficulty, of course, is in distinguishing personal land from fungible land. Problems arise because most landowners would consider their own land to be personal—to be part of their identity and therefore worthy of the kind of protection that Radin articulates as proper for property that constitutes personhood.¹⁵¹ The owner of a plantation might well demand deference to plantation-based wealth as personal property in which the owner's identity is bound.¹⁵² But attachment to the social status that land provides is not the same thing as attachment to the land itself. Allowing the law to privilege this kind of landownership, while others suffer in poverty, is a grotesque mischaracterization of Radin's

150. See Clark, supra note 61, at 821–22; see also Schnably, supra note 73, at 350–51, 361–62.

151. See Radin, supra note 60, at 988.

^{146. 467} U.S. 229 (1984).

^{147.} *Id.* at 231–33.

^{148.} Jeffrey M. Riedinger, Everyday Elite Resistance: Redistributive Agrarian Reform in the Philippines, in THE VIOLENCE WITHIN: CULTURAL & POLITICAL OPPOSITION IN DIVIDED NATIONS 181, 206 (Kay B. Warren ed., 1993) ("[I]t is an article of faith among landowners that the land is theirs—not simply in legal terms but in a more metaphysical sense.").

^{149.} Andre Sawchenko, *Choosing a Mechanism for Land Redistribution in the Philippines*, 9 PAC. RIM L. & POL'Y J. 681, 714 (2000) (discussing how landowner attachment to property "transcends [purely] economic concerns").

^{152.} That people almost universally look at the resources they control and perceive them to be insufficient is a well-documented phenomenon. As a result, the notion of giving up even a fraction of one's wealth or possession is essentially anathema to the human condition. See Kennon M. Sheldon & Sonja Lyubomirsky, The Challenge of Staying Happier: Testing the Hedonic Adaptation Prevention Model, 38 PERSONALITY & SOC. PSYCHOL. BULL. 670, 670 (2012). Yet voluminous economics research demonstrates that "the correlation between income and life satisfaction is evidently negligible"—income above a certain threshold has a diminishing marginal utility in creating human happiness. Samuel Alexander, The Optimal Material Threshold: Toward an Economics of Sufficiency, 61 REAL-WORLD ECON. REV. 2, 5 (2012).

theory because such property would at a minimum qualify as fungible and unworthy of special protection from the state.¹⁵³ To call large-scale agricultural holdings fungible is not to denigrate their importance to their owners. Instead, it is to recognize that fungibility means that those property rights warrant less deference to ensure that others can gain sufficient property in which to constitute themselves as well.

2. Land Creates Opportunities for Individuals to Establish Economic Stability and Social Status

Land reform skeptics also argue that, even if redistributive efforts are worthwhile, investing government funds and effort into redistributing land is inefficient.¹⁵⁴ In the last decade, focus within the international-aid community has shifted toward the redistribution of money in lieu of other social goods.¹⁵⁵ Monetary redistributive efforts take the form of guaranteed basic income, which grants cash to poor individuals with no strings attached¹⁵⁶ or as conditional cash transfers that incentivize the performance of socially desirable conduct.¹⁵⁷

But the historical centrality of land in establishing and supporting wealth and status manifests a deeper truth about land's meaning in modern developing societies and about the fact that redistributing land has its own import. For the average citizen of a first-world country today, land ownership feels almost like a relic of a bygone time. Recalling land's historical centrality within the United States familiarizes the contemporary reader in the first world with the importance of land in rural communities in the developing world today. Land still maintains this historical relationship to power in nations of the developing world.¹⁵⁸ But land

156. See id.

158. Sawchenko, *supra* note 149 (observing how in the Philippines, political power is related to the accumulation of vast tracts of land, and how current landowners are anathema to give up their land, and with it, their power); *see also* JAMES PUTZEL, A CAPTIVE LAND: THE POLITICS OF AGRARIAN REFORM IN THE PHILIPPINES 60–61 (1992) [hereinafter PUTZEL, CAPTIVE LAND] (documenting the role of land in entrenching political power); James Putzel, *The Politics of the Aquino Agrarian Reform Programme: Influence of Bilateral and Multilateral Donors, in Agrarian Reform and Official Development Assistance in the Philippines: Four Papers 7, 9 (Ctr. South-East Asian Studies, Occasional Paper No. 13, 1990) [hereinafter Putzel, <i>Influence of Bilateral and Multilateral Computational Computationa Computational Computational Computational Computational Computa*

^{153.} See Radin, supra note 60.

^{154.} See, e.g., Tim Hanstad, Roy L. Prosterman & Robert Mitchell, Poverty, Law and Land Tenure Reform, in ONE BILLION RISING: LAW, LAND AND THE ALLEVIATION OF GLOBAL POVERTY 22 (Roy L. Prosterman, Robert Mitchell & Tim Hanstad eds., 2009) [hereinafter ONE BILLION RISING].

^{155.} Annie Lowery, *The Future of Not Working*, N.Y. TIMES MAG., Feb. 23, 2017, https://www.nytimes.com/2017/02/23/magazine/universal-income-global-inequality.html (discussing guaranteed basic income as an alternative to other kinds of redistributive development programs).

^{157.} These models pay cash when heads of household demonstrate, for example, that family members have received vaccines and other forms of preventative health care or that their children have regularly attended school with minimal absenteeism. The underlying principle is that paying cash to encourage otherwise positive conduct pays dividends into the future, since children will grow into healthy, literate, and numerate adults. Ariel Fiszbein et al., CONDITIONAL CASH TRANSFERS: REDUCING PRESENT AND FUTURE POVERTY, WORLD BANK [WBG], at 1 (2009), http://siteresources.worldbank.org/INTCCT/Resources/5757608-1234228266004/PRR-CCT web noembargo.pdf.

also serves two deeper functions related to fostering security that can be conveyed to future generations.¹⁵⁹

First, land is symbolically representative of security. Devising land to children in the developing world can have a meaning much like that of the family farm in the United States—a symbol of family and roots in a particular place and context.¹⁶⁰ Much as American farmers remain intent on passing their property onto subsequent generations,¹⁶¹ so too do smallholders in developing countries attach emotional value to the ability to pass their land onto their children.¹⁶²

But the perhaps more substantial purpose of land ownership, and the one of far greater interest when contemplating the function of land reform efforts in today's developing countries, is its role in establishing economic security. The intergenerational transmission of land is a means of creating socioeconomic stability.¹⁶³ When parents in developing nations have the ability to leave land to their children,¹⁶⁴ it is the analog of contemporary American parents educating their children. Having the means to prepare one's children in this way is not about maintaining social position or demonstrating conspicuous wealth in the same way that leaving a large amount of land to heirs might have signified status and privilege in the early American or English context. Rather, land is about survival; it is a fortification against future social strife and instability.¹⁶⁵

159. Winoto, supra note 16, at 5 (describing land as a "transfer of wealth across generations").

160. FISCHER, *supra* note 47, at 111 (documenting the importance of land to families by describing a ceremony celebrating the transfer of rural land within a family).

161. See generally Hannah Alsgaard, Rural Inheritance: Gender Disparities in Farm Transmission, 88 N.D. L. REV. 347, 347 (2012) (highlighting the importance placed on passing on the family farm, while noting the role of gender in shaping who receives control of it). To observe the centrality of this trope in American life, one needs to look no further than the relatively recent discussions about the inheritance tax, commonly referred to as the death tax, and its rejection because of fears of disrupting transmission of the family farm. See generally Elizabeth R. Carter, New Life for the Death Tax Debate, 90 DENV. U. L. REV. 175, 189-92 (2012). This role of inherited land has been part of the American landscape since the colonial era. See ISENBERG, supra note 78, at 34 ("What separated rich from poor was that the landless had nothing to pass on.").

162. This function of land as the transmitter of intergenerational, land-based identity strongly resonates with the personhood and identity strains of property theory. *See supra* Section II.B.1.

163. Winoto, supra note 16, at 5 (describing land ownership as "livelihood security").

164. The converse is also true: the inability to provide land for one's family can be perceived as an absolute failure. In India, male heads of smallholder households often seek out illegal private moneylenders to obtain loans secured by their land after they have exhausted official avenues for funds to pay for farming capital, education for children, children's marriage expenses, or health care. Gowri Janakiramanan, *Protecting the Living Victims: Evaluating the Impact of India's Farmer Suicide Crisis on Its Rural Women*, 20 WM. & MARY J. WOMEN & L. 491, 493 (2014). The inability to repay these loans has led to a recent, dramatic wave of suicides; at least 13,754 people in the selfemployed agriculture sector killed themselves in India in 2012. Id. at 492. That such debt often results from the obligation to pay the dowries that permit their daughters to marry only further complicates the image of a parental responsibility to equip children with the resources needed to be selfsupporting into the future. Id. at 511–12.

165. Ghimire, supra note 1, at 2.

Donors] (observing that "[g]enuinely redistributive agrarian reform is a complex and painful process because it involves a challenge to the entrenched power and privilege of landowning and merchant families").

crops, having land on which to raise staple grains or legumes provides reassurance that no matter what happens with the government, barring a rural scorched-earth campaign, the family should be able to eke out a survival, even if a very modest one.¹⁶⁶ In essence, in a developing country where unemployment insurance, disaster aid, and other aspects of a social safety net are absent, ownership of land represents the best insurance policy to which poor people have access.¹⁶⁷

Land therefore functions to create social status—not purely in a hierarchical sense of establishing status over others but in a binary sense of avoiding indigency as well. Land can secure a stable existence for its owners and their descendants. But land's historical and contemporary, cross-cultural role in constituting social status is too easily ignored by both privileged urban citizens of developing societies and outsiders from other nations, all of whom are squarely situated in a more-or-less knowledge-driven economy today. That land might bear some greater import than just being dirt; that it might be valued as a substitute for insurance; and that it might have a culturally contingent meaning, based on one's perspective as a peasant and as a citizen of a developing nation, is well beyond the apparent surface value of land reform as a development project. These layered connotations cannot be ignored when the topic of land reform is under consideration.

This set of observations about the divergent meanings of land for rural and urban populations can play an important role when it comes to developing a land reform program. To policy makers in a national capital or officials in international-aid programs, land likely appears to be just another fungible resource. From that vantage point, redistribution of land or money would serve similar ends, so a program to redistribute land probably does not seem meaningfully more important than a program to redistribute cash in the minds of even benevolent bureaucrats and legislators in capital cities. To the extent that land reform may cause social turmoil due to the identity-based threat of land redistribution,¹⁶⁸ distributing money might even appear as a more appealing form of redistribution; policy makers may not grasp land's deeper meanings but recognize land

^{166.} Scholars of land reform have observed that land access plays a central role in addressing poverty in developing nations. *See, e.g.*, Hanstad, Prosterman & Mitchell, *supra* note 154, at 19 ("[A] decrease in land concentration by one-third leads to a one-half reduction of the poverty level within 12 to 14 years."); *see also* Kepe & Tessaro, *supra* note 2. This trope of land conferring independence was an aspect of the Jeffersonian colonial property norms, discussed in detail *infra* Section II.B.3, which justified a requirement of property ownership to gain the franchise; without land, a man was "powerless and dependent." Steinfeld, *supra* note 90, at 340.

^{167.} See PUTZEL, CAPTIVE LAND, supra note 158, at 20, 22 (noting that "[i]n a predominantly agricultural society, the 'landless' – or tenants, marginal farmers, farmworkers and other rural poor groups who enjoy no secure access to land – can never be certain of meeting their basic needs for survival"); Moyo, supra note 41, at 188 ("[Land and national] resources are the key direct source of livelihood and wealth for the majority [of Africans]. They are also the means through which the poor pay for their education, health services, and hence a critical means to attain non-agricultural employment.").

^{168.} See infra Section II.B.4 (discussing class identity and land reform).

reform's contentiousness. As a result, money might seem to suffice as a far lower risk form of poverty reduction. But for the beneficiaries of land reform programs, land reform is redistribution with a much more profound significance. Receiving land through such a program is not merely another form of social welfare, such as a food assistance program or a cash transfer program. Rather, it functions more like a long-term social-insurance program, one that guarantees a safety net over generations for its beneficiaries and equips families to care for themselves for an extended period of time.¹⁶⁹ For those charged with initiating land reform programs, it is important to remember this distinction. Receipt of land means more than the receipt of other resources, and among an array of possible poverty eradication programs, it should be prioritized accordingly.

3. Land Creates Opportunities for Democratic Political Citizenship

Property scholars know that ownership of real property has played a substantial role in transforming people within a society into actual citizens of that community. Even two hundred years later, Thomas Jefferson's democratizing push toward broadening access to land, and with it, suffrage and citizenship, remains a compelling vision of the role of land in constituting an individual's political identity. Today's property scholars have built on these ideas, conceptualizing how land ownership has become a factor in the contemporary constitution of citizenship.¹⁷⁰

Exactly how much direction Jeffersonian property theory provides regarding contemporary land reform is ambiguous. At a minimum, Jefferson's repeated reforming efforts focused on two broad themes. First, Jefferson thought it necessary for the government to provide a modest amount of land to those who were landless, largely due to the importance of property for good citizenship.¹⁷¹ While he did not succeed in enacting this reform, he clearly and repeatedly advocated for redistribution of property to the landless because he believed land endowed individuals with independence that was necessary for citizenship.¹⁷² At a fundamental level, then, Jefferson's beliefs that land should not lie fallow,¹⁷³ that the wealthy do not efficiently use their property,¹⁷⁴ and yet that for-

^{169.} This kind of social insurance safety net is not especially familiar to those in the U.S., though the Supplemental Security Income program, available "to help aged, blind, and disabled people, who have little or no income . . . " *Supplemental Security Income Home Page*—2017 Edition, SOC. SECURITY ADMIN., https://www.ssa.gov/ssi (last visited Aug. 26, 2017). Tax revenues, not personal contributions, support this program, so it differs from the more-familiar Social Security system. *Id.*

^{170.} See SINGER, supra note 133, at 9; WALDRON, supra note 129.

^{171.} STALOFF, supra note 105, at 255.

^{172.} See Steinfeld, supra note 90, at 338, 350.

^{173.} STALOFF, supra note 105, at 283.

^{174.} Id. at 258-59.

mal equality of land distribution will never occur¹⁷⁵ suggest some guiding Jeffersonian principles for land redistribution. Fallow lands warrant redistribution. The usage pattern of vast tracts of ownership should be scrutinized to ensure that wealthy owners are using them efficiently. Landless rural laborers have a legitimate claim to a modest parcel of land. However, formal equality of land distribution is an unrealistic, and therefore inappropriate, public policy goal.

Second, Jefferson successfully enacted reforms that abolished statesanctioned protection of hereditary and familial property privileges.¹⁷⁶ Jeffersonian property theory can therefore be relied on to legitimate legal reforms that help dismantle dynastic wealth held in real property. Yet given that Jefferson did not embrace formal equality in the distribution of real property, the impact of this reforming thrust could be viewed as limited. It might most accurately be invoked to show that Jefferson sought to refuse the mobilization of coercive state power to reify existing patterns of land ownership. What is not entirely clear is how far this can extend. One circumscribed application might be a historically grounded skepticism about the legitimacy of hereditary titles themselves and the attachment of rights thereto as the means of allocating land.

A broader vision of Jefferson might claim that, while it is true that Jefferson was not a social radical, his democratizing, anti-aristocratic, and prorepublican tendencies demonstrate a deeper commitment to opening the political system to more people than were involved at the time.¹⁷⁷ In essence, this argument suggests that what Jefferson proposed was radical republicanism within the confines of the limited and not yet democratic Enlightenment vision of the 1700s.¹⁷⁸ By analogy then, this kind of radicalism in the name of investing more people in the republicanism of the era can serve as an example for today of fostering land reform that can yield a more decidedly democratic future. If this analogous interpretation is correct, then invoking Jefferson might serve to justify efforts to democratize access to land even today; now, these democratic efforts may involve state refusal to support efforts of the wealthy and landed to maintain their control over vast expanses of property.

Finally, while Jefferson suggested that land redistribution may not require compensation, it is unclear how far this would extend in practice. Broader consideration of the themes present in Jeffersonian property theory suggests that a radical, uncompensated redistribution would be

^{175.} See Steinfeld, supra note 90, at 342.

^{176.} ISENBERG, supra note 78, at 94.

^{177.} This thrust towards more citizenship rights for more people stands in marked contrast to what Professor Atiba Ellis has observed is a push to circumscribe citizenship today. Atiba R. Ellis, *A Price Too High: Efficiencies, Voter Suppression, and the Redefining of Citizenship*, 43 Sw. L. REV. 549, 549 (2015).

^{178.} Many thanks to Professor Atiba Ellis for helpful ongoing conversations that led to the crystallization of this point.

inconsistent with the moderation that typified Jefferson's actions in this realm. It is likely that a compensated redistributive land reform of modest scale, designed to further the citizenship of the landless, and legislative reforms that remove state support for vested property interests, are what Jeffersonian property theory would mandate today.

Likewise, contemporary theorists' approach to the role of property in creating citizenship can offer important insights into the values that might motivate a nation to engage in redistributive land reform efforts today. Land reform can improve the status of poor individuals. But through the lens of citizenship, it can also, and perhaps more importantly, signify something crucial about the values of a society that rejects the establishment of monopolistic forms of wealth and their perpetuation over generations. Allowing extreme concentrations of property ownership in the hands of the few, while the many lack access to a resource that constitutes citizenship, degrades the democratic functioning of a nation. A truly engaged democracy is an impossibility in a society that has terribly unequal land ownership.¹⁷⁹

Yet far too often, land reform is viewed as a form of corruption or cronyism.¹⁸⁰ Instead of conceptualizing land reform as playing a significant role in building democracy, this kind of cynical viewpoint considers land redistribution as a simple means of rewarding political allies.¹⁸¹ But if land is reframed as constitutive of citizenship, then programs designed to democratize land access could instead be viewed as part of a broader push to build democracy.¹⁸² Land reform thus might be the opposite of

181. The Zimbabwean fast-track land reform is the archetype of politically motivated land distribution. See FAST TRACK LAND REFORM, supra note 180.

182. Joseph Singer and Jack Beermann have moved one step beyond this claim, noting that in some instances, even uncompensated regulation can enhance democracy, because such regulations that are adverse in the short-run may in the long-run "be democracy-*enhancing* because it better

^{179.} See SINGER, supra note 133, at 162; SINGER, supra note 35 at 1–3; VAN DER WALT, supra note 7.

No doubt this is because some of the most notorious modern land reforms have done 180. precisely this. That Mugabe's land reform efforts in Zimbabwe rewarded political allies and punished opponents is well-documented. Although this set of traits is not unique to expropriation-based land redistributions, transfers of expropriated land at times demonstrate gratitude for political patronage. See, e.g., Degeorges & Reilly, supra note 51, at 574-76 (noting that Zimbabwe's land reform programs possessed land but that cronyism meant that "[m]uch of the best land . . . ended in the hands of [ruling party] leaders and Government officials, military officers and many leading judges" instead of in the possession of the poor and landless); HUMAN RIGHTS WATCH, ZIMBABWE: FAST TRACK LAND REFORM IN ZIMBABWE 2-3 (March 2002) [hereinafter FAST TRACK LAND REFORM] (documenting "party-political control of access to the forms for applying for land[,] and partisan discrimination in the allocation of plots," and the role of the same violent political party militias that intimidate political opponents in implementing land reform); see also Freedom in the World 2017: Zimbabwe Profile, https://freedomhouse.org/report/freedom-FREEDOM HOUSE, world/2017/zimbabwe (last visited Aug. 26, 2017) ("In the meantime, rampant corruption ..., as well as repercussions of land-reform policies and an unclear indigenization policy, continued to hamper economic recovery."). But it does not need to be this way. Successful land reform efforts have managed to redistribute massive amounts of land in nations worldwide, creating substantial bulwarks against poverty and human suffering. Roy L. Prosterman & Jennifer Brown, Tenancy Reform, in ONE BILLION RISING, supra note 154, at 57, 62-66 (documenting successful redistributive land reforms in Japan, South Korea, Taiwan, South Vietnam, Kerala State of India, and El Salvador).

corruption or cronyism—it could solidify the operation of a newly democratic nation, rather than undermining it. Land reform might thus create a more equal and democratic society by improving the lot of the worst off and by reducing the concentration of wealth.¹⁸³

Comprehending that land ownership is constitutive of citizenship can help government officials grasp the stakes of land reform programs. Efforts to democratize access to land are not just about situating individuals and families who are the beneficiaries in a better economic position than they occupied prior to receiving land. At a deeper level, land reform represents the democratic drive for liberty, by giving people a site on which to live as freely as they can, and equality, through its rejection of the concentration of land wealth in the hands of the few. Democratizing access to land can signal a change in the social status of program beneficiaries.¹⁸⁴ It may also demonstrate a shift in the nature of the government itself, away from a plutocratic system and towards one that prioritizes a stronger version of equality.¹⁸⁵

Further supportive of the democratic potential of land redistribution is the possibility that land reform can reduce unrest. Conflict over land and the lack of widespread access to agrarian land are central reasons for civil unrest and social revolution.¹⁸⁶ Political theorists have posited that land reform can play an important role in stabilizing societies, functioning as a "substitute for revolution in the countryside."¹⁸⁷ In theory, democratizing land access could appease peasant concerns about economic inequality and give landless people a stake in the maintenance of the existing government.¹⁸⁸ In some instances, this has been documented.¹⁸⁹ For example, El Salvador's land tenure reform, which transferred ownership to around thirty percent of tenant farmers, is believed to have contributed to the defeat of the Communist insurgency.¹⁹⁰

186. Riedinger, supra note 148, at 181.

189. Mason, supra note 187.

approximates the decisions that would be collectively reached by rational judgment free from the cognitive distortions caused by excessive focus on short-run costs." Joseph William Singer & Jack M. Beermann, *The Social Origins of Property*, 6 CAN. J.L. & JURIS. 217, 239–40 (1993).

^{183.} See id. at 243-44 (arguing for an "ongoing commitment" to increasing access to productive resources).

^{184.} See discussion supra Section II.B.2.

^{185.} Redistributive land reform can also serve important expressive goals, especially in postcolonial states. For a longer discussion of the expressive goals of land reform, see Cavalieri, *supra* note 5, at 16–21.

^{187.} T. David Mason, "Take Two Acres and Call Me in the Morning": Is Land Reform a Prescription for Peasant Unrest?, J. POL., Feb. 1998, at 199, 200.

^{188.} See JEFFERY M. PAIGE, AGRARIAN REVOLUTION 122 (1975) (observing that "the peasant's enthusiasm for a social movement is likely to dissipate as soon as his immediate hunger for land has been satisfied"); Mason, supra note 187; see also Michael Albertus & Oliver Kaplan, Land Reform as a Counterinsurgency Policy: Evidence from Colombia, 57 J. CONFLICT RESOL. 198, 199 (2013) (identifying land reform as a potential remedy for unrest).

^{190.} Prosterman & Brown, *supra* note 180, at 65. However, other examples of successful land-to-tiller programs, such as those in South Vietnam, Kerala State of India, and China, were not generated in moments of notable unrest. *See id.* at 62–65.

4. Land Redistribution Reorders Social Hierarchies

Beyond the role of land in constituting individuals' personhood and identities, land reform may have the potential to alter the ordering of society. Radin's theory of fetishistic property may reveal something far more insidious about the meaning of land to plantation owners in nations with deeply unequal access to land. Substantial concentrations of wealth may create the kinds of unhealthy identity development in which the wealthy landowner conceptualizes identity solely through acquisition and not in light of other kinds of community roles. Worse yet, maintenance of fetish property may exhaust the supply of property entirely—in part due to the scarcity problems identified previously¹⁹¹—such that an insufficient amount of property remains for others to use to constitute themselves in property.¹⁹² As a result, the state may actually need to take affirmative steps to dismantle fetish property for the well-being of its citizens, both those who have excess property and those who are unable to obtain sufficient property to constitute themselves.

Some states have attempted to legally establish the amount of property that warrants protection as personal by codifying the amount of land that an owner can retain following a land reform initiative. The state thereby indicates as a matter of law the threshold quantity of land that should be treated as personal.¹⁹³ Such a program can operationalize Radin's central insight: personal property requires deference from the state, so land that qualifies as personal property is exempted from redistribution through land reform. In a crude way, this approach is designed to identify land to which people have deep personal connections. In contrast, excess quantities of land are either fungible property that is outside state deference or it is fetish property, which Radin views as affirmatively harmful to a reasonable constitution of the self. Under a land reform program that caps the acreage of land an individual may own,¹⁹⁴ land reform can transfer fungible property without causing harm to the own-

^{191.} See discussion supra Sections I.A, II.A.1.

^{192.} See Radin, supra note 60, at 990 ("[G]overnment should rearrange property rights so that fungible property of some people does not overwhelm the opportunities of the rest to constitute themselves in property.").

^{193.} See Riedinger, supra note 148, at 207–08 (describing the Filipino land reform initiative that allowed landowners to retain no more than five hectares of land, plus another three for each child over the age of fifteen). However, this threshold of permissible retention led to over 75% of the total farm area being exempt from redistribution. See id.

^{194.} A number of countries have adopted what some researchers refer to as ceilings on ownership, that limit either the total amount of land an individual may own, or in some instances, may control through the rental market. See Prosterman & Brown, supra note 180, at 91. These have at times been unsuccessful because the ceilings were extremely high, or because landowners would transfer the property in anticipation of the enactment of the law, using partitions to family members or fictitious transfers to evade the ceiling. Tim Hanstad & Robin Nielsen, Land Tenure Reform in India, in ONE BILLION RISING, supra note 154, at 235, 244. Tightening guidelines for the operation of the ceilings has made them somewhat more effective. See id. At the same time, using aggressively low ceilings to capture more land is believed to foster opposition and to offer limited success. Roy L. Prosterman, Redistributing Land to Agricultural Laborers, in ONE BILLION RISING, supra note 154, at 107, 138–39.

er's essential personhood. Moreover, land reform initiatives might even intensively focus on redistributing fetish land to reduce the idolatry of property within the state. Another option would be to increase compensation to owners based on duration of ownership to recognize personhood connections to land.¹⁹⁵ This approach would make prior owners more whole, while still permitting the state to identify and purchase sufficient land to accomplish its land reform goals, even if there was insufficient fungible or fetish property to seize. Increased compensation would serve as the protection of personhood interests in this case.

If the concept of personhood and property is broadened by one level of abstraction to a class-based analysis, Radin's insight into personhood may capture a far more insidious aspect of the opposition that land reform can cause. Radin's theory of personhood and property is primarily based on the role of property in constituting individual identity, but there may be a more systemic explanation for why the loss of property through a land reform program offends fundamental notions of identity.¹⁹⁶ When, for example, numerous plantation owners in an agricultural region decide voluntarily to sell their land and are replaced by groups of smallholders.¹⁹⁷ significant social upheaval would predictably result, affecting the lives of both sellers and their neighbors alike. Such a substantial change in the constitution of the landowning class in an isolated, rural place may well feel analogous to a revolution. Despite the absence of violence and the voluntariness of transfers, such programs alter society in ways that have identity-based consequences. This sense of social upheaval will be even more pronounced where the transfers occur involuntarily.

If land's role in constituting identity is both individual and class based, the creation of land rights for landless rural people—even without the state exercising its power of eminent domain—could threaten the identity and station of individuals high within the existing social hierar-

^{195.} This approach has primarily been advocated in the context of eminent domain of homes, as a method to both fully compensate those whose property is taken and to discourage governments from taking homes except in cases of necessity. See John Fee, Eminent Domain and the Sanctity of Home, 81 NOTRE DAME L. REV. 783, 791, 804–05 (2006). But see Brian Angelo Lee, Just Undercompensation: The Idiosyncratic Premium in Eminent Domain, 113 COLUM. L. REV. 593, 647 (2013) (arguing that fair market value does include a measure of sentimentality). Arguably, this kind of premium should be less necessary for agricultural land, which is less personal than homes, though duration of ownership may still increase personhood connections in a fashion that warrants increased compensation.

^{196.} Radin, supra note 60.

^{197.} The International Fund for Agricultural Development defines "smallholder farms" as those that cultivate less than two hectares of agricultural land. *Conference on New Directions for Smallholder Agriculture: Introduction and Conference Overview*, INT'L FUND AGRIC. DEV., at 1 n.2, https://www.ifad.org/event/past/tags/2107053#2 (last visited Sept. 27, 2017). The term "smallholders" is commonly used in development theory in a less technical way to refer to individuals who own and cultivate small tracts of land; this is typically viewed in contrast to plantation owners or other kinds of large-scale agricultural production. *See, e.g.*, ROBERT MCC. NETTING, SMALLHOLDERS, HOUSEHOLDERS: FARM FAMILIES AND THE ECOLOGY OF INTENSIVE, SUSTAINABLE AGRICULTURE 1–4 (1993).

chy.¹⁹⁸ By expanding the landed classes of citizens, land reform programs reveal that the state is concerning itself with the needs and preferences not merely of the wealthy, but also of the destitute and landless. The threat to the perceived social order is profound, demonstrating an elevation in the personhood of previously low-status citizens.¹⁹⁹ This is precisely the central goal of redistributive land reform: to use land to alter preexisting social conditions. Improving the social status of the landless poor puts them on an upward trajectory; it therefore risks threatening the class-based status of landed individuals who no longer occupy reified social space that excludes the poor and marginal.²⁰⁰ To the extent that social status rooted in property rights has historically been an essentially static and immutable aspect of personhood, land reform causes dramatic changes in the structure of reforming societies and the identities of their citizens. If social status is conceptualized as a zero-sum game that at least partially constitutes the identity of individuals and classes, then elevating the personhood of those at the bottom of the hierarchy through land reform threatens the personhood of those at the top.²⁰¹ Paradoxically, Radin's theory of personhood might explain why there can be substantial social backlash to democratically legitimate, marketcompatible land reform programs, even when they occur through a willing-buyer, willing-seller approach. This, of course, is the predictable response to appropriate levels of redistribution of fetishized property.

^{198.} The ugly history of racially restrictive covenants in the United States evidenced a similar, hierarchical notion, creating an unmistakable message that land in some places should only be owned by certain groups of people. See Richard Thompson Ford, *The Boundaries of Race: Political Geography in Legal Analysis*, 107 HARV. L. REV. 1841, 1848–49 (1994) (describing racially defined spaces as the hierarchy created by restrictive covenants).

^{199.} See Radin, supra note 60.

^{200.} Winoto, *supra* note 16 ("Historically, many agrarian reforms have attempted to fundamentally change the social relationship of property ownership, wealth, social status, and political power. These tend to be contested in the political sphere between reformers and those often powerful interests who expect to lose from it.").

²⁰¹ This phenomenon is not just about land reform's effect on dismantling existing social hierarchies. That people derive identity from, and fight to maintain, their position in the social hierarchy is well-documented. For example, legal scholars have tracked the role of poor whites in maintaining and enforcing the racial hierarchy in the United States. Trina Jones, Race, Economic Class, and Employment Opportunity, 72 L. & CONTEMP. PROBS. 57, 62 (2009) (arguing that "the distinction between White servitude and Black bondage was sizable. . . and the psychological benefits it afforded even the poorest Whites, may have impeded the development of cross-racial coalitions that could have significantly ameliorated the sharp effects of economic and racial dominance in seventeenth- and eighteenth-century America."). This theme in American racial history is not limited to scholarly consideration; a recent popular press article examines the contemporary construction of whiteness as an experience of racialized dispossession. See Hua Hsu, White Plight?, NEW YORKER, July 25, 2016 (revisiting the photographs documenting the integration of Little Rock High School by noting that an enraged white student "wanted at least to maintain her status somewhere between the upper-crust white and largely disadvantaged black worlds") (reviewing ISENBERG, supra note 78), https://www.newyorker.com/magazine/2016/07/25/the-new-meaning-of-whiteness. See generally MATT WRAY, NOT QUITE WHITE: WHITE TRASH AND THE LIMITS OF WHITENESS 53, 53 n.13 (2006) (discussing the role of racial hierarchy in preventing poor whites from developing a robust class consciousness).

5. Land Redistribution Can Create Political Stability

Land reform may also broaden a form of property ownership that might increase individuals' sense of investment within their society. Fostering engagement may produce its own positive consequences²⁰² and might therefore serve as an additional justification for land redistribution efforts. This kind of investment within a society may not be sufficient to stop a revolution²⁰³ or prevent a revolution from occurring.²⁰⁴ More perniciously, property ownership might render people more vulnerable to less extreme forms of social upheaval, such as recessions or natural disasters, insofar as owning land or a house means people are less able to move to seek work.²⁰⁵ But gaining access to land might build individuals' sense of investment within their communities, which may be enough to change the way that people think about what role they play and how they conduct themselves within society. Importantly, this possible feature of land reform contradicts the standard ideological framework of redistributive programs. While most who advocate for land reform do so for progressive motives rooted in social justice and concerns with inequality, land reform's potential as a stabilizing force within a society could supply a conservative justification for this kind of social investment. Instead of supporting liberalizing instincts toward social change, land reform may create a newly established class of people who have a sudden, deep investment in social stability.

III. PROPERTY'S BASICS OFFER GUIDANCE ON HOW TO MAKE LAND REFORM EFFECTIVE

Yet even if those implementing land reform understand all of these reasons why land is worthy of redistribution, this alone does not create the circumstances for a successful land reform program. Property law and theory also offer an array of insights into problems that may affect the implementation of land reform initiatives and explain how land reform programs can be made more effective.

^{202.} As alluded to above in Section I.E., Jefferson posited property ownership's role in promoting personal industry and autonomy from others. Jefferson scholars have suggested that encouraging home ownership and acquisition of private property may continue to foster these values in American society. See YARBROUGH, supra note 107, at 98–99.

^{203.} See Mason, supra note 187.

^{204.} See Prosterman & Brown, supra note 180, at 63-65.

^{205.} Property ownership renders the labor force less mobile, creating gluts of labor in some regions where the economy is stagnant and unemployment is high, and at times shortages of labor in other regions where the economy is booming and adding jobs. See David G. Blanchflower & Andrew J. Oswald, Does High Home-Ownership Impair the Labor Market? 1-3 (Nat'l Bureau of Econ. Research, Working Paper No. 19079, 2013) (finding that rises in the homeownership rate in a U.S. state are a precursor to eventual sharp rises in unemployment in that state).

A. Property's Basics Suggest How to Mitigate Popular Opposition to Land Reform

That land is scarce and rivalrous means that its redistribution through land reform will almost inevitably lead to a sense that the program has created winners and losers, in two different ways.²⁰⁶ First, rivalrousness means that those who lose a specific, perhaps beloved, parcel of land through land reform will know that they lost their own property to someone else. In such a rivalry, the prior owner lost and the new owner won. Second, scarcity means that, more broadly, land reform uses government intervention to truncate the rights of prior owners as a class in favor of creating property rights for others. Land reform therefore creates groups of winners and losers because there is not enough land to go around.

What is crucial for policy makers to grasp is that opposition to land reform is a predictable result of shifting the existing property rights regime that governs a resource with a limited supply. The reality is that land's rivalrous and scarce nature almost inevitably fosters resentment and distrust when it is redistributed through land reform. Or, at an even earlier stage, those who anticipate losing through a new land reform program may instead attempt to leverage their political power to forestall its implementation.²⁰⁷ Disapproval are foreseeable responses to land reform precisely because scarcity and rivalrousness are both reasons that land reform is needed. As a result, those initiating land reform programs should anticipate public disapprobation without allowing it to undermine an otherwise legitimate and effective program.

One way of minimizing negative responses to land reform programs is to time the launch of a new program to coincide with politically opportune situations. Legal scholars have developed a robust theory of the role of moments of crisis and the resulting social upheaval in creating the conditions in which an existing, static property system can actually change.²⁰⁸ Such moments may offer unusual circumstances in which those who stand to be the losers of land reform may be willing to break from the political status quo and support, or at least tolerate, redistribution to accomplish other shared goals. During such periods, if many people across the society are winning and losing in various ways, those who

^{206.} Holly Doremus, *Climate Change and the Evolution of Property Rights*, 1 UC IRVINE L. REV. 1091, 1096 (2011) ("Changes in property regimes create losers as well as winners.").

^{207.} Doremus somewhat cynically observes that those who might lose from a change can use their political power to prevent it from occurring, even if it would be an efficient change that theories of evolutionary property rights would predict should occur. *Id.*

^{208.} See, e.g., VAN DER WALT, supra note 7, at 9 (end of Apartheid in South Africa); Nestor M. Davidson & Rashmi Dyal-Chand, Property in Crisis, 78 FORDHAM L. REV. 1607, 1621–23 (2010) (United States Great Depression); Holly Doremus, Takings and Transitions, 19 J. LAND USE & ENVTL. L. 1, 22 (2003) (climate change).

lose land may be less likely to feel singled out to suffer a unique form of publicly imposed loss.

Guatemala's post-civil-war land reform provides an example of how this strategy worked in practice. While reified concentration of land in the hands of wealthy people was a reality of Guatemala's colonial and postcolonial situation, its post-civil-war peace accord provided a clear route to land ownership for landless peasants after decades of rural violence.²⁰⁹ Rather than being created in a vacuum, Guatemala's land reform was part of a broader reconfiguration of many aspects of public life.²¹⁰ Yes, land was still rivalrous and scarce in Guatemala during this time, just as it was and always will be. But those who stood to lose because of land's rivalrousness and scarcity could contextualize their losses in the midst of widespread social change. Such change rendered many people winners and losers across an array of axes-political power, criminal consequences for war crimes, land ownership, and rights to primary social goods, among others.²¹¹ That the peace accord negotiations occurred outside of the standard political process only heightened the sense of disruption-the land reform was insulated from the usual political forces that would have prevented its passage in a typical legislative setting. When peace negotiators acceded to demands from the rural peasants' union, rendering landless peasants the winners and previously landed rural people the losers of scarce and rivalrous resources, it was in a broader setting in which all political factions were simultaneously winning and losing.²¹² The negotiators could not face electoral recrimination in subsequent elections and as a result, they were willing to take political risks that electoral politics would make impossible during another moment.²¹³ Land's scarcity and rivalrousness will create winners and losers when land reform happens, but skillful public officials can leverage social upheaval to accomplish land reform in moments that minimize opposition.

In theory, direct, market-based transfers from voluntarily selling owners to beneficiaries of a land reform initiative who have received subsidies or other government assistance in purchasing property should minimize the level of opposition because they are less intrusive into personal property that constitutes identity.²¹⁴ When the state supports and

^{209.} See Susanne Jonas, OF Centaurs and Doves: Guatemala's Peace Process 79 (2000).

^{210.} See id. at 78–79.

^{211.} See id. at 80.

^{212.} See id. at 79-80.

^{213.} Id. at 79–80; cf. Susana Gauster & S. Ryan Isakson, Eliminating Market Distortions, Perpetuating Rural Inequality: An Evaluation of Market-Assisted Land Reform in Guatemala, 28 THIRD WORLD Q. 1519, 1519–20 (2007).

^{214.} Many commentators in the international development field believe the key distinction between land reform programs is whether they are market-led agrarian reforms or reforms led by the government, known as state-led agrarian reform. SATURNINO M. BORRAS JR., PRO-POOR LAND REFORM: A CRITIQUE 54 (2007). However, I have elsewhere observed that the more important legal

possibly facilitates market-based transfers between willing buyers and willing sellers,²¹⁵ the conveyance avoids the taint of involuntariness. Owners who transfer their property voluntarily cannot legitimately complain that the state is stripping them of a central aspect of their identities without their agreement; the willing seller in this kind of transaction has obviously consented.

But the sense of loss of personhood and identity could be especially profound in instances where an owner relinquishes property involuntarily, such as through uncompensated expropriation or even through compensated eminent domain. In such cases, the situation becomes substantially more complicated because the state takes land in contravention of the wishes of the private landowner. Where the state elects to take privately owned land for redistributive purposes but fully reimburses the private owner for that property²¹⁶ through compensated eminent domain,²¹⁷ it may pose the threat to personhood that Radin has identified. The loss of one's land for purposes of state transfer to a landless rural citizen might well be identity shaking for the former owner, despite it being a lawful event.²¹⁸ Radin's work exposes the possibility that these

distinction for purposes of poverty reduction or eradication is based on whether or not the land reform program undermines the value of land in the nation and generates externalities that accrue to the detriment of the poorest members of the nation. I refer to redistributive land reform programs based either on voluntary sale or a compensated involuntary sale as market-compatible land reform programs. I contrast this kind of market-compatible reform to expropriation-based involuntary takings, in which the state takes private property for redistribution but either entirely refuses to compensate the prior owner for the taken land or undercompensates the prior owner. These expropriation-based programs often set forth with a goal of poverty reduction, but can both devalue the very resource being redistributed and create other consequences, such as dramatic increases in food commodity prices that harm the real or intended beneficiaries of these kinds of programs, who typically control fewer resources that they can use to weather instability. For a broader discussion of this issue, see Cavalieri, *supra* note 5, at 21–42.

^{215.} Some land reform programs have adopted a different language, instead referring to market-led agrarian reforms as "willing-buyer, willing-seller" programs; commentators and organizations have embraced this terminology as well. *See, e.g.*, FAST TRACK LAND REFORM, *supra* note 180, at 6.

^{216.} This kind of process aligns closely with that articulated in the Takings Clause of the U.S. Constitution. Under Fifth Amendment jurisprudence, the government may take property for public use so long as just compensation is paid. U.S. CONST. amend. V.

^{217.} In other cases, the state takes private property but refuses to compensate the private individual, or only partially pays compensation, processes that I refer to as uncompensated expropriation. Elsewhere, I have rejected the legitimacy of uncompensated expropriation as the basis of redistributive land reform initiatives because of its likely negative effects on poor people in the developing world. The distinction is important when considering the democratic legitimacy of the taking, and importantly, the economic effects of the government's action on the nation in question. See Cavalieri, supra note 5, at 25–32.

^{218.} The eminent domain power has long been conceptualized as one of the central powers of the sovereign. See BERGIN & HASKELL, supra note 79 (observing that any act of disloyalty to the throne could lead to the loss of one's land); see also William R. Vance, The Quest for Tenure in the United States, 33 YALE L.J. 248, 270 (1924) (describing the powers of the sovereign). The state's obligation to pay compensation to the owner of taken land is a relatively recent legal phenomenon, but one that is not unique to the Fifth Amendment to the U.S. Constitution. The Spanish Constitution makes similar provision. CONSTITUCIÓN ESPAÑOLA, B.O.E. n. 311, Dec. 29, 1978 (Spain). France does likewise. See GREGORY ALEXANDER, THE GLOBAL DEBATE OVER CONSTITUTIONAL PROPERTY 310 n.160 (2006). Germany does as well. See id. at 115. South Africa also requires compensation.

kinds of involuntary, legally permissible transfers might threaten the individual sense of personhood that is rooted in the ownership of land. As a result, the involuntary loss of property, even if compensated, may be profoundly difficult for individuals to suffer.²¹⁹ Of course this is not a reason to avoid such unpopular but democratically necessary and justified forms of involuntary redistribution. But it can be helpful to understand the roots of opposition to such programs.

Oligarchs' opposition to land reform clearly has substantial fetishistic aspects. No reasonable reading of Radin's theory could permit vast tracts of property to be protected in order to shelter the wealthiest of a nation from their own sense of injury when they lose land to which they are unhealthily attached. Indeed, the central thrust of Radin's theory of personhood as applied to land reform is that the redistribution of fungible property is a legitimate state action. Radin therefore can help nations distinguish legitimate personal attachment to property from attachments that do not warrant state deference. But these observations about the structural aspects of personhood and property as related to the wealthy class of landowners have substantial explanatory value for the depth of opposition that accompanies even modest versions of land reform. While nations ought not be solicitous of oligarchs' attachment to their property, anticipating it may matter for the success of land reform.

Beyond individual opposition, social conflict often accompanies the implementation of land reform programs.²²⁰ Insights into personhood and its meaning for redistributing land can contribute important knowledge to those implementing land reform programs. As a result, "designers of land tenure reforms . . . must make informed and reasonable efforts to take the interests of existing landowners into account."²²¹ Personhood theory helps explain how those landowners think of their interests.

B. Property Law Helps Show How to Address Inflationary Effects of Land Reform

The finite supply of land and the uniqueness of particular parcels can complicate the initiation of land reform programs by muddying appraisals of property transferred through a land reform initiative. These features of real property have the potential to artificially inflate the value

though it may be for less than the entire market value of the property if certain criteria are satisfied. *See id.* at 171–72.

^{219.} Gauster & Isakson, *supra* note 213, at 1520 (observing that state-led land redistribution is "likely to incite protests from powerful landowners").

^{220.} See Gerrit Huizer, Peasant Mobilization for Land Reform: Historical Case Studies and Theoretical Considerations, in LAND REFORM & PEASANT LIVELIHOODS, supra note 1, at 164, 194 (noting the kinds of conflict that result from efforts to mobilize for reform, including landowner and elite efforts to undermine organizations).

^{221.} See, e.g., Prosterman, supra note 194, at 127.

of farms, a critique frequently leveled against land reform programs.²²² Land is, as always, only worth what someone will pay.²²³ But land reform can dramatically alter the market for land, creating a sudden surge in demand that drives up prices²²⁴ at the same time it attempts to provide poor people with property.²²⁵ Government action or subsidies with public funds enable conveyances facilitated by land reform that may create a greater demand than would have occurred without the involvement of the state.²²⁶ In essence, the finite quantity of land combined with increased demand for land during implementation of a land reform program means land reform can cause prices to rise.²²⁷ These concerns are particularly acute in instances of market-assisted land reform, where willing buyers negotiate with willing sellers.²²⁸ In such cases, because the market is ostensibly supposed to guide the transactions and the role of the state is relatively minor, the program may permit prices to rise even higher, unless the government intervenes.²²⁹ Where land reform occurs through state exercise of some form of eminent domain, the state's more robust role may mitigate some of the most severe pricing consequences.²³⁰

Rising land prices result in the same sum of money purchasing less land and making it harder for other land reform beneficiaries to access property, for numerous reasons. Public funds dedicated to subsidy programs do not extend as far in a rising land market. Any private savings

225. See Masiiwa, supra note 221, at 224 n.1.

^{222.} See Medicine Masiiwa, The Fast Track Resettlement Programme in Zimbabwe: Disparity Between Policy Design and Implementation, 94 ROUND TABLE 218, 224 n.1 (2005) (observing that land prices in Zimbabwe increased sixfold between 1980–81, right at the time of independence, and from 1987–88, during the era of continued compensated land reform); see also Prosterman, supra note 194, at 128 (detailing reasons why land prices rose as well as the consequences of this increase).

^{223.} See Lee, supra note 195, at 599 (noting that while fair market value is what a buyer would pay, the property may be worth more as an idiosyncratic matter to the seller).

^{224.} This is especially the case when the compensation for such land is not based on fair market value of the land immediately prior to the initiation of a land reform. See Prosterman, supra note 194, at 128. This can be even more severe where expropriation is hampered by land acquisition processes that increase transaction costs so severely that the government will negotiate an overpayment to avoid extended litigation. See id.

^{226.} See Prosterman, supra note 194, at 128. A similar critique has been leveled against tax subsidies for homeowners in the United States, arguing that these kinds of subsidies distort behavior, encouraging housing prices to inflate and beneficiaries of subsidies to purchase more expensive housing than they otherwise would choose to buy. Cf. Snider, supra note 96.

^{227.} Cf. Masiiwa, supra note 223, at 224, n.1.

^{228.} See Prosterman, supra note 195, at 128–29.

^{229.} This can be even more severe in instances where the local land market is relatively inactive; large-scale redistribution through voluntary transactions would require a substantial increase in sale activity, which "is highly unlikely unless the existing 'market' price increases greatly." *See id.* at 129.

^{230.} While price controls in many cases outside of the land reform context are documented to create market distortions that have negative long-term consequences, it is important to note that here, price controls would be implemented to prevent the market distortions caused by land reform itself. Rather than viewing the controls as the source of distortion, the controls are instead a response to the problems that result from land reform. However, in some instances, the state will permit prices to rise artificially as part of the land reform itself, in order to mitigate the anger of elites at the loss of their land. See Putzel, Influence of Bilateral and Multilateral Donors, supra note 158, at 8.

the beneficiaries might have amassed will cover less of the purchase price of a given parcel of land under these circumstances. Where the state wishes to obtain property for a land reform program via its eminent domain power, rising prices mean that compensating prior owners will cost the state more money. This is exacerbated further by the fact that land reform programs facing these obstacles may move away from transferring high-quality cultivated land, instead electing to transfer marginal public lands.²³¹ Inflationary pressures on land prices can undercut the ability of a land redistribution initiative to reduce poverty and are therefore worthy of mitigation efforts.²³²

Addressing inflationary effects can also increase the democratic legitimacy of a land reform program. Rising prices accrue to the personal benefit of the landowners who sell their property as part of a land reform program.²³³ Land worth a modest price before the initiation of a land reform effort can surge in value as the initiative creates greater demand, while supply stays fixed due to land's nonfungible nature, the relative inelasticity of the supply of land, and the unwillingness of large-scale owners to sell property. This can invite the perception that the real beneficiaries of land reform are not the poor who receive the redistributed land but the wealthy individuals who stand to earn a healthy profit due to a rapid, dramatic rise in the value of their property just as they prepare to sell.²³⁴

Property law's knowledge of pricing in eminent domain can help mitigate inflationary effects of land reform. The eminent domain literature idealizes fair market value as the price that would be reached in an arm's length transaction.²³⁵ Any negotiated price or fair market valuation reached in the shadow of a land reform program—which is designed to encourage or facilitate transfer—is therefore generated from a distance far more intimate than arm's length. Those implementing a land reform initiative should therefore take care to enlist mechanisms to prevent negotiations from resulting in runaway land prices, both for the practical reason of stretching available funds as far as possible and for the mainte-

^{231.} See Prosterman, supra note 194, at 128.

^{232.} Development experts at the Rural Development Institute have identified a number of strategies to use in attempting to control the price of land. For example, offering to pay a lump sum immediately instead of allowing beneficiaries to pay over time may incentivize sellers to reduce the price. Offering benefits such as infrastructure improvements that benefit the owner who retains a portion of the original parcel may also lead to lower prices. Robert Mitchell, Tim Hanstad & Robin Nielsen, *Micro-plots for the Rural Poor, in ONE BILLION RISING, supra* note 154, at 153, 175.

^{233.} See Prosterman, supra note 194, at 128; see also Sawchenko, supra note 149, at 700 (documenting that Filipino landowners of property redistributed through the Comprehensive Agrarian Reform Program demanded higher compensation rates than even those provided in the statute, despite the fact that statutory rates already exceeded market rates).

^{234.} See Sawchenko, supra note 149, at 713 (observing that in the instance of market-led land reform efforts, characterized by willing-buyer, willing-seller negotiations, the knowledge that land reform is ongoing can increase demand and raise prices).

^{235.} See Kelianne Chamberlain, Unjust Compensation: Allowing a Revenue-Based Approach to Pipeline Takings, 14 WYO. L. REV. 77, 84–85 (2014).

nance of democratic legitimacy. How to best accomplish this goal will depend on the mechanism of the land redistribution. If the state is engaged in a low-intervention land reform, attempting to democratize land access by supporting market transactions between willing buyers and willing sellers, the state has largely truncated its possible role. However, articulating specific conditions under which public subsidies will be provided may help prevent these pricing problems. For example, limiting the availability of public funds to instances where the negotiated price is confirmed through an independent appraisal may stem the worst of price hikes.

The state can more directly limit price increases if it plays a substantial role in the reform through activities such as identifying privately owned property for redistribution, exercising its eminent domain powers, or compensating owners for the deprivation of their property. Using legislation or regulation to set a permissible range for land prices may help avoid some of the worst price inflation that can result from rising demand for land.²³⁶ Careful drafting of land reform legislation to include a measure for valuing land sold during a land reform program can mitigate some of these concerns. One possible approach is to legislatively mandate prices equivalent to a fair market value set prior to initiation of the reform.²³⁷ Another option would be to include a schedule or formula for pricing in legislation creating a land reform program, thereby avoiding any recourse to the judiciary and creating greater efficiency.²³⁸ Alternatively, the legislature may establish a quasi-judicial administrative mechanism to determine market value, which may reduce the likelihood of runaway prices. Likewise, where land reform is part of a broader set of legal reforms, there may be factors inherent in those reforms that can limit inflation in the price for agricultural lands. For example, in nations that are moving away from a state-supported economy towards a freer market, the abolition of artificial price supports for crops can reduce the profitability of farming. Depressed crop prices may increase the debt burden of farmers, as they make less money from the sale of their crops. Under such circumstances, more farmers may elect to sell their property voluntarily, and some may be unable to pay on outstanding loans, increasing the odds of lender foreclosure. Either possibility results in more property being listed for sale, thereby increasing supply.²³⁹

^{236.} Such a schedule could also include premiums for land held for a long duration, thereby addressing the personhood compensation concerns at the same time. See Fee, supra note 195, at 791–92. But see Lee, supra note 195, at 648 (observing that where such a schedule is created on a percentage basis, it ends up treating wealthy people's sentimental attachment as worth more money than the personhood concerns of people with less expensive homes).

^{237.} Sawchenko, supra note 149, at 713 n.266.

^{238.} See Fee, supra note 195, at 815–16.

^{239.} Klaus Deininger et al., Implementing 'Market-friendly' Land Redistribution in South Africa: Lessons from the First Five Years 6-7 (1999) (Glob. Dev. Network Working Paper Series),

Whatever the approach, officials initiating land reform must be cognizant that the scarcity of land can inflate land prices, resulting in a host of problems, including undermining the legitimacy of land reform and eroding the value of public funds invested in land reform. But they can draw on property law and policy insights to anticipate and respond to these problems before they undermine the overall success of the land reform initiative.

C. Recognizing that Land's Meanings Are Divergent Can Render Land Reform More Effective

For land reform advocates, the recognition that a property regime captures social values and at the same time represents potentially divergent meanings is crucial to understanding the nature of conflict that land reform creates. It is not only that property's meaning diverges across subcultures within a nation. It is that the existing rules embody one set of values related to land, and any alteration to those rules represents a shift in the implicitly expressed meaning of land. One might naively presume that as an outgrowth of a relatively similar set of cultural values, the citizens of a nation might share an understanding of the meaning of land. Instead, the cultural contextuality and contingency of land's meaning, and the fact that these divergent meanings relate to allocations of power and resources, reveal how land reform efforts themselves become sites of conflict and discord. Even within a single relatively small nation that might be anticipated to have a more cogent, unitary vision of the meaning of real property, divergent meanings of real property raise the question of how a state can realistically attempt to democratize land access without exacerbating the tensions that result from the conflict-laden meaning of land in that state. But once it is acknowledged that property systems are infinitely varied, complete recognition and understanding of differences in land's meaning can determine whether a land reform initiative will ultimately succeed or fail. What works in one setting may not work in another, so those advocating for land reform must have a firm grasp of the potentially multivalent cultural implications of land in their context.

When a nation undertakes a land reform initiative, the shifting, contingent meaning of land across populations within the country can become an obstacle to its successful implementation. If land reform programs are enacted in a place with heterogeneous meanings of property, social conflict can result.²⁴⁰ Where dissent is widespread, it may preclude a state from reaching an adequate level of social accord to support a new

https://web.archive.org/web/20010709003040/http:/orion.forumone.com/gdnet/files.fcgi/224_zafpap v9.PDF.

^{240.} See Sawchenko, supra note 149 (observing how passage of land reform legislation led to law-breaking by elites who wanted to avoid the loss of their property); see also Albertus & Kaplan, supra note 188, at 202 (connecting land reform to some increases in social unrest).

land reform program. Therefore, any discussion of the goals or purposes of a particular land reform effort realistically can only offer a partial representation of the public opinion and belief system about land reform in a particular setting. But those undertaking land reform programs should seek to understand the varied meanings of land within their nation before implementing any such initiative. Those multiple meanings must include not only historical meanings of land but also the contemporary and potentially shifting significance of land as understood by members of both dominant and minority groups in rural and urban communities. To the extent that land reform beneficiaries come from a single cultural group within a nation, while those who lose their land in a land reform program come from a distinct cultural group, even more safeguards are needed to ensure that there is buy in across the full array of subcultures present in the state.

Progressive property's understanding of land's contextual, contingent nature helps highlight why a monolithic land reform program established by members of a ruling social class or racial, ethnic, religious, or linguistic group will likely fail to engage all members of the society. Instead, cognizance of this divergent set of possible meanings of land must lead decision makers to be intentional in their efforts to involve members of all affected social groups. At a minimum, officials charged with implementing land reform must be culturally diverse and culturally competent to communicate clearly with a wide array of citizens. Those tasked with implementing land reform must establish mechanisms to engage with and listen to both poor communities of land reform beneficiaries and wealthy landowners, though a third group of citizens comprised of those not directly affected are also implicitly important as well.

First, government officers must know the history of land struggles in their nation and work to avoid invoking painful episodes of the past, while also attempting to rectify prior injustices. Beneficiaries of land reform can help decision makers orient a program within the framework of cultural meanings that land may bear in an agrarian society. They can ensure that the method of titling used in a redistributive effort aligns with communities' traditional values about how land should be held and by whom.²⁴¹ The social meaning of land within the landless community must be understood, but because land reform implicitly seeks to embody

^{241.} While private landownership by an individual or family is often envisioned as ideal, a substantial literature exists that extolls the virtues of collective ownership, for reasons of both cultural history and efficiency. See S. James Anaya & Claudio Grossman, The Case of Awas Tingni v. Nicaragua: A New Step in the International Law of Indigenous Peoples, 19 ARIZ. J. INT'L & COMP. L. 1, 12 (2002) (cultural tradition); see also Rick Welsh, Farm and Market Structure, Industrial Regulation and Rural Community Welfare: Conceptual and Methodological Issues, 26 AGRIC. HUM. VALUES 21, 22 (2009) (efficiency).

Second, those who stand to lose their land through a land reform initiative must be heard to prevent a sense of illegitimacy from permeating the program.²⁴³ Where context and contingency create divergent meanings of land, those who stand to lose theirs must have an opportunity to engage with the program.

Third, citizens who neither gain nor lose land can be crucial to creating public support for the initiative. As taxpayers whose contributions underwrite a land reform program, seeking their input from their own meanings of property can foster the program's legitimacy. Because they are not directly affected by the program, it is easy to pretend that their interests do not matter. But if only those directly affected are engaged, often the beneficiaries will support a program and those who lose land will oppose it. This group of uninvolved citizens can shape the perceptions of a program, however, and therefore warrant engagement.

CONCLUSION: LESSONS EXCHANGED BETWEEN LAND REFORM AND U.S. PROPERTY LAW

This Article has highlighted five key lessons from American property law and theory and has argued that these lessons can help improve land reform programs in the future. First, land reform is necessary because land is different than other kinds of property since it is rivalrous and scarce, creating a need for state intervention to ensure a just distribution. Second, property is contextual and contingent, so its distribution is not fixed but rather can be changed to reflect the evolving values of a nation. Third, land reform is a site for deeply felt conflict because people construct their identities in their property. Fourth, land reform can be socially disruptive because land itself signifies social status, but reform matters as a means of ensuring status for marginalized people. Fifth, land reform offers conditions that can foster democracy because land access allows people to become citizens and to have a stake in their society.

These lessons expose the theoretical roots of land reform, which can then be leveraged to shape future land reform programs. Property law reveals why land reform is a valuable public policy intervention. Property law also offers interventions to make land reform more effective. Land reform that is developed cognizant of these lessons will reflect an understanding of the importance of the program, the reasons landless people

^{242.} Still, these voices cannot be pressured into conformity with policy makers' goals and expectations. *See* Dyal-Chand, *supra* note 9, at 1687–88 (discussing processes for engaging subaltern voices in property discourse and ensuring that their potentially fragmentary perspectives are incorporated).

^{243.} See supra Sections I.C. and I.D. discussing at length some of the concerns of those who lose land.

are desperate for land, and the reasons that the majority of society is reluctant to alter extant land distributions.

At its heart, the goal of this Article is to help address global poverty by offering support to land reform programs in their effort to reduce inequality in land distribution. But to accomplish these ends, land reform programs must address widespread opposition to this particular form of redistribution. Grasping how land forms a web of social status relationships and is entrenched within the established hierarchy of social class in a nation can explain why even those who do not stand to lose their land may still perceive land reform as a personal threat. Effective, widespread land reform signals deep change within the values that animate a nation. Awareness of this meaning is crucial for decision makers.

Looking forward, perhaps the most interesting question is what lessons American property law can learn from the experience of land reform. In particular, land reform offers one site for exploring the possibilities of applying progressive property scholarship. Land reform's lessons for property theory in the United States today include insights about both the need for more equal property distributions to ensure a functioning democracy and the possibility that current unequal property arrangements make it impossible for some citizens to constitute themselves in property. That the existing distribution of property is reified to confirm the status of already privileged citizens may be an insight that the United States can more fully absorb by looking to the Global South.

SUSTAINABLE DEVELOPMENT IN LAW PRACTICE: A LENS FOR ADDRESSING ALL LEGAL PROBLEMS

JOHN C. DERNBACH^{\dagger}

ABSTRACT

Sustainable development is a normative conceptual framework for integrating economic development, social well-being, and environmental protection in decision making. While it is widely recognized that lawyers have an important role to play in advancing sustainable development, and while a growing number of lawyers describe themselves as doing sustainability work, it is less clear what they actually do. This is an impediment not only to achieving sustainability but also to law students and lawyers who want to direct or redirect their legal careers toward sustainability.

This Article, which is based on structured interviews with twenty-six lawyers who practice or have practiced law related to sustainability, provides a first assessment of what this work entails. It describes what these lawyers understand sustainability or sustainable development to mean, both as defined and as applied. These lawyers tend to see sustainability as a lens for productively addressing all legal problems and for helping clients make better decisions. The Article explains who their clients are and what they do for them, and provides insight into the dynamics of attorney– client conversations related to sustainability. It describes key personal and professional qualities of these lawyers, such as how they became interested, and what they like and do not like about doing work related to sustainability. Finally, by exploring what these lawyers see as obstacles to sustainability and where the jobs are in sustainability-related law, it sheds light on the future of sustainability in law practice.

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INTRODUCTION

Sustainable development is becoming increasingly important to lawyers.¹ A small but growing number of lawyers describe themselves as doing work related to sustainability or sustainable development. Many lawyers or law firms engaged in the private practice of law identify their practice area using sustainability language.² Sustainable development is a growing part of law practice in nearly every practice area and involves many different skills.³ As the final report of American Bar Association (ABA) Task Force on Sustainable Development concluded in 2015, "[t]he transition to sustainability in both governmental and private sector deci-

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^{1.} See TASK FORCE ON SUSTAINABLE DEV., AM. BAR ASS'N, FINAL REPORT 2 (2015), https://www.americanbar.org/content/dam/aba/administrative/environment_energy_resources/re-sources/final_sdtf_aba_annual_08-2015.authcheckdam.pdf. According to the Task Force: "Sustainability is affecting, or will affect, tax law, insurance, banking, finance, real estate development, environmental and energy law, among other fields. It also involves a wide range of knowledge and skills, including litigation, commercial transactions, client counseling, advocacy before governmental agencies and other bodies, and legislative drafting." *Id.* at 2–3. For an overview of this activity, see John C. Dembach et al., *The Growing Importance of Sustainability to Lawyers and the ABA*, ABA TRENDS, July/Aug. 2013, at 21, 24.

^{2.} See infra Part I.

^{3.} TASK FORCE ON SUSTAINABLE DEV., AM. BAR ASS'N, supra note 1, at 2-3.

sion making is inevitable, and will profoundly affect the legal profession."⁴ The transition toward sustainability in the legal profession is also both reflected in and encouraged by a wide variety of activities involving sustainability in law schools, including but not limited to courses, scholarship, facilities, and community service.⁵

Sustainable development is a normative, conceptual framework for integrating development (which includes not only economic development but also social development, and is based on peace and security) with environmental protection in decision making.⁶ "It is premised on principles of basic equity—that each human being is entitled to a certain quality of life and that the minimum conditions for human quality of life should be maintained from generation to generation."⁷ Sustainability is intended to address two significant and related problems: widespread environmental degradation, including climate disruption; and large-scale extreme poverty.⁸ The framework applies to a wide variety of decisions, including but not limited to those involving climate change.⁹

Sustainable development is reflected, but only partially, in U.S. conservation, environmental, and land use laws.¹⁰ In fact, the National Environmental Policy Act of 1969 (NEPA) declared sustainable development to be national policy even before the term "sustainable development" was coined.¹¹ NEPA declares a national policy "to create and maintain conditions under which man and nature can exist in productive harmony, and fulfill the social, economic, and other requirements of present and future generations of Americans."¹² Environmental, conservation, and land use laws provide a baseline of environmental protection and employ many of the tools and much of the vocabulary of sustainable development (e.g., integrated decision making, precaution, planning, public information, and

^{4.} Id. at 4.

^{5.} John C. Dernbach, *The Essential and Growing Role of Legal Education in Achieving Sus*tainability, 60 J. LEGAL EDUC. 489, 504–17 (2011).

^{6.} John C. Dernbach & Federico Cheever, Sustainable Development and Its Discontents, 4 TRANSNAT'L ENVTL. L. 247, 256–61 (2015); John C. Dernbach, Sustainable Development as a Framework for National Governance, 49 CASE W. RES. L. REV. 1, 32 (1998). Peace and security provide a foundation for development; without peace and security, development is difficult or impossible. *Id.* at 19.

^{7.} Dernbach & Cheever, *supra* note 6, at 252.

^{8.} See World Comm'n on Env't & Dev., Our Common Future, From One Earth to One World, ¶¶ 3, 7–9, 11, 13–14, 20, 23–24, 26–28, 34, 39–44, U.N. Doc. A/42/427, annex (Mar. 20, 1987) [here-inafter Our Common Future].

^{9.} See John C. Dernbach, Achieving Sustainable Development: The Centrality and Multiple Facets of Integrated Decisionmaking, 10 IND. J. GLOBAL LEGAL STUD. 247 (2003).

^{10.} JOHN C. DERNBACH ET AL., ACTING AS IF TOMORROW MATTERS: ACCELERATING THE TRANSITION TO SUSTAINABILITY 15 (2012).

^{11.} See National Environmental Policy Act of 1969 § 101, 42 U.S.C. § 4321 (2012). The first use of the term appears to be in 1980, when the International Union for the Conservation of Nature and Natural Resources (IUCN) published a conservation strategy for living resources that explicitly linked conservation and development in the term sustainable development. INT'L UNION FOR CONSERVATION OF NATURE & NAT. RES., WORLD CONSERVATION STRATEGY: LIVING RESOURCE CONSERVATION FOR SUSTAINABLE DEVELOPMENT, at sec. 1, paras. 2, 10 (1980).

^{12. 42} U.S.C. § 4331(a).

public participation).¹³ But, these laws do not directly address the large ecological footprint (energy, water, resources, and land) of the United States.¹⁴ They do not directly address a great many laws historically used to foster economic development—laws that have the effect of encouraging, supporting, and even rewarding environmental degradation and unsustainable development.¹⁵ Nor do these laws fully address existing threats, particularly climate change.¹⁶ Finally, environmental and conservation laws do not directly or fully address the social dimensions of sustainable development, which include but are not limited to poverty, food security, public health, and human rights.¹⁷

Sustainable development has nonetheless influenced the development and implementation of law in various ways and contexts, including

^{13.} See, e.g., RICHARD N.L. ANDREWS, MANAGING THE ENVIRONMENT, MANAGING OURSELVES: A HISTORY OF AMERICAN ENVIRONMENTAL POLICY 4–10 (2d ed. 2006); see also RICHARD J. LAZARUS, THE MAKING OF ENVIRONMENTAL LAW, at xii–xvi (2004) (describing the development of environmental law and policy and explaining the use of these principles and ideas in its development).

^{14.} CTR. FOR SUSTAINABLE SYS., UNIV. OF MICH., U.S. ENVIRONMENTAL FOOTPRINT (2016), http://css.umich.edu/sites/default/files/U.S._Environmental_Footprint_Factsheet_CSS08-

⁰⁸_e2017.pdf (describing in detail U.S. consumption of resources and explaining that it would take five earths to supply the resources needed for the entire world's population if it consumed resources at the same level as the average American).

^{15.} See, e.g., Justin Gillis, Flooding of Coast, Caused by Global Warming, Has Already Begun, N.Y. TIMES (Sept. 3, 2016), https://www.nytimes.com/2016/09/04/science/flooding-of-coast-causedby-global-warming-has-already-begun.html ("The federal government spends billions of taxpayer dollars in ways that add to the risks [of sea level rise], by subsidizing local governments and homeowners who build in imperiled locations along the coast."); Michael Lewyn, How Government Regulation Forces Americans into Their Cars: A Case Study, 16 WIDENER L.J. 839, 839 (2007) (providing a case study of land use and zoning in Jacksonville, Florida); Dernbach, supra note 6, at 67-68 (summarizing different types of legal obstacles). See also infra Sections V.D., VI.A., in which lawyers describe various legal obstacles to sustainable development.

^{16.} See, e.g., Jody Freeman & Andrew Guzman, Climate Change and U.S. Interests, 109 COLUM. L. REV. 1531, 1531, 1531 n.2 (2009) (explaining the strong case for U.S. action based only on U.S. self-interest).

^{17.} See G.A. Res. 70/1, ¶¶ 14–15, 17, Transforming Our World: The 2030 Agenda for Sustainable Development (Oct. 21, 2015). Among the sustainable development goals contained in this agenda are Goal 1 ("End poverty in all its forms everywhere"), Goal 2 ("End hunger, achieve food security and improved nutrition and promote sustainable agriculture"), Goal 3 ("Ensure healthy lives and promote well-being for all at all ages"), and Goal 4 ("Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all"). *Id.* at 14.

brownfields redevelopment,¹⁸ smart growth,¹⁹ public access to infor-mation,²⁰ recycling,²¹ biodiversity conservation,²² and green building.²³ Indeed, the U.S. Environmental Protection Agency (EPA) has increasingly integrated sustainability into the implementation of the laws it administers.²⁴ These changes are not limited to traditional environmental law. For example, energy law is being transformed by a great many federal, state, and local laws that foster greenhouse gas reductions; renewable energy; energy efficiency and conservation in buildings, transportation, and industry; and distributed energy.²⁵ Many longstanding business reporting and disclosure requirements, including those administered by the Securities and Exchange Commission (SEC), are now being applied to greenhouse gas emissions, working conditions, and the environmental and social impacts of activities in a company's supply chain (because investors and the public now deem these things material to the company's profitability).²⁶ The investigation by state attorneys general and the SEC into whether Exxon misled the public and investors about climate change raises significant economic, environmental, and social questions.²⁷ To a growing degree, the private sector employs many forms of private law or governance

20. See Carl Bruch et al., Public Access to Information, Participation, and Justice: Forward and Backward Steps Toward an Informed and Engaged Citizenry, in AGENDA FOR A SUSTAINABLE AMERICA, supra note 18, at 459, 460.

21. See Marian Chertow, Municipal Solid Waste: Building Stronger Connections to Jobs and the Economy, in AGENDA FOR A SUSTAINABLE AMERICA, supra note 18, at 335, 344.

22. See A. Dan Tarlock & Andrew Zabel, Biodiversity Conservation: An Unrealized Aspiration, in AGENDA FOR A SUSTAINABLE AMERICA, supra note 18, at 269, 270.

23. See Stuart Kaplow, Can Green Building Law Save the Planet?, 3 U. BALT. J. LAND & DEV. 131, 133–34 (2014).

24. See U.S. ENVTL. PROT. AGENCY, FISCAL YEAR 2014–2018 EPA STRATEGIC PLAN 4 (2014) (identifying "Cleaning Up Communities and Advancing Sustainable Development" as one of EPA's five goals and "Working Toward a Sustainable Future" as one of four cross-agency strategies); COMM. ON INCORPORATING SUSTAINABILITY IN THE U.S. ENVTL. PROT. AGENCY, SUSTAINABILITY AND THE U.S. EPA 1 (2011) (recommending that the EPA adopt a sustainability strategy and take other actions to incorporate sustainability into its programs).

25. See GLOBAL CLIMATE CHANGE AND U.S. LAW (Michael B. Gerrard & Jody Freeman eds., 2d ed. 2014) (providing a comprehensive description of federal and state energy laws); see also Steven Ferrey, Solving the Multimillion Dollar Constitutional Puzzle Surrounding State "Sustainable" Energy Policy, 49 WAKE FOREST L. REV. 121, 122 (2014) (describing five different types of state energy laws that are "the primary pillars of sustainable energy policy in the United States"—net metering, renewable portfolio standards, renewable system benefit charges, carbon/greenhouse gas regulation, and feed-in tariffs).

26. See Jeffrey A. Smith & Matthew Morreale, Disclosure Issues, in GLOBAL CLIMATE CHANGE AND U.S. LAW, supra note 25, at 453, 453–54; Nancy S. Cleveland et al., Sustainability Reporting: The Lawyer's Response, BUS. L. TODAY, Jan. 2015, at 2–4 (explaining what corporate clients can and should report publicly about their sustainability activities).

27. Paul Barrett & Matthew Philips, Can ExxonMobil Be Found Liable for Misleading the Public on Climate Change?, BLOOMBERG BUSINESSWEEK (Sept. 7, 2016, 3:00 AM), https://www.bloomberg.com/news/articles/2016-09-07/will-exxonmobil-have-to-pay-for-misleading-the-public-on-climate-change; Bradley Olson & Aruna Viswanatha, SEC Probes Exxon Over Accounting for Climate Change, WALL STREET J. (Sept. 20, 2016, 7:55 PM), https://www.wsj.com/articles/sec-investigatingexxon-on-valuing-of-assets-accounting-practices-1474393593.

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^{18.} See Joel B. Eisen, Brownfields Development: From Individual Sites to Smart Growth, in AGENDA FOR A SUSTAINABLE AMERICA 57, 57 (John C. Dembach ed., 2009).

^{19.} See Patricia Salkin, Land Use: Blending Smart Growth with Social Equity and Climate Change Mitigation, in AGENDA FOR A SUSTAINABLE AMERICA, supra note 18, at 349, 349–51.

to foster sustainability, in lieu of public law, including certification, auditing, labeling, and reporting programs, and tends to enforce them through a variety of contractual and related arrangements.²⁸

Three assessments of U.S. sustainability activity track the real but limited progress that this country has made. The first, published in 2002, concluded that there had been little progress, but that "[i]n virtually every area of American life, a few people and organizations are exercising leadership for sustainability."29 This assessment, based on the contributions of more than three dozen experts, represents a wide range of perspectives and disciplines from universities, nongovernmental organizations, and the private sector. The second, published in 2009 and based on the work of essentially the same set of contributors, found that the United States "has made significant progress since 2002 in at least six areas: local governance, brownfields redevelopment, business and industry, higher education, kindergarten through 12th-grade education, and religious organizations."³⁰ The third and most recent review, published in 2012, and based on the contributions of fifty-one people from a variety of fields³¹ found that while the United States had made "some progress" over the past two decades, "the sustainability destination is now farther away than it was" two decades ago, largely because of climate change.³² The report emphasized that the basic challenge is "accelerating the transition to sustainability."³³ The review continued:

Yet there is nonetheless an emerging sustainability movement in the United States. It includes dedicated practitioners in a wide variety of fields who have thought deeply about what sustainability means in different contexts and why it is attractive, and whose day-to-day job is to make it happen, fix what doesn't work, and improve results. They are engaged in a wide variety of fields, including agriculture, energy, manufacturing, technology, community planning and development, business and industry, government, education, building construction, engineering, and law.³⁴

Within the field of law, attorneys are making their offices run more sustainably, most obviously by reducing their environmental footprint, and also by using sustainable development concepts and ideas to help clients

^{28.} See Errol E. Meidinger, Environmental Certification Programs and U.S. Environmental Law: Closer Than You May Think, 31 ENVTL. L. REP. 10162, 10162 (2001); Michael P. Vandenbergh, Private Environmental Governance, 99 Cornell L. Rev. 129, 134 (2013).

^{29.} John C. Dernbach, Synthesis, in STUMBLING TOWARD SUSTAINABILITY 1, 2 (John C. Dernbach ed., 2002).

^{30.} John C. Dernbach et al., *Progress Toward Sustainability: A Report Card, in* AGENDA FOR A SUSTAINABLE AMERICA, *supra* note 18, at 16.

^{31.} DERNBACH ET AL., *supra* note 10, at iii-iv.

^{32.} See id. at 9.

^{33.} *Id.* at i.

^{34.} Id. at 9-10.

solve or address specific issues.³⁵ More than three hundred law organizations participate in the ABA-EPA Law Office Climate Challenge, under which they do one or more of the following: reduce paper use, use renewable energy, or become more energy efficient.³⁶ Bar associations in California,³⁷ Pennsylvania,³⁸ and Massachusetts³⁹ adopted and encourage the use of similar guidelines. Lawyers for a Sustainable Future-a nonprofit organization with roots in Oregon that is now becoming a national network of lawyers-developed a set of tools to improve the sustainability activities within a law office.⁴⁰ The Law Firm Sustainability Network—a nonprofit organization made up of law firms as well as legal departments of major corporations⁴¹—launched the American Legal Industry Sustainability Standard (ALISS), a "self-assessment tool . . . designed to help law firms measure the success of their environmental sustainability programs and discover opportunities to improve their sustainability programs."42 The ABA Section on Environment, Energy, and Resources developed the Sustainability Framework for Law Organizations, which many leading firms endorsed and are implementing.⁴³ The framework provides a structure for progressively greater law firm commitment to economic, social, and environmental responsibility.44

Still, the existing literature on sustainable development does not tell us exactly what these lawyers actually do when they are assisting clients. While there are many stories in magazines, newspapers, and online about

^{35.} Lawyers can also play other roles. These include: 1) working through bar associations and other organizations to encourage sustainable development in other sectors of the economy, and 2) working to change legal frameworks to encourage or enable sustainable development. Although these latter two roles may help clients address specific problems, they are not the primary focus of this article.

^{36.} *ABA-EPA Law Office Climate Challenge*, ABA, http://www.americanbar.org/groups/environment_energy_resources/public_service/aba_epa_law_office_climate_challenge.html (last visited Sept. 19, 2017) (explaining and describing the program); *Partners and Leaders*, ABA (Dec. 3, 2014), http://www.americanbar.org/groups/environment_energy_resources/public_service/aba_epa_law_office_climate_challenge/partners_leaders.html (listing more than 300 firms and other law organizations as "partners and leaders").

^{37.} See State Bar of Cal., Voluntary State Bar of California Lawyers Eco-Pledge and Voluntary Law Office Sustainability Policy 1 (2008).

^{38.} See Pennsylvania Lawyers United for Sustainability (PLUS) Program, PA. BAR ASS'N, http://www.pabar.org/public/sections/envco/plusprogram.asp (last visited Sept. 19, 2017).

^{39.} See Green Guidelines, MASS. BAR ASS'N, http://www.massbar.org/for-attorneys/law-yers-eco-challenge/green-guidelines (last visited Sept. 19, 2017).

^{40.} Welcome, LAWYERS FOR A SUSTAINABLE FUTURE, http://www.sustainablelawyers.org (last visited Sept. 19, 2017) (providing links to tools on sustainability policy, sustainable practices, building management, tenant improvements, events and retreats, and green lunches).

^{41.} Who We Are, LAW FIRM SUSTAINABILITY NETWORK, http://www.lfsnet-work.org/about/who-we-are/ (last visited Oct. 19, 2017).

^{42.} About ALISS, LAW FIRM SUSTAINABILITY NETWORK, http://www.lfsnetwork.org/aliss/overview (last visited Sept. 19, 2017).

^{43.} See Law Firm Sustainability Framework, ABA (Dec. 2, 2010), http://www.americanbar.org/groups/environment_energy_resources/public_service/model_law.html.

^{44.} See id. For an excellent summary of what some of the leading law firms are doing on sustainability under this framework see William R. (Bill) Blackburn, *The Sustainability Strategy*, ENVTL. F., Mar./Apr. 2011, at 34, 34.

lawyers who do work related to sustainability,⁴⁵ there has thus far been no effort to systematically assess what they do. That is the basic question this Article attempts to answer. The answer matters because accelerating the transition to sustainability requires more and better sustainability choices. including legal choices, the use of law on behalf of sustainability, and visionary and supportive governance.⁴⁶ Accelerating the transition also requires the participation of all significant parts of society, including lawvers.⁴⁷ If the lawyers doing work related to sustainability are actually helping accelerate the transition, then it would be of real value to know what they do, how they do it, and why. Because these lawyers are a distinct minority of all practicing lawyers, and because there is growing understanding of the importance of sustainable development, it is highly likely that a great many other lawyers and lawyers-to-be would consider doing this kind of work if they knew how to do it or better understood what this work entails, both personally and professionally. At the same time, many lawyers who are doing sustainability work on behalf of their clients may recognize some of their own experiences and approaches in the stories of other lawyers who are working on sustainability. They may thus appreciate that more lawyers are doing this kind of work than they may have believed.

As a growing number of law schools provide sustainability training for law students,⁴⁸ moreover, it behooves them to know what lawyers engaged in sustainability work actually do. Greater understanding of what sustainable development in law practice means will improve the ability of students to do this work in the real world. It is also consistent with growing recognition of the need to provide students with the skills and knowledge they will need in the practice of law, including the importance of training lawyers to practice law in new and challenging contexts.⁴⁹ In a 2013 reso-

^{45.} See, e.g., Richard J. Sobelsohn, Law Firms Adopt Sustainability to Stay Sustainable, N.Y. L.J. (Dec. 28, 2015), http://www.newyorklawjournal.com/id=1202745732909; Stuart Kaplow, Lawyers' Opinion Matters in Green Building Transactions, GREEN BUILDING L. UPDATE (July 12, 2015), http://www.greenbuildinglawupdate.com/2015/07/articles/leed/lawyers-opinion-mat-

ters-in-green-building-transactions; Christine Bader, Corporate Lawyers Can Be More Than Naysayers-in-Chief, ATLANTIC (May 8, 2015), https://www.theatlantic.com/business/archive/2015/05/corporate-lawyers-social-responsibility/392474; Bob Langert, Are Lawyers the Enemy of Sustainability Execs?, GREEN BIZ (Apr. 6, 2015, 1:45 AM), https://www.greenbiz.com/article/are-lawyers-enemy-sustainability-execs; Thomas Bourne, Why Lawyers Have a Part to Play in Sustainable Development, GUARDIAN (Feb. 16, 2012, 9:53 AM), https://www.theguardian.com/sustainable-business/blog/sustainable-business-development-law.

^{46.} DERNBACH ET AL., supra note 10, at 229.

^{47.} See id. at 285.

^{48.} Dernbach, supra note 5, at 495-96.

^{49.} See WILLIAM M. SULLIVAN ET AL., EDUCATING LAWYERS: PREPARATION FOR THE PROFESSION OF LAW 202 (2007) ("The calling of legal educators is a high one: to prepare future professionals with enough understanding, skill, and judgment to support the vast and complicated system of the law needed to sustain the United States as a free society worthy of its citizen's loyalty; that is, to uphold the vital values of freedom with equity and extend these values into situations as yet unknown but continuous with the best aspirations of our past.").

lution, the ABA House of Delegates—the policy-making body for the organization—urged "all governments, lawyers, and ABA entities to act in ways that accelerate progress toward sustainability," and called on "law schools, legal education providers, and others concerned with professional development to foster sustainability in their facilities and operations and to help promote a better understanding of the principles of sustainable development in relevant fields of law."⁵⁰

The answer also matters for a more basic reason: although it has been more than twenty years since the United Nations Conference on Environment and Development first endorsed sustainable development, and adopted an international strategy and set of principles to realize it,⁵¹ the term is still subject to misunderstanding and skepticism.⁵² This is true in spite of—and also perhaps because of—the adoption by the United Nations General Assembly in 2015 of Sustainable Development Goals for the world.⁵³ Understanding what practicing lawyers say and do about sustainable development in the context of specific client situations sheds light on what the term means in practice, and the extent to which it actually adds value.

This Article examines systematically what lawyers in the sustainability arena actually do. It is based on qualitative research, a form of socialscience research that provides insight into how particular people understand what they do.⁵⁴

Part I of this Article describes the methodology used in the research. Essentially, the research involved structured telephone interviews based on thirteen questions. The twenty-six lawyers interviewed have all spent a considerable part of their professional lives doing work related to sustainability. I chose the interviewees from a much larger pool of lawyers who do this work. The rest of this Article—Parts II through VI—describes and analyzes their answers, explanations, and stories.

Part II explains the interviewees' understanding of sustainable development and sustainability (unless the context indicates otherwise, the two terms are used interchangeably in this Article). Most understood one or more widely applied shorthand definitions of sustainable development. Many focused on its long-term time horizon or the importance of reducing overall negative impacts. At the same time, they tended to be more interested in how those concepts and principles apply to their clients. They also

^{50.} AM. BAR ASS'N, HOUSE OF DELEGATES, RESOLUTION 105, 13 (2013).

^{51.} U.N. Conference on Environment and Development, Agenda 21, ¶¶ 1.1, 1.3, 1.6 (Apr. 23, 1993), https://sustainabledevelopment.un.org/content/documents/Agenda21.pdf; U.N. Conference on Environment and Development, *Rio Declaration on Environment and Development*, Principles 3–4, 8, U.N. Doc. A/CONF.151/26 (Vol. I), annex I (Aug. 12, 1992) [hereinafter *Rio Declaration*].

^{52.} Dernbach & Cheever, supra note 6, at 272.

^{53.} See G.A. Res. 70/1, supra note 17; see also U.N. Secretary-General, Progress towards the Sustainable Development Goals, \P 3, U.N. Doc. E/2016/75 (June 3, 2016) (one-year report on progress toward these goals).

^{54.} See infra Part I.

tended to emphasize the environmental aspects of sustainability more than the social aspects.

Part III provides an overview of what these lawyers do. The primary subject matter of the work performed by these lawyers varies considerably and includes environmental law, climate change and clean energy law, corporate law, land use and development law, sustainable infrastructure finance, and corporate social responsibility and human rights. Their clients are also diverse, including developers, banks, multinational corporations, start-up businesses, nongovernmental organizations, and federal, state, and local governments. These lawyers also perform a wide variety of types of legal work—not only counseling clients but also performing transactional work, litigating, advocating, and drafting.

Part IV explores the dynamics of the attorney-client conversation on sustainability. Many said that their clients come to them for sustainabilityrelated legal work precisely because they specialize in the kind of legal work that is being sought. This Part then addresses the converse question-the circumstances under which attorneys raise sustainability issues with their clients. Some believe they have a fiduciary duty to explain risks and opportunities related to sustainability when a sustainability approach would benefit the client. Some lawyers raise sustainability-related questions and suggestions based on what the client seems to care about, and to the extent that the client is interested. Others have developed standard questions, programs, and tools related to sustainability, and share those with clients when relevant. Part IV also examines what attorneys say in those conversations. The essential starting point, of course, is whatever law may be applicable to the client's situation; sustainable development is sometimes required or encouraged by law, but often it is not. Beyond that, many said, the next requirement is understanding what the particular client needs and wants, rather than preaching to the client about sustainability. Other attorneys described the importance of framing a conversation with clients in terms of risks and opportunities related to sustainable development, even when clients are not focused on those risks and opportunities.

Part V explores the personal and professional qualities of the attorneys who are doing this work. It begins by examining how these lawyers became interested in sustainability. A few were always interested or developed an interest prior to law school. Work in environmental law led to an interest in sustainability for some. Exposure to sustainable development concepts through specific workplace or community experiences was the catalyst for others. Still others concluded, based on these experiences, that they were not doing the work they wanted to do. They moved their careers in the direction of sustainable development because it offered a more satisfying framework to solve problems. This Part then examines the most essential personal and professional characteristics for sustainability work. While many of the most essential skills of a lawyer practicing law relating to sustainability are the same as those of a good lawyer, these lawyers emphasized six characteristics that overlap with, and extend beyond, basic legal skills. These characteristics are expertise in, and even passion for, sustainability; ability to listen well; open-mindedness, curiosity, and creativity; good problem-solving skills; patience; and an ability to think big picture and long term.

Part V then discusses what these lawyers find most enjoyable about their work and what they find least enjoyable or most frustrating. In explaining what they most enjoy, they identified the achievement of specific and positive results, success in explaining a sustainability project or proposal to a skeptical or uninformed client, the intellectual challenge of the work, and their ability to work with likeable and talented people. In explaining what they find least enjoyable, they identified clients that did not understand or support sustainability; public opposition based on ideology, misrepresentation, or ignorance; the slow pace of progress, particularly on energy and climate change; and legal barriers to sustainability.

Part VI addresses two questions about the future of sustainability in law practice. The first is about the greatest obstacles to sustainability. These lawyers identified public opinion as a major obstacle, including failure to understand both the underlying problems and what sustainable development means. The other major obstacle they identified is legal-not only laws that obstruct progress but also the absence of an effective legal structure that guides and supports sustainable development. Part VI also explores present and future employment in law related to sustainability. Many said that legal jobs related to sustainability are everywhere, but they are not ordinarily labeled as such. Rather, these lawyers said, sustainability is or should be a critical part of all legal work. Many identified specific workplaces or subjects that are particularly amenable to sustainability-related legal work. These lawyers provided a common piece of advice for those who want to enter the field: find some particular subject matter or legal field that is of interest, master both that subject matter or field as well as its sustainability aspects, and create a sustainability job based on that. At the same time, some lawyers said there is little or no sustainabilityrelated work.

The sustainability-related legal work described in this Article varies considerably in its scope and ambitiousness. Some of it is about more sustainable ways to comply with existing laws; some of it may simply be a new label for the kind of work they have always done; and some of it is about helping companies, businesses, and governments achieve more ambitious environmental, social, and economic goals. But for all of these lawyers, sustainable development provides a perspective and framework for making better decisions. Understanding how this perspective and framework is applied in the real-world practice of law provides insight into the role of law and lawyers in achieving a sustainable society.

I. METHODOLOGY

This Article is based on interviews with twenty-six practicing lawyers who identify themselves as having spent a substantial part of their career doing sustainability-related work or who bring a sustainability perspective to their legal work. This specific form of research is known as qualitative research.⁵⁵ Unlike quantitative research, which "uses numbers as data," qualitative research "uses words as data."⁵⁶ More specifically, "qualitative researchers are interested in understanding the meaning people have constructed; that is, how people make sense of their world and the experiences they have in the world."⁵⁷

As explained in the Introduction, the purpose of this research is to understand what practicing lawyers engaged in legal work related to sustainable development actually do. Although no one appears to have surveyed the number of lawyers in the United States who do work related to sustainability, a conservative estimate is that several thousand lawyers devote at least part of their practice to such work. A basic source of information on this topic is the Martindale-Hubbell online directory of lawyers and their listed areas of practice.⁵⁸ In that directory, 615 U.S. lawyers identified sustainability as a practice area, and an additional 144 lawyers iden-tified sustainable development.⁵⁹ The number becomes considerably larger if lawyers that identify climate change and renewable energy as part of their practice are included: an additional 749 attorneys include climate change as part of their practice area.⁶⁰ Another 826 attorneys—who do not identify climate change, sustainable development, or sustainability as a practice area—identify renewable energy as a practice area.⁶¹ The number gets even larger when various aspects of social sustainability are included. For instance, 590 attorneys identify human rights as a practice area.⁶² That totals 2,624 attorneys. Because the directory is focused on lawyers in private practice,⁶³ it is less likely to include government attorneys, academic

^{55.} See generally SHARAN B. MERRIAM & ELIZABETH J. TISDELL, QUALITATIVE RESEARCH: A GUIDE TO DESIGN AND IMPLEMENTATION 5–6 (4th ed. 2016) (explaining how to conduct qualitative research and write findings).

^{56.} *Id.* at 6 (citing VICTORIA CLARKE & VIRGINIA BRAUN, SUCCESSFUL QUALITATIVE RESEARCH: A PRACTICAL GUIDE FOR BEGINNERS 3–4 (2013) (emphasis removed).

^{57.} Id. at 15 (emphasis removed).

^{58.} See Attorney and Law Firm Search, MARTINDALE.COM, https://www.martindale.com/find-attorneys (last visited Sept. 19, 2017).

Membership in the ABA's Climate Change, Sustainable Development and Ecosystems Committee provides another data point. The Committee has 837 members. E-mail from Dana Jonusaitis, Dir., American Bar Association Section of Environment, Energy, and Resources, to John C. Dernbach (Sept. 7, 2016, 13:50 EST) (on file with author). Of course, many lawyers likely do this work who are not members of this Committee.

^{59.} E-mail from Brent Johnson, Co-Director & Reference/State Documents Librarian, Law Library, Widener Univ. Commonwealth Law Sch., to John C. Dernbach (Mar. 3, 2017, 10:37 EST) (on file with author).

^{60.} Id.

^{61.} *Id.* Smaller numbers of attorneys identify other aspects of sustainable development, such as energy efficiency (30) and mixed-use development (77) as practice areas. *Id.*

^{62.} *Id*.

^{63.} See Attorney and Law Firm Search, supra note 58.

attorneys, and attorneys employed by nongovernmental organizations, businesses, and corporations. Thus, the figures provided here probably understate the number of attorneys doing legal work related to sustainable development.

The lawyers interviewed for this Article represent a subset of this larger group. All of them spent a substantial part of their career doing sustainability-related work for their clients (although not all of them were working for legal clients at the time of the interview). I interviewed twenty-six lawyers who are mostly in private practice with law firms. Some in-house counsel were included because they also work for a client. And some work for local, state, or federal government. Others now work for nongovernmental organizations, consulting firms, or law schools, although all of these have substantial, previous governmental or private experience in practicing law. The great majority have more than twenty years of experience—often in different jobs or with different law firms—over the course of their career, although some have been practicing only a few years. All of those interviewed self-identify as doing legal work related to sustainability.

The results of the interviews are not presented as a representative sample of the 1.3 million licensed lawyers in the United States.⁶⁴ They nonetheless constitute a reasonable sample of the total population of lawyers who do work related to sustainable development. I selected twelve of the lawyers interviewed because I know or previously worked with them on sustainable development and climate change issues through the ABA or in other professional contexts. I selected ten from suggestions by colleagues or other interviewees and four based on their law firm's website descriptions.⁶⁵

I conducted the research through telephone interviews based on thirteen questions that are set out in the Appendix. Telephone interviews both encouraged participation and permitted follow-up questions when appropriate. To encourage those participating to speak frankly about their views and experiences, the identities of those interviewed are confidential.⁶⁶ Most interviews lasted about an hour, with a few considerably longer. I conducted the interviews between June 2014 and August 2016.⁶⁷ Afterwards, I sent my interview notes to those interviewed and asked for any changes or corrections they thought appropriate; many returned my notes

^{64.} AM. BAR ASS'N, LAWYER DEMOGRAPHICS: YEAR 2016 (2016).

^{65.} Several interviews were subsequently excluded from this list, or were terminated quickly, because the attorney is not actually doing work related to sustainability. Interviews with three lawyers who have never practiced law, or who are long retired, were also excluded. At least five unstructured interviews with other lawyers were also excluded.

^{66.} This Article sometimes makes details vague to protect the identity of these attorneys. For the same reason, it does not use gender-based pronouns to refer to the interviewees (e.g, he/she, his/hers).

^{67.} Interviews were not recorded; I typed while people spoke.

with revisions. I used an online database program to consolidate all of the interviews into a single master report that organized the answers by question, which facilitated comparison and analysis.⁶⁸ Except as otherwise stated, any quantitative indications (e.g., some, many) apply only to the lawyers who were interviewed.

II. HOW THESE LAWYERS UNDERSTAND SUSTAINABILITY

How do the lawyers who do sustainability work understand the meaning of sustainable development and sustainability? How does that understanding square with the way that other sustainability practitioners use the term?⁶⁹ These lawyers have a good understanding of sustainable development and sustainability. Most were conversant with several widely applied shorthand definitions of the term, but tended to be more interested in how sustainable development concepts and principles are applied in practice. Many emphasized key aspects of sustainable development—its long-term time horizon, the importance of reducing overall negative impacts and creating positive impacts, and limits on resource use. In the context of the specific work they do, they reflected a sophisticated understanding of not only the term, but also what it means for their clients. That said, they tended as a group to be more focused on the environmental dimension of sustainability than on the social dimension.

A brief history of the term sustainable development may be helpful here.⁷⁰ Although many use the term sustainability as a substitute for sustainable development, the original term is sustainable development,⁷¹ and the original term provides several keys to understanding. Development is understood internationally in terms of both economic and social development, and requires a foundation of peace and security.⁷² In other words, development is not economic development alone; it is more helpfully understood in terms of human development.⁷³ The objectives of development are "human freedom, opportunity, and quality of life."⁷⁴ This model of improving the human condition, which dates at least back to the end of World War II, has nothing to say about the environment.⁷⁵ In consequence, development tends to work by furthering economic and social progress to some degree; however, it does so at the expense of the environment, as

^{68.} Sustainability in Law Practice Interviews with 26 Attorneys (2016) (on file with author) [hereinafter Master Report of Interviews] (unpublished report generated by author for this Article). The data base program was developed by Qualitrics.

^{69.} See *id.* Most of the interview material in this Part is taken from answers to Question 4 ("What is your understanding of sustainability?"). See *infra* Appendix.

^{70.} This paragraph summarizes a history that is explained and documented in much greater detail in Dernbach & Cheever, *supra* note 6, at 252–61.

^{71.} See supra note 69.

^{72.} Dernbach, supra note 6, at 9-14.

^{73.} *Id.* at 14.

^{74.} Dernbach & Cheever, *supra* note 6, at 257.

^{75.} See Dernbach, supra note 6, at 14-21.

well as living and future people who depend on that environment.⁷⁶ Discussions that treat development and environment as inherently oppositional forces—e.g., development versus environment, or having to choose between development and environment—are based on that weakness or limitation in the development model. Human population and economic development grew rapidly after World War II.⁷⁷ Widespread environmental degradation as well as deep and growing poverty—both understood as caused or not addressed by development—grew to the extent that they threatened to overcome, undermine, or weaken the progress of development.⁷⁸

As a result, nations of the world concluded that the development model needed to be modified. Instead of development, countries would strive for sustainable development. They first committed to that change at the U.N. Conference on Environment and Development (Earth Summit) in 1992⁷⁹ and most recently reaffirmed that commitment with the U.N. General Assembly's 2015 adoption of Sustainable Development Goals (SDG).⁸⁰ As the official name of the Earth Summit indicates ("Conference on Environment and Development"), sustainable development is a way of reconciling development and environment. In fact, the key action principle for sustainable development is integrated decision making.⁸¹ Essentially, decisions involving the environment or development must take the environment and development into consideration and further both in more or less equivalent ways.⁸² Sustainable development also requires a long-term perspective; intergenerational equity is a key principle to be applied in integrated decision making.⁸³ The goals of sustainable development are essentially the same as those of development-human freedom, opportunity, and quality of life-except that sustainable development focuses on those goals for both present and future generations.⁸⁴

Conceptually, this has two consequences. First, because conventional development can damage not only the environment but also humans depending on that environment, conventional development can be criticized as unjust, particularly when the adverse effects are visible or obvious.⁸⁵

83. See Claire Molinari, Principle 3: From a Right to Development to Intergenerational Equity, in THE RIO DECLARATION ON ENVIRONMENT AND DEVELOPMENT: A COMMENTARY 139 (Jorge E. Viñuales ed., 2015).

^{76.} See id. at 14–21; see also Dernbach & Cheever, supra note 6, at 257–58.

^{77.} See Our Common Future supra note 8, at ch. 5, ¶¶ 3-4.

^{78.} See id. at ch. 1, ¶ 1.

^{79.} See Rio Declaration, supra note 51, at annex I.

^{80.} G.A. Res. 70/1, supra note 17, ¶ 1.

^{81.} See Dernbach, supra note 9, at 249 (analyzing and comparing various provisions of the Rio Declaration); see also MARIE-CLAIRE, CORDONIER SEGGER & ASHFAQ KHALFAN, SUSTAINABLE DEVELOPMENT LAW: PRINCIPLES, PRACTICES, AND PROSPECTS 103 (2005) (defining "sustainable development law" as a "set of legal instruments and provisions where environment, social and economic considerations are integrated to varying degrees in different circumstances").

^{82.} Dernbach, supra note 9, at 260-61.

^{84.} Dernbach & Cheever, supra note 6, at 257–58.

^{85.} Id.

Because sustainable development does not do these things, it follows that sustainable development is a way of fostering environmental and social justice⁸⁶ as well as protecting human rights.⁸⁷ Second, the social dimension of sustainability is often considered of equal importance to the environmental dimension.⁸⁸ Because damage to the environment also tends to hurt humans who depend on the environment, the social dimension also reinforces the point that sustainable development is a way to foster social justice and human rights.

Many writers have used sustainable development and sustainability synonymously.⁸⁹ But it is important to recognize that sustainability is often used to describe a future state of affairs-a sustainable society-where basic environmental challenges, social challenges, and threats no longer exist, and where human well-being is fostered for present and future generations.⁹⁰ Because no individual, corporation, or country can move from unsustainable development to sustainable development overnight, the transition to a sustainable society is often described in terms of a journey rather than a destination.⁹¹ A great many of the steps in this journey move from less-sustainable activities and projects to more-sustainable activities and projects.⁹² A critical question is whether any given project or activity should be directed at reducing adverse environmental and social impacts, or instead directed at creating positive environmental and social impacts (along with its presumed positive economic impacts).⁹³ Because of growing population and economic development, and the substantial cumulative effects of numerous negative impacts, achieving sustainable development would seem to require that we move toward the latter.

Several shorthand formulas used to explain sustainable development are more widely understood than the history. The iconic and most often cited definition of sustainable development is contained in the 1987 report

^{86.} See John C. Dernbach, Patricia E. Salkin & Donald A. Brown, Sustainability as a Means of Improving Environmental Justice, 19 J. ENVTL. & SUSTAINABILITY L. 1, 12–13 (2012).

^{87.} CLIMATE CHANGE JUST. & HUM. RTS. TASK FORCE, INT'L BAR ASS'N, ACHEVING JUSTICE AND HUMAN RIGHTS IN AN ERA OF CLIMATE DISRUPTION 9 (2014) (recommending that "states consider recognizing freestanding human rights to a safe, clean, healthy and sustainable environment") (emphasis removed).

^{88.} See, e.g., WILLIAM R. BLACKBURN, THE SUSTAINABILITY HANDBOOK: THE COMPLETE MANAGEMENT GUIDE TO ACHIEVING SOCIAL, ECONOMIC, AND ENVIRONMENTAL RESPONSIBILITY (2d ed. 2015) (explaining wide variety of best corporate sustainability practices giving equal attention to environmental and social sustainability).

^{89.} See Dernbach & Cheever, supra note 6, at 248 n.2.

^{90.} See PAMELA MATSON ET AL., PURSUING SUSTAINABILITY: A GUIDE TO THE SCIENCE AND PRACTICE 20–21 (2016).

^{91.} See, e.g., BD. ON SUSTAINABLE DEV., NAT'L RESEARCH COUNCIL, OUR COMMON JOURNEY: A TRANSITION TOWARD SUSTAINABILITY 3 (1999).

^{92.} See DERNBACH ET AL., supra note 10, at 6–7.

^{93.} Dernbach & Cheever, supra note 6, at 271.

of the World Commission on Environment and Development,⁹⁴ Our Common Future. (The Commission is also called the Brundtland Commission, after then-Norwegian Prime Minister Gro Harlem Brundtland, its chair.) According to the report, sustainable development is "development that meets the needs of the present without compromising the ability of future generations to meet their own needs."⁹⁵ Others describe sustainable development in terms of three overlapping circles or pillars—social, economic, and environmental.⁹⁶ The idea is that progress on sustainable development occurs when a particular action furthers all three.⁹⁷ In the corporate setting, the use of independent metrics to measure each of the three is described in terms of a "triple bottom line," where the social, economic, and environmental goals are often referred to as "people, profit, and planet."⁹⁸

It is also important to recognize what sustainable development is not. Sustainable development is not a discrete subject or area of law like energy law, insurance law, or even environmental law; it is a way of viewing, analyzing, and making decisions about a wide range of human activities. In addition, sustainable development is not another term for environmentalism or environmental protection, and it is not about protecting the environment for its own sake. Rather, it is about advancing human well-being in the context of a quality environment.⁹⁹ Nor is sustainable development simply about "balancing" the environmental, economic, and social aspects of a proposal; the ultimate test of a decision, as the Brundtland Commission recognized, is whether it ensures the ability of future generations to meet their needs.¹⁰⁰ Conversely, sustainable development is not another term for sustained economic growth.¹⁰¹ Economic development is part of sustainable development, but sustainable development is a framework for integrated decision making, not simply realizing profits or growth.¹⁰² Finally, sustainable development is not another way of describing environmental regulation; it is based on recognition of the need for a great variety

^{94.} Kaj Bärlund, Sustainable Development - Concept and Action, UNITED NATIONS ECON. COMMISSION FOR EUR., http://www.unece.org/oes/nutshell/2004-2005/focus_sustainable_develop-ment.html (last visited Sept. 19, 2017).

^{95.} Our Common Future, supra note 8, at ch. 2, ¶ 1.

^{96.} See, e.g., DERNBACH ET AL., supra note 10, at 3.

^{97.} See id.

^{98.} See Carolina Miranda, The Breakthrough Thinking of the Triple Bottom Line, SUNPOWER (Dec. 17, 2016), http://businessfeed.sunpower.com/business-feed/written-breakthrough-thinking-of-the-triple-bottom-line; see also ANDREW W. SAVITZ & KARL WEBER, THE TRIPLE BOTTOM LINE: HOW TODAY'S BEST-RUN COMPANIES ARE ACHIEVING ECONOMIC, SOCIAL, AND ENVIRONMENTAL SUCCESS—AND HOW YOU CAN TOO 156 (2d ed. 2013) (explaining how businesses can design and implement sustainability strategies).

^{99.} *Rio Declaration, supra* note 51, Principle 1 ("Human beings are at the centre of concerns for sustainable development. They are entitled to a healthy and productive life in harmony with nature.").

^{100.} See supra Part II.

^{101.} DERNBACH ET AL., supra note 10, at 6.

^{102.} Id.

of legal tools, including those fostering sustainable economic development. 103

Many of the lawyers interviewed for this Article explained their understanding of sustainable development in terms of the Brundtland Commission definition, three circles, three pillars, or the triple bottom line. One lawyer captured the definition this way: "The simultaneous pursuit of economic prosperity, environmental stewardship, and social responsibility."¹⁰⁴ Another thought that the Sustainable Development Goals are a helpful touch point, partly because of their breadth: "It is having a society, including a business model, where you are advancing environmental, social, and economic goals."¹⁰⁵ As the following discussion indicates, however, their operational understanding tended to focus more on environment, energy, and land use rather than on the social dimensions of sustainability. In that respect, they mirror the reality that environmental sustainability is now more accepted among practicing attorneys than social sustainability.¹⁰⁶

Some were uncomfortable with the question about the meaning of sustainable development, or highlighted the limits of one-sentence definitions. They tended to see these definitions as incomplete. As one attorney explained:

I understand sustainability to have stewardship at its core—using resources today in a manner so that resources are still available for the future. But it is more complicated than that simple definition. There are a lot of nuances involved when you start peeling the onion, with issues including energy efficiency, water usage, sustainable harvesting practices for replenishable resources, and carbon footprints.¹⁰⁷

Another highlighted the limits of the Brundtland Commission definition by saying that it "isn't wrong."¹⁰⁸ A different attorney explained: "To be more technical, we have to have an energy budget that comes from the sun and other finite resources and cycles on planet. If we don't succeed in arranging civilization within those processes, we're toast."¹⁰⁹ A third at-

109. Id.

^{103.} See John C. Dernbach, Creating the Law of Environmentally Sustainable Economic Development, 28 PACE ENVTL. L. REV. 614, 614–15, 630 (2011) (setting out a typology of laws that protect the environment, create jobs, and foster economic development).

^{104.} Master Report of Interviews, supra note 68, at 17.

^{105.} Id. at 16 (for this attorney, the social dimensions of sustainability are particularly important).

^{106.} E-mail from William Blackburn, William Blackburn Consulting, Ltd., to John C. Dernbach (Oct. 3, 2016, 23:03 EDT) (on file with author).

^{107.} Master Report of Interviews, supra note 68, at 17.

^{108.} *Id*.

torney made a similar point from a different perspective: "Unless sustainability is translated into tangible parameters, it is hard for businesses to get their minds around it."¹¹⁰

The decision making and advocacy aspect of the sustainable development frame was much more important to one attorney than a short definition:

I'm not confident that I would put as much meaning into a short definition. The big question is how much we reduce the environmental cost of what we are doing. Part of that requires more holistic thinking than the limits in my air permit. The sustainability frame is good for options, alternatives, and advocacy. It is particularly good for advocacy with government agencies and environmental groups.¹¹¹

Some lawyers emphasized the long-term aspect of sustainable development. One emphasized the need to harmonize environmental protection and economic development so "we can survive for more than the next several decades."¹¹² Another stated the importance for long-term sustainability of being "fossil fuel free."¹¹³ And another said, "If I were going to redefine sustainability, it would be creating a system that has the components and structure to maintain itself long term and the flexibility to adjust to changing circumstances."¹¹⁴

Others emphasized the importance of reducing impacts and creating healthier places:

Sustainable development law focuses on shaping land use and economic development to have a lighter impact on the environment, including but not limited to climate change mitigation and adaptation. Sustainable development uses less material; avoids consuming wetlands or eroding watersheds; consumes less energy; emits less carbon dioxide; lessens storm water runoff; reduces ground and surface water pollution; and creates healthier places for living, working, and recreating.¹¹⁵

Several attorneys emphasized the importance of limiting resource use. Of sustainable development, one said:

It boils down to conserving and best utilizing available resources—not using more water than you need to, turning food waste into energy, using an LED (light-emitting diode) bulb instead of an incandescent

- 114. *Id*.
- 115. *Id*.

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^{110.} Id.

^{111.} Id. at 16-17.

^{112.} Id. at 16.

^{113.} Id.

bulb,^[116] smart ways of doing what we do every day that don't affect what you do every day. We are not asking people to sit in the dark. A lot of people I talk to make the assumption I am a left-wing environmentalist. I am a registered Republican, and a capitalist at heart. We don't have to live in teepees or destroy the environment to enjoy what the American lifestyle has to offer. This is being smart about how you use your resources.¹¹⁷

Many other attorneys were more comfortable defining and applying sustainable development concepts and principles from the perspective of their own work, rather than abstract definitions. One of these lawyers explained it in terms of its application to the corporate world: "How can we help corporations live into an aspirational goal of creating and encouraging human flourishing?"¹¹⁸ A lawyer who works with agricultural and industrial chemicals explained:

I use it very generally as a surrogate for doing things from inception to end of life in a more environmental and human health-sensitive way, including smarter selection of feedstocks and improved manufacturing processes. It can be summarized as smarter, cheaper, and greener. It is about designing technologies so that they are fundamentally more green through their whole life cycle, and the product is sustainable from a business, environmental, and health and safety perspective.¹¹⁹

An attorney working as in-house counsel for a large city with an express sustainability commitment explained the term in ways that are somewhat similar to the explanation given above but also quite different in detail:

The city sees it as addressing a wide variety of issues at the same time, including receiving waters and carbon footprint. A lot of this is reversing the trend toward greater and greater degradation. We have reversed flow and now we are trying to push back and make the city a greener space, a better storm-water-managed space, and reduce energy consumption or switch to other forms of energy. This is not being driven by economic development or job creation; these things are a benefit, but not a driver.¹²⁰

Another attorney, who works with businesses and investors, explained that the transition to sustainability is being driven by economics:

I see that sustainability is critical to long term-success in business and investment. If you manage your environmental, social, and governance issues and impacts well, you will be more successful in business and

^{116.} See U.S. Dep't of Energy, Lighting Choices to Save You Money, ENERGY.GOV, https://energy.gov/energysaver/lighting-choices-save-you-money (last visited Sept. 19, 2017) (LEDs use 20% to 25% of the energy of regular incandescent light bulbs and last up to twenty-five times longer).

^{117.} Master Report of Interviews, supra note 68, at 17.

^{118.} Id. at 16.

^{119.} Id. at 17.

^{120.} Id. at 18.

investment. There is a lot of data showing that sustainable companies outperform sustainability laggards in their industry significantly, and that investment strategies that incorporate environmental, social, and governance metrics tend to do better. Sustainability investment beats unsustainable investment. There are megatrends in terms of social license and laws pushing sustainability (at least in the European Union), as well as transparency and disclosure, and competitive pressure for companies to be sustainable. Sustainability is starting to win, but it is not because of law. It is more about economics.¹²¹

An attorney who works with many businesses that seek to do sustainability work explained these developments in terms of the economic attractiveness of the triple bottom line. This attorney used Walmart's Sustainability 360 program, a comprehensive program for integrating sustainability into all aspects of its business,¹²² as an example:

A lot of companies these days understand an opportunity to be aspirational, and they are finding business models to do that. This provides opportunity to scale sustainability, because the programs they implement are providing profitability. Walmart did not start its Sustainability 360 program to make money. There was leadership at the top that was interested, and then they found all kinds of waste in their supply chain. So, they developed a questionnaire for suppliers that makes it clear to suppliers that you better use less plastic, ship less air in your packages, and have lower greenhouse gas emissions. Once you do that for Walmart, you will do that for other companies.¹²³

Finally, several attorneys explained that their view of sustainable development is evolving with experience. Several years ago, one attorney came to the conclusion that simply reducing adverse impacts was not an adequate way to approach sustainable development. "My clients and I concluded that anything other than a regenerative approach is inappropriate. Simply sustaining is not enough."¹²⁴ At "Building to Save the Earth," a green building event at Ball State University, this attorney remembered someone asking if "building to save the earth was like logging to save the owls."¹²⁵ This attorney often wonders "if sustainable development has the same challenge."¹²⁶

III. WHAT SUSTAINABILITY LAWYERS DO

The question of what sustainability lawyers actually do in their work with clients addresses two distinct aspects of their work: One is subject

^{121.} Id. at 49.

^{122.} Sustainability, WALMART, http://www.corporatereport.com/walmart/2014/grr/environment sustainability 360.html (last visited Sept. 19, 2017).

^{123.} Master Report of Interviews, supra note 68, at 48.

^{124.} Id. at 17.

^{125.} Id.

^{126.} Id.

matter and clients, which are most helpfully discussed together. The other is the type of legal work they do.¹²⁷

A. Subject Matter and Clients

The primary subject matter of the work performed by these lawyers varies considerably and includes environmental law, climate change and clean energy law, corporate law, land use and development law, sustainable infrastructure finance, corporate social responsibility, and human rights. The lawyers interviewed also differ in their explicit identification with sustainability: some identify themselves not as sustainability lawyers but rather with the primary subject matter of their work. Their clients are also diverse. What follows illustrates the wide range of activities and clients they described in the practice of law related to sustainability.

Many are environmental lawyers who see issues through a sustainability lens. Taken together, these lawyers have a broad range of clients, including municipal governments, financial institutions, investors, utilities, industry, state and local governments, property owners, and nongovernmental organizations.¹²⁸ Many of their corporate clients have international operations. As one explained: "I do not have a sustainability practice. I have a sustainability prism that informs, or through which I view, my cases, and how my cases should be managed, litigated, or pursued."¹²⁹ Another said: "I don't sell myself as a sustainability lawyer. I am an environmental lawyer who believes in sustainability, and I counsel clients who are willing to go toward that path. I believe this is an option I need to make the client aware of."¹³⁰

Within environmental law, the subject matter of their work is also varied. Many do the full range of environmental law work, including air and water pollution, wetlands, endangered species, waste, among other subjects. Others are more specialized. Some focus on the environmental aspects of transactions and on brownfields redevelopment. One works in the industrial chemical and agro-chemical area, representing chemical producers, formulators, and end-users of these chemicals.¹³¹ Another, working for a regulatory agency, is helping to "identify strategies that can be used to strengthen compliance other than the traditional inspection and enforcement route." These strategies, the attorney said, include "greater transparency about facility compliance and performance."¹³²

^{127.} Most of the material in this Part is taken from answers to Question 1 ("How long have you been in this position?"), Question 2 ("What kind of work do you do, and who are clients?"), and Question 8 ("Apart from client counseling, what type of other legal work do you do on sustainability?") in the Appendix. See infra Appendix.

^{128.} Master Report of Interviews, supra note 68, at 9-10.

^{129.} Id. at 7.

^{130.} Id.

^{131.} Id.

^{132.} Id. at 5.

Other lawyers work primarily or exclusively on climate change, renewable energy, and energy efficiency. These lawyers work in a wide variety of private practice, governmental, business, academic, and nongovernmental settings. One with a long career in a variety of governmental and consulting positions has focused on "developing and teaching an awareness of energy policy in a carbon-constrained world."¹³³ Continuing the theme of identification with the primary subject matter of their work, rather than sustainable development, another explained: "I'm a climate change lawyer; I don't call myself a sustainability lawyer."¹³⁴

Other lawyers are anchored in corporate law, but again, their work involves a sustainability lens. One lawyer describes his clients as "renew-able energy, energy storage, energy efficiency companies, and companies with strong sustainability platforms, products, or services."¹³⁵ "Other clients are social enterprises and impact investors."¹³⁶ Several do work for start-up companies that want to focus on sustainability, including green technology companies.

Some work primarily in land use and development law. The clients for that work can be buyers or sellers, as well as tenants or lenders. The types of projects on which they work indicate their orientation toward sustainability. One attorney worked for many years as in-house counsel for a publicly traded real estate investment trust that began to pursue energy efficiency, air and water quality, materials consumption, and other issues in its existing real estate holdings and in new construction.¹³⁷ Another in private practice has done considerable work in "New Urbanism"- an approach to planning and designing communities that emphasizes walkability, mixed uses, a diversity of people, traditional neighborhood structure, and quality of life.¹³⁸ Until somewhat recently, a considerable part of this attorney's work involved "large-scale, New Urban projects that identified as pursuing sustainable development-energy and water efficiency, planting programs, and a wide range of environmentally themed projects."139 More recently, this attorney has being doing work for smaller-scale developments, including urban infill projects.¹⁴⁰ In addition to developers, this

^{133.} Id. at 8.

^{134.} Id. at 5.

^{135.} Id.

^{136.} *Id.*

^{137.} Id. at 16.

^{138.} *Principles of New Urbanism*, NEW URBANISM, http://www.newurbanism.org/newurbanism/principles.html (last visited Sept. 19, 2017); *see also* DANIEL K. SLONE & DORIS S. GOLDSTEIN, A LEGAL GUIDE TO URBAN AND SUSTAINABLE DEVELOPMENT FOR PLANNERS, DEVELOPERS, AND ARCHITECTS (2008) (explaining how to apply New Urbanist principles).

^{139.} Master Report of Interviews, supra note 68, at 7.

^{140. &}quot;Infill development is the process of developing vacant or under-used parcels within existing urban areas that are already largely developed." *Infill Development: Completing the Community Fabric*, MUN. RES. & SERVS. CTR., http://mrsc.org/Home/Explore-Topics/Planning/Development-Types-and-Land-Uses/Infill-Development-Completing-the-Community-Fabric.aspx (last modified Dec. 22, 2016). Infill development is preferable to greenfield development—development in areas that

attorney's client base includes green building and resilient design organizations, eco-districts,¹⁴¹ and companies that are trying to bring "energy efficiency, green energy, and social equity projects into the marketplace."¹⁴²

Another lawyer combines traditional real estate development with solar energy and sustainable development. This lawyer's law firm has a longstanding client base comprised of "property owners, whether that is hotels, shopping centers, office buildings, apartments, or industrial buildings."¹⁴³ The lawyer said: "We were able to take that client base and put solar panels on their roofs and encourage them to enter the green sustainability movement and say, this is good for your business."¹⁴⁴ Another drafts best-practice-in-sustainability ordinances for the consideration of municipalities (e.g., transit-oriented development,¹⁴⁵ green building, and water conservation), and trains local officials on these issues.¹⁴⁶

Some of the lawyers focus on sustainable infrastructure finance. One does legal work for "development and financing of projects that are mostly for sustainable infrastructure of one kind or another, including renewable energy, energy efficiency, micro grids,^[147] water, and wastewater."¹⁴⁸

Others are engaged in various aspects of social sustainability, including corporate social responsibility and human rights. One attorney explained: "We don't do a lot of environmentally oriented work. Our practice is primarily in the human rights space."¹⁴⁹ The attorney further said that the client base for this kind of work tends to involve multinational corporations operating in developing countries where they or their suppliers incur risks of violating human rights. This client base has expanded over time:

When I started, our client base was primarily, but not exclusively, oil, gas, and mining companies, who were worried about tort cases and were worried about litigation based on acts of security guards at their facilities. Our practice has grown. We have seen diversification of the

are currently used for agriculture, forestry, or similar purposes—because it tends to save energy and resources and helps build and restore existing communities. See id.

^{141.} An ecodistrict is a "neighborhood that combines livability, green infrastructure and community decision-making." PORTLAND SUSTAINABILITY INST., THE ECODISTRICTS INITIATIVE: GETTING TO NEXT GENERATION NEIGHBORHOODS (2010), https://www.mayorsinnovation.org/images/uploads/pdf/22ecodistricts 10-22-10.pdf.

^{142.} Master Report of Interviews, supra note 68, at 7.

^{143.} Id. at 10.

^{144.} *Id.* at 8.

^{145.} Transit-oriented development is walkable and mixed-use development around transit nodes such as rail or mass transit stations. *See* TRANSP. RESEARCH BD. OF THE NAT'L ACADS., TRANSIT-ORIENTED DEVELOPMENT IN THE UNITED STATES: EXPERIENCES, CHALLENGES, AND PROSPECTS S-1 (2004).

^{146.} Master Report of Interviews, supra note 68, at 5.

^{147. &}quot;A microgrid is a local energy grid with control capability, which means it can disconnect from the traditional grid and operate autonomously." U.S. Dep't of Energy, *How Microgrids Work*, ENERGY.GOV (June 17, 2014), https://www.energy.gov/articles/how-microgrids-work.

^{148.} Master Report of Interviews, *supra* note 68, at 7.

^{149.} Id. at 9.

client base, including now big banks, apparel companies, private equity firms that are looking at potential investments, and technology companies.¹⁵⁰

Finally, some lawyers who once practiced law related to sustainability have now moved into consulting or nonlegal positions on sustainable development. One explained, "I am helping a green building organization with some of its programs. I am doing sustainability consulting for corporations and not-for-profit clients. I also work with professionals who are traditional environmental lawyers, and also many, many lawyers who have transitioned from law to sustainability consulting."¹⁵¹ Another runs a business that sells "software to create, implement, and manage strategic sustainability plans."¹⁵² Still another works for a nongovernmental organization that is devoted to addressing climate change and sustainable development.¹⁵³

B. Types of Legal Work

These lawyers perform a wide variety of legal work. This includes counseling, transactional work, litigation, advocacy, and drafting. Perhaps the most common type of legal work in this context is client counseling. Much of it, of course, is traditional client counseling about compliance with statutes, regulations, and other legal requirements, including assistance in complying with those requirements.¹⁵⁴ These regulatory requirements include California's cap-and-trade program for greenhouse gas emissions.¹⁵⁵ Much of this work is counseling related to litigation or potential litigation, including enforcement actions.¹⁵⁶ For some lawyers, counseling does not just occur in an office setting; at least one speaks to corporate boards of directors about SEC reporting and disclosure requirements related to sustainability.¹⁵⁷

In addition to traditional counseling about compliance with applicable laws, lawyers that do sustainability-related work also counsel clients on how to move toward or achieve sustainability. Lawyers are required to address legal issues related to sustainability, of course.¹⁵⁸ But the ABA Model Rules of Professional Conduct also provide: "In rendering advice, a lawyer may refer not only to law but to other considerations such as moral, economic, social and political factors, that may be relevant to the

157. Id. at 30.

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^{150.} Id.

^{151.} Id. at 5.

^{152.} Id. at 7.

^{153.} See id. at 7.

^{154.} See id. at 5–9.

^{155.} Id. at 6.

^{156.} See id. at 5-9.

^{158.} MODEL RULES OF PROF'L CONDUCT r. 1.1 (AM. BAR ASS'N 2014). ("A lawyer shall provide competent representation to a client. Competent representation requires the legal knowledge, skill, thoroughness and preparation reasonably necessary for the representation.").

client's situation."¹⁵⁹ As a result, lawyers may raise sustainability issues even when they are not grounded in specific legal rules. At the same time, a lawyer is generally required to abide by a client's decision about how to proceed in any matter.¹⁶⁰ As described in greater detail below, many lawyers specifically counsel their clients on a variety of sustainability matters—explaining the desirability of particular options based on reduced cost, greater efficiency, improved reputation, enhanced likelihood of compliance, and other factors. As will also be seen, clients may or may not follow that advice.

In addition to counseling, sustainability-related work in law practice also involves a great deal of transactional work. Brownfields redevelopment is a good example of this type of work. As one lawyer explained:

With transactional work, I assist with negotiating the contractual provisions that allocate environmental liability and risk between the parties to a deal. The clients for that work can be buyers or sellers as well as tenants or lenders. With brownfields redevelopment work, I assist in putting together teams to execute remediation strategies for a site. In that role, I serve as an environmental oncologist, excising the environmental cancer impacting a site so redevelopment can occur. The clients for that work are typically developers. In both roles, the ultimate goal is to make sure properties are positioned so they are marketable, lendable, and developable.¹⁶¹

Much transactional work involves sustainability projects other than brownfields redevelopment, and the legal aspects of these projects can be complex. An attorney who works for a large city described the legal effort required to design, construct, and operate a bio-gas recovery project at a sewage treatment plant.¹⁶² "How do you do a complex project in a city framework, dealing with millions of rules on procurement and other issues? It is like running an obstacle course to do a project."¹⁶³ For financial reasons, a bank owns the facility—which was largely designed by the city and built by a city-selected contractor—and the bank has leased the facility back to the city.¹⁶⁴ This attorney said, "In order to do a project like that, you have to be a transactional attorney; you can't just be a regulatory lawyer. This is about writing, negotiating, managing, and selling contracts."¹⁶⁵

Other transactional work for these lawyers involves solar energy, including negotiation of power purchase agreements, site agreements, construction agreements, finance agreements, and tax-related counseling.¹⁶⁶

^{159.} *Id.* r. 2.1.

^{160.} Id. r. 1.2(a).

^{161.} Master Report of Interviews, supra note 68, at 7-8.

^{162.} See id. at 8.

^{163.} *Id.*

^{164.} *Id.*

^{165.} Id. at 8–9.

^{166.} See id. at 32.

For green leasing, the transactional issues tend to be about setting up a structure whereby the owner can get certification under the U.S. Green Building Council's Leadership in Energy and Environmental Design (LEED) program.¹⁶⁷ In addition, the leasing arrangements need to be structured "to make sure tenants do what needs to be done to keep LEED certification."¹⁶⁸ For other lawyers, transactional work in an environmental setting involves mergers and acquisitions; private equity deals; and "all sorts of offerings on the public market, including both issuers and underwriters, and strategic litigation counseling."¹⁶⁹ One attorney negotiates contracts between smaller start-up companies with a sustainability orientation "and larger companies who are interested in them and their line of business. An example is a set of agreements between a ride sharing company and major airlines that have an interest in that capability."¹⁷⁰

Many of these lawyers are active in litigation. While litigation is a traditional part of legal practice, some lawyers are using it to advance sustainability.¹⁷¹ A lawyer who does a lot of transactional work related to solar energy explained that sometimes "deals go bad."¹⁷² This lawyer said in one case, the solar collectors installed as canopies over a parking lot collapsed, resulting in litigation.¹⁷³ Another lawyer who does enforcement defense work sees this work in a sustainability context:

The first step in achieving a resolution with government enforcement is correcting the violation. But compliance programs have sustainability components. Almost always, the system does not work because of sustainability concerns, such as inappropriate consumption of resources or discharge of pollutants. When you fix a system, you fix a process. A lot of sustainability is avoidance—pollution prevention, material substitution, upfront design issues. On a wastewater treatment plan with compliance issues, for example, we are counseling the client to re-evaluate the design to incorporate energy sustainability (energy recovery to provide heat and reduce energy usage costs), which can avoid multiple problems, such as noncompliance, permitting, and operational costs.¹⁷⁴

Advocacy on behalf of sustainability is another important skill for these lawyers. They comment on proposed regulations and proposed gov-

172. Id.

173. Id.

^{167.} Geoffrey M. White et al., Green Building Rating Systems and Leases, in THE LAW OF GREEN BUILDINGS 15, 22 (J. Cullen Howe, Michael B. Gerrard & Frederick R. Rucci eds., 2010).

^{168.} Master Report of Interviews, supra note 68, at 32.

^{169.} Id. at 5.

^{170.} Id.

^{171.} On the other hand, one lawyer who does not do much litigation expressed skepticism about the value of litigation to foster sustainability, saying that litigation does not address the required behavioral changes. *Id.* at 32.

^{174.} Id. at 33–34.

ernment agency actions; testify before congressional and legislative committees, lobby legislators, and government agencies; and present arguments before city councils, zoning hearing boards, and corporate boards.¹⁷⁵ One lawyer who left law practice for a period said: "I came back to being involved with the law because I saw that there is an enormous amount of work to do on advocacy."¹⁷⁶ This includes "helping people understand how things are connected, and how some things that seem okay are really bad in the long run."¹⁷⁷ Two lawyers identified advocacy involving brownfields remediation as demonstrating how sustainability arguments can broaden the range of issues being considered as well as potential solutions. One explained: "In negotiations with environmental agencies about contaminated site remediation, I raised sustainability arguments about impacts of the remedy on other environmental media and on the community."¹⁷⁸ Another worked on a remediation case where the property owner, a refinery, was in bankruptcy. The bankruptcy trustee asked this lawyer to see if it was possible to turn the site into a solar farm. The overall objective, this lawyer explained, was to "actually make money for the estate."¹⁷⁹

Drafting is another frequently employed type of work for lawyers engaged in sustainability. Drafting is a powerful tool for advancing sustainability because it involves writing the public and private laws that govern the behavior of individuals, businesses, and organizations in specific contexts.¹⁸⁰ Drafting on behalf of sustainability includes drafting proposed statutes, regulations, and municipal ordinances representing best practices in sustainability; drafting private governance agreements for land development (including homeowner associations, commercial associations, codes, covenants, and restrictions); and editing various disclosure documents.¹⁸¹ One lawyer helped revise a smarter municipal regulation involving water use and conservation.¹⁸² "In my city, we were charging less on a per-unit basis the more water that was used: we turned it upside down. charging more for greater per-unit water use."183 Another lawyer who works in human rights and corporate social responsibility explained the range of her firm's drafting activities: "We do everything from policy and standard development to developing contract language and vendor guidelines."184

Drafting is more than scrivener's work and it is not merely legal; it requires an attorney to conceptualize how particular actions on behalf of sustainability will actually work in the real world, and to make sure that

^{175.} See id. at 30–32.

^{176.} Id. at 31.

^{177.} Id. 178. Id.

^{178.} *Id.* 179. *Id.*

^{180.} See Dernbach & Cheever, supra note 6, at 265–66.

^{181.} See Master Report of Interviews, supra note 68, at 30–32.

^{182.} Id. at 31.

^{183.} Id.

^{184.} Id. at 9.

the legal rules as drafted will work in practice. This in turn requires a solid understanding of the subject matter, which frequently involves matters that are not strictly legal in nature. A lawyer who works on sustainable land use and community planning explained:

A lot of document drafting is a formality, and a lot of lawyers throw that in for free. They don't realize how much damage can be done with a bad document, because it is so hard to change; once you start subdividing a property, it is possible to destroy a lot of value of property with bad documents. A lot of bad legal writing masks fuzzy thinking. A lot of my work involves looking at a master plan and visualizing it at each stage of development, and figuring out what needs to be done at each stage.¹⁸⁵

Other types of legal work or skills were also identified. One lawyer's firm serves as a facilitator for multi-stakeholder dialogues—a form of collaborative decision making that engages all actors that have a stake in the decision.¹⁸⁶ This lawyer facilitates dialogues on a variety of issues, including voluntary principles for security and human rights.¹⁸⁷ Other lawyers need to have the ability to collaborate effectively with scientists on specific projects because their firm includes scientists as well as lawyers.¹⁸⁸ Many mentioned pro bono, community service, or public education work on sustainability.¹⁸⁹

Finally, one lawyer emphasized that many people trained as lawyers can successfully use their skills in nonlegal settings:

I see so many lawyers who are in the consulting space. The skills that lawyers bring to the table are an ability to communicate orally and in writing better than almost every other professional sector, and to critically analyze a situation. I see that over and over again. Some lawyers also have the ability to convene all players, get them to the table to achieve a particular result, and deliver it.¹⁹⁰

IV. DYNAMICS OF ATTORNEY–CLIENT CONVERSATIONS ON SUSTAINABILITY

Understanding the dynamics of conversations that lawyers have with their clients on sustainability involves at least three issues: the circumstances under which clients raise sustainability issues with their attorneys,

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^{185.} Id. at 30.

^{186.} Id. at 32.

^{187.} Id.

^{188.} See id. at 31.

^{189.} See, e.g., id. at 23, 30, 45.

^{190.} Id. at 30.

the circumstances under which attorneys raise sustainability issues with their clients, and what attorneys say in those conversations.¹⁹¹

A. When Clients Raise Sustainability Issues with Attorneys

A great many lawyers interviewed for this Article said that their clients come to them for sustainability-related legal work precisely because these lawyers, their firms, or both, specialize in the kind of legal work sought. Others said clients come to them with questions about business risks and opportunities, questions that they can answer using a sustainability lens. By contrast, very few said their clients rarely or never come to them for legal help on sustainability-related matters. One who does a lot of work for real estate developers said that clients "are driven by the bottom line, including lender concerns about project costs."¹⁹² This attorney added that clients "don't want to spend on green if they are not going to realize a financial benefit."¹⁹³

Many attorneys said that their clients choose them because of their overall work on legal aspects of sustainable development. One who works on a broad range of sustainability-related issues said, "Clients come to us for this."¹⁹⁴ Another, whose client base includes "social enterprise clients," says it is easier to attract other similar clients "because they are seeking an integral approach to their business; sustainability is part of their DNA. How the business treats the planet and people is just as important to them as profits."¹⁹⁵ A lawyer with a broad range of clients explained it this way:

Clients consult me with respect to environmental health and safety programs. In that context, they consider sustainability. I help and advise them on methods and approaches to be more sustainable. Development clients approach us on wanting to include sustainable design into their projects, for a variety of reasons. We help them with that. Energy-user clients approach us about concerns relating to greenhouse gas issues, and we counsel them on that.¹⁹⁶

Similarly, attorneys who work in-house for a governmental or nongovernmental client committed to sustainable development described a high level of interaction with people at all levels of the organization who are interested in advancing sustainability. Sometimes the client's movement toward sustainability occurs with a noticeable shift. In 2011, the National Research Council (NRC) published a report called *Sustainability*

^{191.} The interview material in this Part is primarily drawn from answers to Question 5 ("Under what circumstances do your clients raise sustainability issues with you?"), Question 6 ("Under what circumstances do you raise sustainability issues with your clients?"), and Question 7 ("When you talk to clients about sustainability, what do you say?") in the Appendix. See infra Appendix.

^{192.} Master Report of Interviews, supra note 68, at 22.

^{193.} Id. at 22.

^{194.} *Id*.

^{195.} Id. at 19.

^{196.} Id. at 20.

and the U.S. EPA, which recommended that EPA adopt a comprehensive approach for integrating sustainability into its decision-making processes and strategic objectives.¹⁹⁷ A lawyer working for the EPA before and after the NRC issued the report said that, before the report, the EPA did not ask for much legal help on sustainability matters. However, the "report really changed that. We got asked to turn that into a path forward for EPA, and that has now been incorporated into EPA governance structure because it is in EPA's strategic plan."¹⁹⁸

Many clients come to attorneys because of their expertise in specific sustainability-related issues. A lawyer with considerable national experience in financing renewable energy and energy efficiency projects and programs said: "I'm lucky enough to have a number of clients for whom these issues are very important. This is a self-selecting process."¹⁹⁹ The clients of another lawyer—who has deep expertise in community planning and mixed-use development— "are starting from the position that mixed-use developments are inherently more sustainable."²⁰⁰

Some clients in the chemical industry are especially interested in obtaining legal help to assist them in moving toward sustainability. A lawyer who works for many of these companies explained:

Sustainability is embedded in their entire construct. For some clients, sustainability is a motivator for creation of new technologies. If we are deploying a particular technology for a particular use, we are looking to diminish its effects in particular applications, both because it is the right thing to do and because it won't otherwise pass EPA screening. Sustainability is always there. It is very rarely the case when we ask if they are concerned about tort liability, worker health and safety, or the like.²⁰¹

Clients come to other lawyers because of their expertise with public disclosure. A lawyer who does this work explained: "At the end of the day, what a publicly traded company has done and what it is going to do must be disclosed in SEC-regulated documents, and through other media and reports, and to the public on websites."²⁰² This lawyer's role is to help publicly traded companies "sharpen their disclosure" to the SEC, as well as in other disclosure documents; to make sure the disclosure documents are accurate and consistent; and to help companies tell their story.²⁰³ The lawyer continued:

203. Id.

^{197.} COMM. ON INCORPORATING SUSTAINABILITY IN THE U.S. ENVTL. PROT. AGENCY, *supra* note 24, at 49–50.

^{198.} Master Report of Interviews, supra note 68, at 19.

^{199.} Id. at 21.

^{200.} Id. at 20.

^{201.} Id. at 21.

^{202.} Id. at 19.

There is also a strategic corporate direction part to this for consumer-facing clients, which means most companies. A global food company may have concerns about what is in its food, which may have a social, environmental, or other component. A company may want to change the perception of its profile to be more sustainable in order to recover market share.²⁰⁴

In some cases, lawyers are sought when a law or regulation makes it hard or impossible to do what the client believes is sustainable. Many said laws that foster or encourage unsustainable development are a recurring and substantial problem. One attorney who works with industrial clients explained her challenge:

Typically, the issues we are battling now involve EPA's regulation of recyclable materials and secondary hazardous materials. Because of the sham recycling history and EPA's policy on this,^[205] clients that are exercising attempts to be sustainable by adopting really efficient processes—such as closed loop recycling and putting chemical intermediates back into manufacturing—are leading EPA to say these are sham recycling. If EPA is trying to hammer people who are doing green chemistry and more sustainable practices, then where are we going to go?²⁰⁶

A land use and development attorney told a similar story:

Many times, because of the reputation I've developed over many years of this kind of work, clients come to me wanting to do a sustainable project but there are all kinds of legal or regulatory obstacles. When my projects include components of New Urbanism—things we want to do to increase pedestrianism—they typically violate local laws, and we have to get these laws changed. We want to harvest water but we are not allowed to harvest water. We want to introduce a new non-toxic wood product, but the treated lumber industry blocks it.²⁰⁷

In other cases, clients come to lawyers on sustainability issues because of sustainability-related concerns about risk, opportunity, or both. Clients come to one attorney because they "perceive a sustainability risk, whatever that may be. It might be the manufacture of a hazardous chemical or something in the workplace."²⁰⁸ Clients also come to this attorney because sustainability provides a "business opportunity to operate more efficiently (use less energy, less water) or obtain a reputational advantage."²⁰⁹ "Companies are getting smarter about the upside to this, as

^{204.} Id.

^{205.} See Jeffrey M. Gaba, *Rethinking Recycling*, 38 ENVTL. L. 1053, 1072–73 (2008) (explaining the history and policy of sham recycling in the EPA).

^{206.} Master Report of Interviews, supra note 68, at 21.

^{207.} Id.

^{208.} Id. at 19.

^{209.} Id.

opposed to merely managing risk."²¹⁰ In a somewhat similar vein, clients come to another lawyer under two circumstances (both of which involve opportunity): In one, the client is told that it needs to be green (sustainable), and it does not know how.²¹¹ In the other, a client wants to build a project in a more sustainable manner, and needs legal help getting it done.²¹²

B. When Attorneys Raise Sustainability Issues with Clients

In raising sustainability-related issues with clients, there is a spectrum of approaches. On one end of the spectrum are lawyers who do not need to raise sustainability issues because their clients already embrace sustainable development. One lawyer said: "If sustainability is not consistent with their core philosophy, we tend not to work with them."²¹³ On the other end of the spectrum are lawyers reluctant to raise sustainability issues at all if their clients do not raise them. These lawyers assume that if clients have not already raised them, then these clients are not interested. A lawyer who specializes in brownfields cleanup said: "When I raise these issues, they say 'we are hiring you as our environmental oncologist, and we only want your input on the remedial aspects of the project."²¹⁴

The center of the spectrum is much larger than either end. At the center are lawyers who believe they have a fiduciary duty to explain risks and opportunities related to sustainability, when these would benefit the client. Some lawyers raise sustainability-related questions and suggestions based on what the client cares about and the level of the client's interest in sustainability. Some lawyers have standard questions, programs, and tools related to sustainability that they routinely share with clients.

Many lawyers frame the decision to raise sustainability issues with clients in terms of their professional responsibility. As a matter of professional responsibility, Stephen Gillers wrote that lawyers have a fiduciary duty toward the client that is based on "trust and confidence."²¹⁵ This duty requires the lawyer to act with "solicitude for, candor toward, and tenacity on behalf of the client within the scope of the work the lawyers has been hired (or appointed) to do."²¹⁶ While the fiduciary status of lawyers does not add to their other duties to clients (including competence and diligence), "it is instead meant to drive home the point that we expect lawyers to observe their obligations fully and without reservation."²¹⁷

213. Id. 214. Id.

^{210.} *Id*.

^{211.} *Id.* at 22. 212. *Id.*

^{212.} *Id.* 213. *Id.* at 25.

^{215.} STEPHEN GILLERS, REGULATION OF THE LEGAL PROFESSION: THE ESSENTIALS 18 (2009).

^{216.} Id. (emphasis omitted).

^{217.} Id. at 76.

Thus, when sustainability-related issues provide opportunities to benefit clients or raise risks of which the client may be unaware, some of these lawyers believe they need to raise those issues. As one explained: "All of us as fiduciaries are honor-bound to maximize opportunities for our clients. You have to educate your client on anything that would enhance your client's opportunity for success—to get what the client wants with as few commercial hurdles and legal obstacles as possible."²¹⁸ A straightforward way this works, another explained, occurs when "they have not yet perceived a risk that we have seen in the history of other companies in the same sector, or they don't have programs that their competitors do. This is also true for business opportunities."²¹⁹

Lawyers often raise sustainability questions with their clients when, and to the extent that, the lawyer believes their clients are interested. A lawyer who does considerable corporate work explained:

There are two kinds of lawyers: One believes in sustainability, sees all these risks related to it, and encourages clients to understand and mitigate or manage the risks. When a lawyer does that, management responds by asking what they should do or by blowing it off as "BS" and deciding they will deal with it when someone raises it. The other kind of lawyer says, "the client will tell me when they have a risk they want help with."²²⁰

To be the first kind of lawyer—the one that believes in sustainability—the lawyer must have a good understanding of the client's goals and orientation. One said, "The issue here is: Where is my client on the sustainability journey?"²²¹ Another explained how understanding the issues the client is sensitive to—reputational risk, litigation risk, or social responsibility—affects how that lawyer will approach explaining sustainability-related issues to that client.²²² An energy lawyer simply points out to clients that "there are other ways and places they can go that serve them at other levels. It is just part of conversation, not where I am preaching."²²³

Often, these lawyers are in the position of explaining sustainability-related options that are either cost-saving or revenue-producing. According to a longtime environmental lawyer, the economic bottom line is a powerful driver for providing sustainability-related legal advice:

I raise it when there are opportunities for tax credits and other economic benefits, when it can assist them in marketing or preserving their market. You can't really raise issues just because it is a good thing

^{218.} Master Report of Interviews, supra note 68, at 25.

^{219.} Id. at 23.

^{220.} Id. at 24.

^{221.} *Id.* at 24. Another put it more bluntly: "This is for people I know; I don't do this for everybody." *Id.* at 23.

^{222.} Id. at 25.

^{223.} Id. at 24.

to do; you have to raise it because it is of economic benefit to shareholders.²²⁴

Sometimes these lawyers advocate for what they believe is a more sustainable remediation (at a contaminated site) that would also be less expensive to the client.²²⁵ A clean energy finance lawyer provided a similar explanation:

Lots of times you can help them along at margins. Energy efficiency saves money. If you do electricity storage with a solar system, you improve operation of the grid and get paid for doing so. Lots of times the sustainable thing to do is also the right thing to do from a money-saving point of view.²²⁶

Sometimes, one lawyer explained, clients do not mention sustainability but "sustainability issues are embedded or implicit in their request for legal advice."²²⁷ This lawyer used these questions as examples: "What is the cheapest way to clean up this Superfund site? How do I get this enforcement case over with? What are the risks of this strategy?"²²⁸ Other lawyers "counsel clients on how they incorporate sustainable measures into their projects if they don't raise it with us."²²⁹ Another encourages clients to include sustainability as part of their project or product if it "is going to need public or regulatory support."²³⁰ A lawyer who works on hazardous waste issues raises sustainability "whenever we are looking at a waste stream. I ask: 'Why are you generating this? Do you want to have to deal with these rules?"²³¹

A land use and development attorney said at other times clients come to lawyers when something the clients want has simply "gone wrong or is not happening."²³² This lawyer explained:

They may not identify the issue as a sustainable development issue, but it is clear to us that it is. Why do people have so little disposable income in downtown? Part of the answer is that they are spending too much money on transportation and not enough on housing. So, we work on transit-oriented development.²³³

- 226. *Id.* 227. *Id.* at 20.
- 228. Id.
- 229. Id. at 24.
- 230. Id. at 25.
- 231. *Id.* 232. *Id.* at 19.
- 232. *Id.* at 1 233. *Id.*

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^{224.} *Id.* at 23. 225. *See id.* at 24.

^{225.} See Id. at 24 226. Id.

A lawyer who does extensive work on corporate public disclosures described another context where the client does not raise sustainability issues, but where legal advice related to sustainability is needed:

Today, reporting material sustainability issues is gaining prominence. Clients ask: "What is legally required and what are the legal ramifications of reporting based on what stakeholders are asking?" The lawyer's job is to ask: "Do you understand that there are issues under the umbrella of sustainability that present risks?" For example, there are climate change risk factors for all of a business's investments. If the company is in the insurance business, how are they taking account of risks of increased disease, migration, and other public health effects?²³⁴

A lawyer who works with many multinational corporations does not broadly raise sustainability-related issues with clients, but rather sees the sustainability framework as akin to medicine, "looking at the patient holistically."²³⁵

When a client comes to me with a problem that opens a portal to sustainability analysis, I will look at it through that portal. Then we don't have twelve discussions about the same symptom—for example, worker dust-inhalation-claims at different facilities over time. That may be indicative that the company is using materials that are not sustainable or sourced sustainably, and alternatives may exist that will eliminate the entire issue.²³⁶

Sometimes this legal advice is directed at those within an organization who can use it to advocate a particular outcome to more senior management. One environmental lawyer in private practice gives sustainability-related legal advice when "I am trying to give broader strategic advice about what approach would likely produce the best long-term outcome for the company or institution."²³⁷ The lawyer explained:

A bunch of in-house environmental counsel and environmental health and safety managers also care about the environment, and you can work with internal champions. You can give them advice they can share with their business people. There is often an opportunity to appeal to the broader interests of environmental counsel or chief sustainability officers who do care about it, and who think sustainability is in the interests of the company.²³⁸

When the opportunity to raise sustainability issues with clients arises, many lawyers have "menus" of issues, tools, and options to share with

^{234.} Id. at 24.

^{235.} Id. at 23.

^{236.} *Id.*

^{237.} Id. at 24.

^{238.} Id.

them. Options include various tax incentives, rebates, and grant programs.²³⁹ Tools often include specific methods or areas of expertise that lawyers have developed to address particular problems. One lawyer presents "social entrepreneur clients" with a "menu of sustainability choices," including rules of corporate citizenship, writing into the company's bylaws how the company treats people and the planet, and getting needed sustainability certifications.²⁴⁰ A real estate development lawyer who has developed expertise in solar energy and other aspects of sustainable real estate development said that "[i]f I start the conversation, it generally needs to be an economic conversation."²⁴¹ This lawyer has a standard approach:

The client may buy an industrial building with a big roof. I say you can put solar panels on the roof, and you can make money. That starts the conversation, and the client gets an eight percent return on its investment. Then the client comes back and says: "What else is in your bag of tricks?" And then I talk about LEDs. And that is how you make converts. This is how you get their attention.²⁴²

Many of these lawyers acknowledged that clients do not always accept these suggestions.²⁴³

Another indication of client responsiveness is seen in answers to a follow-up question that many of the lawyers were asked about the amount of time they spend doing sustainability-related work. While most answered that all, or nearly all, of their time is devoted to sustainability-related work, others answered that only half of their time is devoted, and two answered that below twenty-five percent of their time is devoted to sustainability-related work.²⁴⁴

C. What Attorneys Say in Sustainability Conversations

This Part of the Article has thus far discussed the circumstances under which clients raise sustainability issues with lawyers, and the circumstances under which lawyers raise these issues with clients. Either way the conversation begins, what do lawyers say? Of course, if there are relevant public or private laws, those laws would need to be discussed. As previously explained, some aspects of sustainable development are required or supported by law, but many are not.²⁴⁵ Beyond that, many attorneys believe that a critical starting point is understanding what the particular client needs and wants. Other attorneys described the importance of framing a

^{239.} Id. at 8, 23–25, 33.

^{240.} Id. at 23.

^{241.} *Id.* at 25. 242. *Id.*

^{243.} Id. at 38-40.

^{244.} Id. at 50.

^{245.} See supra Introduction.

conversation with clients in terms of risks and opportunities. These two points of emphasis, of course, are not mutually exclusive.

Many explained that what they say during these conversations depends upon the client. One attorney, who does a lot of work with sustainability-oriented start-up companies, underscored this point by focusing on the listening aspect of an attorney–client conversation: "I mostly just ask questions: How important is sustainability to you? Do you simply want to comply with the law or do you want to be aspirational?"²⁴⁶ In addition to a client's commitment to sustainability, other values or issues are often part of this conversation. One lawyer's experience is that the conversation tends to depend on the client's mix of "conservation values (water, energy, natural resources) and economic values (things that can be done more cost effectively or are more affordable)."²⁴⁷ Another explained his approach in this way:

For clients who don't care about climate change, I talk to them about reducing cost through using less energy, buying cheaper, and using less. Why wouldn't one be interested in that? If there is ancillary benefit to environment, that doubles the bang for the buck. Much of it is about return on investment, and is pitched as efficient.²⁴⁸

In addition, one lawyer explained the importance of comparing a client's performance to its peers: "Clients try to benchmark themselves, asking where they fit in terms of their peers. Sustainability may come into that discussion: Are they consistent with best practices?"²⁴⁹

An attorney with a long career in private practice (who now runs a sustainability company) framed the key issues in terms of understanding what the client needs and wants:

When you talk to a client about sustainability, it is in many ways like being a therapist talking to a patient, and you are trying to figure out whether the patient is willing and ready to do the work or is in denial. It would be easy if we could deal with sustainability as a compliance matter and tell the client, "you must do A, B, C, and D on sustainability." And there is a legal framework like that for some sustainability matters (pollution, labor standards, etc.). But really there is no law or regulation for all issues, and certainly none at the sustainability best-practices level. So the conversation is instead about efficiencies, and evaluating and managing sustainability-related risks and opportunities, like generating revenue with new products and services or entering new markets.²⁵⁰

^{246.} Master Report of Interviews, supra note 68, at 26.

^{247.} Id.

^{248.} Id.

^{249.} Id. at 28.

^{250.} Id. at 27.

The risks and opportunities of sustainable development, of course, depend on what goods or services the client is producing, or where the client is planning to locate. An environmental attorney thus tailors a standard approach, based on assessment of risks and opportunities, to a specific discussion about risks and opportunities for a particular client:

I put sustainability issues into the context of risk within their industry if they do not address these issues, and opportunities they could realize if they addressed these issues. Perhaps for some industries, if one markets a product that has green components, such as household cleaners that are greener, they can capture greater market share.²⁵¹

Another attorney, who does considerable work in the land use and zoning area, sees and communicates sustainable development issues in terms of risk:

Today we are telling people not to build in high-hazard areas so you don't get flooded. There are risks of climate change that are being picked up by conservative markets—banks, lenders, secondary mort-gage markets. If a client is not assessing these risks—and our job is due diligence as lawyers—then I'm seeing an opportunity that perhaps others have not opened their eyes to.²⁵²

Others make a broader argument that a sustainability approach will benefit the client and relevant stakeholders. One environmental attorney habitually asks clients: "Can't we make this look better for everybody by doing (fill-in-the-blank)?"²⁵³ Another tells clients: "I say, 'this is a matter that will be important to some of the people you work with, and will be important to more people over the next decade, and if you want to deal with this issue, you should do it now."²⁵⁴ An attorney with extensive corporate experience said:

There is no way to summarize it. The simplest thing to say is that to the extent sustainability principles represent good holistic management—whether from a governance, or process, or business perspective—then I encourage that approach. I believe they are best served by looking at an issue as part of a larger suite of related concerns and opportunities, all of which are embraced by sustainability-related principles.²⁵⁵

Another attorney summarized his approach in this way: "To make this work long-term, and minimize your long-term liabilities and transaction costs, you may want to consider the broader environmental and social

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^{251.} Id. at 26.

^{252.} Id. at 48.

^{253.} Id. at 27.

^{254.} Id. at 28.

^{255.} Id. at 26.

context."²⁵⁶ For contaminated sites, that means doing "a good cleanup so it doesn't come back to bite you later."²⁵⁷ For another attorney, that means "getting stakeholder feedback or input from the community in designing" a development project.²⁵⁸ It might be better to "spend more time and money now, to save a lot more time and money later by achieving a sustainable result."²⁵⁹ Depending on the situation, this attorney makes a business case, a case based on reputational risk, a case based on demonstrating "you care about the community and the environment," or a case based on what competitors are doing related to sustainability.²⁶⁰

Interestingly, many lawyers make these arguments without mentioning sustainability, sustainable development, or climate change. Several of the lawyers said that many clients will not listen to an explanation based on climate change.²⁶¹ One attorney uses "efficiency" as a substitute for sustainability: "Efficiency is as big a term as you want it to be. They can't hear the S-word [sustainability] in the middle of the country."²⁶² Another uses "sustainability principles and concepts" as a substitute for the term itself:

I have lots of sustainability conversations in which the word sustainability never comes up—such as about governance, supply chains—but which are based on sustainability as it is properly understood. People hire lawyers, not preachers, and no one wants to be preached at. You can make a lot of good medicine that will go down with the right amount of sugar.²⁶³

A green building and community development lawyer explained the dynamics of such conversations:

A lot of times I tell them how to save money, how it will give them an economic advantage in the marketplace. We talk about almost everything, except "that is the right thing to do and will save the world." That doesn't mean I don't have clients that believe that. If I have to persuade them though, these other aspects get emphasized. In my state, many clients have engineers who tell you that a more sustainable model will cost you more. I tell them they have the wrong engineer. If you had an engineer who knew more, that engineer would tell you how to do this in a way that would cost you less and create more community benefits. The challenge here is to convince a client of both intrinsic benefits (lower cost, increase in tenants, lower operating costs, higher retention rate for tenants) and extrinsic benefits (that might benefit the

^{256.} Id. at 27.

^{257.} Id.

^{258.} Id.

^{259.} Id.

^{260.} *Id.* 261. *See*

^{261.} See id. at 26.262. Id. at 28.

^{263.} Id. at 26.

community or the environment and would mean that the community is more likely to support your project).²⁶⁴

This lawyer added that there are often limits in how far an attorney can go in arguing for the intrinsic benefits of sustainable development:

Some clients are wary of attorneys who pitch intrinsic benefits. The clients see the attorneys as engaging in advocacy. They worry that you are advocating something and if they say no, your heart won't be in advocating for their position. I had one client who hired me because I pushed back against what he proposed, but I would move his project forward whether I won or lost our internal arguments. He didn't buy all of the things I suggested as sustainable but he bought a lot of them.²⁶⁵

When a client is fully engaged in an effort to achieve environmental and social sustainability, on the other hand, the conversation can be more fruitful. Another attorney is working with benefit corporations and B Corporations, two closely related types of for-profit corporations formed not only to make profits but also to produce social and environmental benefits.²⁶⁶ This attorney explained:

Lawyers are creative people who can make positive change. At the end of the day, the question is whether we are able to have a conversation about how to have all three things at the same time: economic prosperity, environmental stewardship, and social responsibility. Companies are not able to stop being bad overnight. We are working with a B Corporation that has been willing to lay bare everything, and their goal is to stop contributing bad stuff. They know where they want to go, but have no idea how to get there yet. When you engage an entire company in that way, people get extraordinarily creative; the challenge is thrown down and a solution emerges over time.²⁶⁷

^{264.} *Id.* at 28.

^{265.} Id.

^{266.} Id. at 31; see also Jay Love, Benefit Corporation vs. Certified B Corp in Plain English, BLOOMERANG (Aug. 17, 2015), https://bloomerang.co/blog/benefit-corporation-vs-certified-b-corpin-plain-english. Both are alternatives to nonprofit status for a company. Id. A benefit corporation exists by virtue of state law; a B Corporation is a benefit corporation that has also been certified by a third party for measurable social and environmental performance, accountability, and transparency. Id.; see also Matthew J. Dulac, Sustaining the Sustainable Corporation: Benefit Corporations and the Viability of Going Public, 104 GEO. L.J. 171, 173–79 (2015) (providing a primer on benefit corporations, including the 2013 Delaware statute authorizing benefit corporations).

^{267.} Master Report of Interviews, supra note 68, at 31.

V. PERSONAL AND PROFESSIONAL QUALITIES OF LAWYERS DOING SUSTAINABILITY WORK

Understanding the personal and professional qualities of these lawyers is important for two reasons:²⁶⁸ First, for someone considering sustainability in law practice—whether a student entering law school or an experienced practitioner looking to change direction—it is useful to know what people in this field think and believe because that information may be helpful in making a decision. Second, for legal educators, this information may be helpful in designing curricula and programs, as well as in teaching classes.

A. How They Became Interested in Sustainability

A few of these lawyers say they have a lifelong interest in sustainability and sustainability concepts, and some developed their interest during college or jobs prior to law school. For many, an interest in sustainability grew out of their work in environmental law. But some were led to sustainability by specific workplace or community experiences involving projects, perspectives, clients, or colleagues, which exposed them to sustainable development concepts. These experiences fed a sense of dissonance between what they were then doing and what they wanted to do, which led them to move their career more in the direction of sustainable development.

Many lawyers reported a lifelong interest in sustainable development concepts. A clean energy finance lawyer explained:

I was a charter subscriber to an energy efficient home magazine, *New Shelter*, which started in the 1970s or 1980s. It was all about how to build a passive solar-house, and collect rainwater, and have composting toilets—real practical advice. I grew up with a grandfather who taught botany and started arboretums, and my mother knew the names of all the trees and was an organic gardener. I read *The Sand County Almanac*^[269] fairly early on.²⁷⁰

Others developed an interest during college.²⁷¹ One participated in the first Earth Day (a national teach-in on the environment in 1970) as a

^{268.} This Part draws primarily on interview answers to Question 3 ("How did you get interested in sustainability?), Question 9 ("What personal or professional characteristics are most essential to your sustainability work?), Question 10 ("What do you find most rewarding about your sustainability work?"), and Question 11 ("What do you find least enjoyable or most frustrating?") in the Appendix. See infra Appendix.

^{269.} ALDO LEOPOLD, A SAND COUNTY ALMANAC AND SKETCHES HERE AND THERE (1949) (classic work in conservation and environmental protection).

^{270.} Master Report of Interviews, supra note 68, at 13-14;

^{271.} See *id.* at 11, 14–15. Interestingly, one attorney became interested in sustainability when he stepped out of law practice for several years to do teaching and research at a major university:

In my university position, the big areas were climate change, biodiversity, and sustainability. I also was working with forestry, and sustainability has been an important part of forestry for a long time. This is an emerging area, and you can't get into an emerging area as

college student.²⁷² Several had science-related majors.²⁷³ Another developed a particular sustainability-related interest in college that led to a job in that area after law school.²⁷⁴ This attorney studied the duties of multinational corporations in college.²⁷⁵ That led to work after college at a corporate social responsibility company that performed screenings of a company's performance for investors.²⁷⁶ When this attorney was in law school, the field of corporate social responsibility did not exist.²⁷⁷ The attorney worked as an intern during law school at a "group that was filing a lot of litigation against companies," but was "more interested in facilitating dialogue with companies," and saw that nongovernmental organizations and "companies were not particularly good at talking to each other."²⁷⁸ After law school, this attorney found a law firm interested in this type of work.²⁷⁹

One lawyer became interested in toxic metals after dropping out of college and taking a job at a residential training institute for people with severe mental disabilities.²⁸⁰ At that job, the lawyer learned that nine of the residents traced the origin of their disability to heavy metal poisoning experienced while working at coal-fired power plants.²⁸¹ This lawyer subsequently did considerable work on energy efficiency and renewable energy:

I worked for the state's only residential training institute for people who were severely retarded. I was picked to work with the twelve most difficult men, and most were in their mid-fifties. I got interested in why they were mentally retarded. One was trauma, two were genetic, and the other nine were heavy metal poisoning, mostly mercury and lead. Many of these men were kids when they were exposed to these heavy metals. So I went to law school to get lead and mercury out of kids' brains.²⁸²

Another's interest in sustainability grew out of training and work experience prior to law school as a chemical engineer. "We don't make waste and don't like to waste. Chemical engineering requires mass balance; my

easily when you have to have billable hours, etc. When I returned to private practice, however, I saw that my clients were interested in sustainability.

Id. at 11.

- 274. *Id.* at 275. *Id.*
- 275. *Id.* 276. *Id.*
- 270. Id. 277. Id.
- 278. Id.
- 279. Id.
- 280. Id.
- 281. Id.
- 282. Id.

^{272.} Id. at 14.

^{273.} *Id.* at 11, 14. 274. *Id.* at 15.

brain is not organized to accept waste. When I worked as an on-scene coordinator for the Superfund cleanup program, I saw the result of operations that saw no downside to generating waste."²⁸³

Some lawyers have spent their entire careers working with clients to advance sustainable development. The attorney discussed earlier who does corporate social responsibility work provides one example.²⁸⁴ Another example is provided by an attorney who does considerable work with start-up companies interested in sustainability:

I started working with shade-grown organic fair-trade coffee, with a give-back model. They provide some of their proceeds to help educate kids in that part of the world. After that, I became more and more interested in those business models, and never gave up. Then the firm said, "You ought to be our firm's guy."²⁸⁵

For many, practicing law led them to sustainability. Some are environmental lawyers who became knowledgeable about sustainability as part of their overall practice, often because they thought broadly about how the companies and businesses they represent affect the environment and the communities in which they operate. For at least one lawyer, this interest intensified over time: "As you age, and you become a grandfather, you think about what kind of legacy you and others leave behind for your grandkids."²⁸⁶

To no small degree, as previously explained, many key concepts of sustainable development are embedded, albeit imperfectly, in environmental laws and their implementation.²⁸⁷ An attorney with a lot of experience working for the EPA explained:

The common thread of my work in the agency has been achieving environmental goals in ways that are in harmony with social and economic goals. I assume that they are not automatically in conflict. This began in the Clinton Administration "Reinvention" era. We didn't call it sustainability then. When we discussed reinvention, we used terms like "cleaner, cheaper, smarter." We found it wasn't just cheaper; it could also advance environmental goals. Then we found that this aligned with what others were calling sustainability.²⁸⁸

A good number of lawyers became interested in sustainability when they saw the limits of simple compliance with environmental laws. One

^{283.} Id. at 14.

^{284.} See id. at 11.

^{285.} Id.

^{286.} Id. at 14.

^{287.} See supra Introduction.

^{288.} Master Report of Interviews, *supra* note 68, at 11; *see also* Sheila M. Cavanagh, Robert W. Hahn & Robert N. Stavins, *National Environmental Policy During the Clinton Years* 9–10 (Res. for the Future, Discussion Paper No. 01–38, 2001) (discussing the history of the "Reinvention" era and summarizing the history of the Clinton Administration's environmental policy).

dates his interest in sustainability to his experience in granting and denying permits for storm water discharges.²⁸⁹ The conventional approach is to use pipes to move storm water to treatment plants, but this approach is expensive.²⁹⁰ By contrast, green infrastructure—the use of permeable areas, green roofs, rain gardens, and other features that allow water to be absorbed into the ground—is less expensive and generates environmental and social benefits.²⁹¹

The idea that we were physically and chemically impairing waterways with relatively benign discharges got me very interested. The issue is not what is in water; the issue is volume. How do you avoid overwhelming urban creeks? We began to look at green infrastructure to address the issues we had. We have looked at reducing volume and also at the redesign of urban waterways to help manage runoff.²⁹²

Taking a management position at a major pharmaceutical company led another attorney to sustainable development:

My job was about managing risk and looking for opportunities. It was more preventative. That is what moved me toward sustainability. Many of the larger companies have the luxury of being more progressive and forward looking, and they look out ahead of environmental regulation. They have to manage risks that are not yet regulated. There are business opportunities from managing risk better, being greener, operating more efficiently, and utilizing fewer natural resources. And so many times companies are out ahead of regulation in order to grab opportunities.²⁹³

Many lawyers became interested in sustainable development through real estate work. For one lawyer, it began with the realization that most of the real estate transactions that the lawyer worked on were in "greenfields, which are previously undeveloped areas that may have been used for agriculture or forestry."²⁹⁴ Around the same time, this lawyer became very interested in LEED and began exploring many of the legal ramifications of LEED for developers, landlords, tenants, and contractors.²⁹⁵ Another lawyer, who has done considerable work in walkable communities and New Urbanism, was introduced to sustainability shortly after law school, when two real estate law firm jobs did not work out.²⁹⁶ With a baby, this lawyer decided to work from home.²⁹⁷ An attorney from the second firm

^{289.} Master Report of Interviews, supra note 68, at 15.

^{290.} See U.S. Env't Prot. Agency, What is Green Infrastructure?, EPA, https://www.epa.gov/green-infrastructure/what-green-infrastructure (last visited Sept. 19, 2017). 291. See id.

^{292.} Master Report of Interviews, supra note 68, at 15.

^{293.} Id. at 11.

^{294.} Id. at 13

^{295.} Id.

^{296.} Id. at 6.

^{297.} Id.

this lawyer worked at introduced this lawyer to a prospective client planning a new community.²⁹⁸ This lawyer has been doing that kind of work, for this and other clients, ever since.²⁹⁹

The recession that began in 2008 brought at least one lawyer, who had spent the bulk of his career doing "all things real estate," to practice in the sustainability arena.³⁰⁰ In 2009, this lawyer's firm started a sustainability department:

The biggest reason for starting the department was the real estate crash; real estate work dried up, and I was looking for another area of practice. Also in 2008 the state legislature adopted a law creating one of the largest incentives for renewable energy. We started getting a client base with a lot of millennials and professionals who weren't interested in living in the suburbs, and who were willing to entertain paying more to be in a green building. And there were retailers and other businesses who recognized that this would be a good business model, and would give them a marketing advantage.³⁰¹

Another lawyer's career went through several phases before starting to work on sustainable development. This lawyer started at a firm as a real estate attorney, but soon began "establishing a practice that could be called 'environmental aspects of real estate transactions.'"³⁰² The firm then began asking this lawyer to do more land use projects:

Because of my environmental reputation, I got big, nefarious projects-landfills, coal co-generation projects, medical waste, mining projects, and exploratory oil wells. I developed a practice working on projects where people filled auditoriums opposing my projects. At one point, a woman asked me how I could sleep at night. I said, "Unless you are walking home, to a home that uses no power and you eat all of your garbage, you expect all of these facilities to be in someone's back yard; you just didn't want it to be yours. I sleep just fine." My undergraduate degree was in philosophy, and I went home and did a "gut check," and I was not where I wanted to be. But it was not for the reason she thought. My landfills were many times better than those the state had been using. The co-gens [combined heat and power, or cogeneration plants³⁰³] were more efficient than the conventional plants. My oil well was safer. It wasn't those projects that kept me awake-it was the shopping centers and subdivisions that chewed through irreplaceable habitat. Those kept me awake. In 1988, I began doing New

^{298.} Id.

^{299.} See id.

^{300.} Id. at 15.

^{301.} *Id*.

^{302.} Id. at 14.

^{303.} Cogeneration/Combined Heat and Power (CHP), CTR. FOR CLIMATE & ENERGY SOLUTIONS, https://www.c2es.org/technology/factsheet/CogenerationCHP (last visited Sept. 19, 2017) (co-gens are combined heat and power, or co-generation plants).

Urbanist projects. I met the "green mafia"—leading voices of sustainable development—in a green development project. I decided that was what I wanted to do—focus on sustainable development and New Urbanism.³⁰⁴

Community work introduced sustainable development to yet another group of lawyers. One helped to start up a regional green building council. "I have never been in an organization where people are more committed, where the environment was more stimulating," this lawyer said.³⁰⁵ "It was infectious. I was the founding director and I am really proud of that."³⁰⁶ Another lawyer started learning about sustainable development through friends and local organizations. At the same time, the firm this lawyer worked at became interested in sustainability.³⁰⁷

B. Most Essential Personal and Professional Characteristics for Sustainability Work

Many of the most essential characteristics of a lawyer practicing law related to sustainability are the same as those of a good lawyer: good analytical, speaking, writing, research, and advocacy skills; an ability to work effectively with clients and others; and an appetite for hard work. The personal and professional characteristics identified by these lawyers as most essential to their sustainability-related work begin with these characteristics.³⁰⁸ But these lawyers emphasized six basic characteristics central to practicing law related to sustainability: (1) expertise in, and even passion for, sustainability; (2) an ability to listen well; (3) open-mindedness, curiosity, and creativity; (4) good analytical and problem-solving skills; (5) patience; and (6) an ability to think big picture and long term. As a whole, they overlap with but extend beyond the skills of most lawyers.³⁰⁹

What follows are the personal and professional characteristics that these lawyers identified as most essential to their work:

1. Expertise in, and even passion for, sustainability.

These twenty-six lawyers, of course, all have this characteristic. One said that expertise in sustainability includes "what it means, relevant legal frameworks, best practices, what other companies in the industry are doing

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^{304.} Master Report of Interviews, supra note 68, at 14.

^{305.} Id. at 12.

^{306.} Id.

^{307.} Id. at 26.

^{308.} See id. at 33–35.

^{309.} A word of caution about this list is appropriate. These lawyers typically did not identify more than three or four characteristics; many identified only one or two; and many identified as the most important characteristic something that most or all of the others did not identify at all. Thus, it is inappropriate to conclude that these lawyers or any lawyer doing work related to sustainability possesses all of the characteristics identified here in equal measure. As one attorney explained in answering this question, "There is not one model of a typical lawyer in this space." *Id.* at 35.

in sustainability, and what government policies are relevant."³¹⁰ Another explained the importance of mastering the wide variety of issues that arise in this "quickly trending and developing area."³¹¹ At least one is LEED Accredited Professional (AP) certified, which means that this lawyer has significant expertise in green building.³¹²

For many, mere expertise is not enough. One explained that "you have to have a genuine interest in it" to understand the environmental, economic, and social facets of any given issue and "all of the different parties that will be impacted."³¹³ Another said passion for the concept is necessary to "articulate issues in an industry-friendly fashion."³¹⁴ Another emphasized: "Enthusiasm helps. You have to convince people."³¹⁵

2. Ability to listen well.

One lawyer said, "the key thing is hearing what people really want so you can find a solution for everyone."³¹⁶ Another spends "a lot of time listening to clients, trying to figure out various approaches to address a particular problem."³¹⁷ Still another stressed the importance of understanding whether the "client is asking a sustainability question or if sustainability is relevant even if it is not explicitly asked about."³¹⁸

3. Open-mindedness, curiosity, and creativity.

These qualities are grouped here because they overlap and because many attorneys explained themselves in this way. A lawyer who works with developers said: "I am constantly questioning why architects, engineers, or planners do something in a certain way, so we can unlock creative ways of meeting their goals while accomplishing those goals in a more sustainable fashion."³¹⁹ Another described intellectual flexibility, imagination, and creativity as essential:

That's why I like the work. We need to develop new answers to questions. It is not a field for lawyers who are comfortable doing the same thing year after year with the same forms. It is a field for people who are prepared to invent or be creative. Yet as a counterpoint, you can't be operating in the ionosphere. You have to be realistic and pragmatic.³²⁰

Id. at 34. 310. 311. Id. 312. Id. at 12. 313. Id. at 33. 314 Id. at 34. 315. Id. 316. Id. at 33. Id. at 35. 317. 318. Id. at 34. 319. Id. 320. Id. at 33.

In the realm of environmental law, several lawyers said sustainability means thinking creatively about how to solve problems, and suggesting solutions that are different from what would ordinarily be considered:

You can't be focused on what not to do or how to stay in compliance. This is the big challenge I see for lawyers in sustainability. As a lawyer, you need to have the personality to go beyond compliance to help the client find ways to get things done, to find legal levers to help the client accomplish what they want. You can't simply say no. If you are working on obtaining a permit, you need to find a way to help the client meet the requirements in a more sustainable way.³²¹

A good example of this creativity is provided by a lawyer in private practice with a municipal client.³²² The lawyer proposed a public–private partnership to enable the city to combine ground source geothermal energy recovery with subsurface storm water recharge basins.³²³ Because the project would be privately owned but operated on behalf of the city, the owner would be able to take advantage of tax credits, and the city would be able to take advantage of private capital.³²⁴

One lawyer who counsels many small companies said it was not just necessary for the attorney to be creative.³²⁵ The attorney must also have "a love of working with creative people. Some of the people I work with are the coolest people ever. Most of my developers are 'mom and pops.' They want to make money but they see themselves as stewards of the land and they want to create something enduring."³²⁶

4. Patience.

Several emphasized the importance of being patient with clients, particularly when they are resistant or do not understand.³²⁷ They emphasized the importance of explaining, translating, and clarifying issues related to sustainability. One said: "You have to keep winnowing down the negative conversation about why we would do that, and what are the benefits to us."³²⁸

5. Good analytical and problem-solving skills.

One lawyer with significant experience working with major corporations said sustainable development is "multi-disciplinary and multi-focal."³²⁹ The multiple focal points of sustainable development, of course,

321. Id.

- 322. See id.
- 323. Id.
- 324. *Id.*
- 325. See id. 326. Id.
- 327. Id. at 33, 39.

329. See id.

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^{328.} *Id.* at 33.

are defined by its environmental, social, and economic dimensions.³³⁰ This attorney emphasized the importance of "being able to take all sorts of information and synthesize it and critically evaluate it toward the end of solving a problem."³³¹

6. Ability to think big picture and long term.

The multiple focal points noted above and the intergenerational aspect of sustainable development require lawyers who work in this area to approach problems from a broad perspective. The three pillars, one said, require "a much broader lens"-the ability to "connect seemingly disparate ideas and work areas"—and to break down silos.³³² From this perspective, for example, legal advice on forest protection is not just about the forest itself but also about economic development and community protection.³³³ Another described "an ability to think about things at a meta or systemic level, and then drill down to components of that to more granular levels, and move back and forth between systemic and granular levels."³³⁴ Others emphasized the need to care about "long-term outcomes; you can't just be focused on billable hours or the cheapest short-term outcome for your client."³³⁵ An attorney has to think about "what the world is going to be like in fifty or sixty years," said another who worked with Native Americans.³³⁶ This attorney explained that Native Americans "introduced me to the idea of thinking seven generations ahead."³³⁷ One said that some lawyers can do big picture thinking and some cannot:

A certain kind of lawyer does project finance and public-private partnerships. Some people are natural project managers. It involves keeping a number of large complex documents in mind and how they fit together. Some people do this well and some do not. Lawyers tend to be detail oriented and not big picture. To do project management, it helps to be a big picture person. It is not so different for sustainability.³³⁸

C. Most Rewarding Aspects of Sustainability Work

A great many of these lawyers identified the achievement of specific and positive results as the most rewarding aspect of their work related to sustainability. Many said they found it satisfying to explain sustainability projects to clients and particularly satisfying to convince clients who are either uninformed or skeptical. Others identified the work itself, saying it

^{330.} See supra Introduction.

^{331.} Master Report of Interviews, supra note 68, at 33.

^{332.} *Id.* at 49.

^{333.} *Id.* at 33.

^{334.} Id. at 34.

^{335.} *Id.* 336. *Id.*

^{330.} *Id.* 337. *Id.*

^{338.} Id.

is enjoyable and intellectually engaging. And some said the most rewarding aspect is working with likeable and talented people.

Many described the most rewarding aspect of their work in terms of specific projects or laws to which they contributed, where they made some positive difference. One said: "I am always flabbergasted by the incredible opportunities to do things that are more effective, save money, create local and lifelong jobs, and beautify neighborhoods."³³⁹ Another lawyer said the work is "always about the good I'm doing. Understanding that there is actual good and bad that can be done is an important divining rod in what we do.⁷³⁴⁰

Another attorney explained the potential for sustainability to accomplish good outside of the United States, particularly in developing countries where many of this attorney's clients operate:

On a global geopolitical level, it is the opportunity to create extraordinary good in places that should not have to experience primitive and benighted approaches, or walk the same resource-intensive pathways to prosperity for their people, as developed countries did. There are generation-skipping technologies and theories. If an advanced solid waste sorting technology could be implemented in Nairobi, for example, you could remanufacture or up-manufacture up to ninety-five percent of what is currently being disposed of.³⁴¹

They expressed this in terms of "helping the community,"³⁴² "contributing toward nudging the world in the direction it should be going,"³⁴³ or making the state "a better place to live."³⁴⁴ One explained sustainabilityrelated legal work in terms of "making a positive difference in the world for mankind and the environment, beyond solving a narrow legal problem."³⁴⁵ Another likes "the idea that by helping clients reuse existing property and infrastructure. I am not contributing to metastasizing urban sprawl that chews up greenfields."³⁴⁶

Many attributed this ability to do this kind of work to their clients. "You collect enough clients that want to do the right thing," said an energy finance lawyer, "then you get to do the right thing most of the time."³⁴⁷ This lawyer added that it is "getting better all the time."³⁴⁸

Id. at 36. 339. 340. Id. 341. Id. 342. Id. 343. Id. 344. Id. 345. Id. 346. Id. at 37. 347. Id. 348. Id.

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While many find satisfaction in getting specific projects done, others expressed satisfaction in drafting laws that are subsequently enacted, or in helping to get those ordinances or laws adopted. One attorney who helped write the regulations for a five-cent tax for plastic bags for a major city said that "seeing this in operation is amazing."³⁴⁹ Another—whose work in drafting and implementing laws at the state level has led to significant reductions in that state's greenhouse gas emissions—has found such "structural reform" especially satisfying.³⁵⁰

Some were nonetheless bluntly cautious or circumspect about the limits of what they are helping to achieve. Many cast their work in terms of reducing negative impacts rather than in terms of achieving positive impacts. One lawyer actually makes a difference "on some days."³⁵¹ Another sometimes influences a client "to do something that has decreased their footprint."³⁵² Still another found it satisfying when "you can make progress. It is all a drop in the bucket. But it is progress."³⁵³ A lawyer who specializes in sustainable community-development projects said:

The thing I find most rewarding is when we get to create a project that truly makes the community better than it would have been without the project. This is a really high standard. So much development diminishes the community. It is so hard to deliver development that not just sustains but makes things better. That is the standard I strive for when working for sustainable development.³⁵⁴

Others find satisfaction in explaining to clients why more sustainable approaches are better and how they will work. One enjoys "persuading companies to invest in a new technology that is truly better, safer, and more efficacious than something that has been used for years."³⁵⁵ Another who specializes in legal work related to sustainable communities said, "The part I love the best is rolling out that master plan with the client, and spending hours talking about the possible things that could happen with this property."³⁵⁶ Many find particular satisfaction in convincing skeptical clients. This explanation is illustrative: "I love it when people who are so certain that what they want to do is right for the world realize that a lower cost, less intrusive solution is in fact better for the environment."³⁵⁷

Some attorneys emphasized that they find the work enjoyable and intellectually engaging. "It is fun," one attorney said.³⁵⁸ Another described

349. *Id.* at 36. 350. *See id.* at 37.

351. *Id.* at 36.

352. Id.

353. *Id.* at 37.

- 354. Id.
- 355. Id.
- 356. Id. at 36.

357. Id.

358. Id.

it as "an endless horizon. That's the most exciting thing. It is just beginning, and you can't see where it will go."³⁵⁹ Another, with a long and diverse career in the public and private sector, said:

What is wonderful about this field is that it so diverse. It never ceases to engage me intellectually. My career has been very multidimensional-it has been sustaining and nurturing. I can't think of another career that has been as sustaining and challenging. By contrast, I know a lawyer who has been a bankruptcy lawyer for thirty-five years, and this has been a very static area of law. Sustainability is a very dynamic area of law, policy, and thought leadership.360

Another explained the work in terms of tracking social expectations concerning business performance on sustainability:

Something I particularly enjoy is being a trend spotter-where societal expectations are trending. Companies need to comply with mandatory standards but also with developing and evolving standards. I am a curious person and find the work intellectually stimulating. I also feel I am playing a part in defining and refining the core performance expectations for companies-not just law and policy but also what they expect they should do. Playing a role in that conversation is very rewarding.³⁶¹

Some expressed their greatest satisfaction in terms of the people with whom they get to work. One explained this as "having a community of people in your office who I can work with to realize the vision of sustainability."362 Another said: "People who work in sustainability tend to be very nice. This is not a joke; it is true. They are interested in cooperation, working across department lines, and encouraging departments to look at alternatives and options to be more sustainable."363 Several commented on the great talent of the people with whom they work. One enjoys mentoring "young millennials who are 'wicked smart' to assist in getting things done."³⁶⁴ One lawyer responded to the question of what is most rewarding or satisfying by saying:

Everything. It does not get any better than this. I get out of bed at six thirty in the morning and think about how fast I can get to the office. When I started this work, I got completely overwhelmed and a bit depressed. At a certain point, we made a conscious decision to stop focusing on the negatives. We explain issues factually, and then we dive into the solutions. We don't talk about whether a company is good or not. I prefer not to talk to people who aren't interested in working on

- 359. Id.
- 360. Id.
- Id. at 37. 361.
- Id. at 36. 362. Id. at 37.
- 363.
- Id. at 36. 364.

solutions. We work with great people and all of the great ideas that can get a business to the triple bottom line.³⁶⁵

D. Least Enjoyable or Most Frustrating Aspects of Sustainability Work

Many lawyers reported that they found little or nothing unpleasant or frustrating about their sustainability work.³⁶⁶ Others answered by talking about work–life balance, time sheets and billing, the administrative aspects of big-law-firm practice, or their organization's lack of resources—none of which are directly related to sustainability work.³⁶⁷

But the great majority of these lawyers did not feel this way, and there was a great range in the aspects of their practice they find least enjoyable or most frustrating. Some were frustrated with clients that did not understand or support sustainability. Others identified public opposition based on ideology or misrepresentation, or simply public ignorance of basic science and environmental policy, as the least enjoyable part of their practice. Some are frustrated with the slow pace of progress, particularly on energy and climate change. And some find legal barriers to sustainability the most frustrating aspect of their practice, and the time and difficulty of accomplishing sustainability activities and projects. As will be seen below, there is some overlap between these aspects of legal practice and what these lawyers see as the greatest obstacles to sustainability.

Many complained about some of their clients, often distinguishing between clients they enjoy working with and clients they do not enjoy working with: "I meet clients who want to be best in the field and clients who are dragged into the field kicking and screaming," one attorney explained. ³⁶⁸ A common complaint from these lawyers is about clients engaged in "narrow, short-term thinking."³⁶⁹ One attorney described such clients as "focused purely on minimizing short-term cost—how much you pay to settle the case or close the deal, and how much you pay your lawyer to do it."³⁷⁰ Another common complaint is clients who lack a basic "understanding of science and policy behind sustainability and environmental protection" (e.g., climate change, chemical loading),³⁷¹ or who resist attorney suggestions "based not on facts but on politics."³⁷² The attorneys said that these and other factors often mean that those clients are not interested in analyzing a problem from a sustainability perspective, or looking at the additional options that a sustainability analysis would provide.³⁷³

^{365.} Id. at 37.

^{366.} See id. at 38-39. One responded, "I really can't say." Id. at 38.

^{367.} See id. at 38-40.

^{368.} *Id.* at 40.

^{369.} Id. at 38.

^{370.} Id.

^{371.} Id.

^{372.} Id.

^{373.} Id. at 38-40.

An attorney who has worked extensively on cleaning up contaminated sites explained these problems in terms of the "limited role of the attorney in big picture decision making."³⁷⁴ This attorney said:

When I talk to clients about what they are going to do next, after the property is cleaned up, about whether they are going to do a green building, etc., that falls on deaf ears. There is a perception that energy efficiency and green building are more expensive than they really are. My overall frustration is not getting a place at the table in the overall conversation.³⁷⁵

Another attorney explained that the least enjoyable aspect of working with clients is the patience it requires. Yet, this attorney said that sometimes patience pays off:

I have had to be patient with individuals within companies and with companies themselves. All are at different stages of their sustainability journey. There is often dissonance between what needs to be done and what companies and individuals are able to do. But when people understand what they can do, and what they can encourage other people to do, they move pretty quickly. It is waiting for the "aha" moment that is the hardest thing to do. When that happens, it is extraordinarily wonderful; the best thing ever. We spend a lot of time thinking about how to get people to the "aha" moment faster.³⁷⁶

Another group of these lawyers said that the most frustrating aspect of their sustainability work is public opposition, based on ideology or outright misrepresentation, to specific proposals or projects. A lawyer who does considerable legal work for solar industry clients complained about the "blowback that the industry gets from people who are not knowledgeable."³⁷⁷ In one case, this lawyer's client proposed a solar energy project for a school system that had demonstrable economic advantages, but one school board member was simply opposed to solar energy.³⁷⁸ Another echoed that point in describing the least enjoyable aspect of sustainability work:

Ideological intransigence; that's number one, head and shoulders above everything else. It is a whole cluster of things. If I have an American value, it is that we recognize problems soberly and solve them intelligently. When people talk about socialism, conspiracy, property rights—this requires an entirely differently skill set, and it impedes problem solving.³⁷⁹

^{374.} Id. at 39.

^{375.} Id.

^{376.} Id.

^{377.} *Id.* 378. *Id.*

^{379.} Id. at 38.

One complained about the "Not In My Back Yard" (NIMBY) phenomenon that occurs on some of the land use projects on which this attorney works:

The most frustrating thing is when individuals or communities use legitimate sustainability issues to mask raw NIMBY-ism. Say a community really does not want adjoining development to happen. So, they raise issues about trees or endangered species that they have not cared about historically; they simply don't want development on the adjoining property. We can't work out a compromise on that issue because they are using it as a blocking issue. This gives a bad name to legitimate issues, because developers and engineers then see these simply as things to stop the project.³⁸⁰

Another framed the least enjoyable aspect of the work in terms of polarized national politics, particularly the people who are "utterly cynical"³⁸¹ in their opposition to specific EPA proposals:

It is hard enough to do this without fighting people who are lying. It's not just climate change. It is the assertion that a new EPA rule will bring the economy to a halt, when the reality is that the new rule will make us better off and not worse off. It is not only bad earth science; it is bad economics.³⁸²

Another group of lawyers said that what they liked least was not public opposition but rather the lack of public understanding. For some, this is based on the same concerns—about the lack of basic science and environmental-policy knowledge—as their clients. For others, there is a distinct regional dimension to this ignorance. One attorney who frequently travels to California says sustainability "is in the dark ages in my home state."³⁸³ In this attorney's view, that ignorance translates into having fewer clients available for sustainability-related legal work.³⁸⁴ Another attorney does not enjoy the "need to win the same battles over and over again."³⁸⁵ This attorney explained: "You can go to the state legislature and argue that energy efficiency would save money and reduce emissions. Then five years later you have to go back and defend the same program because it is threatened with budget cuts."³⁸⁶

For many attorneys, limited progress and the slow pace in moving toward sustainability are the most frustrating or least enjoyable aspects of their sustainability work, particularly work on energy and climate change. One found it frustrating that sustainability "is viewed as secondary and

^{380.} Id. at 39.

^{381.} *Id.*

^{382.} Id.

^{383.} *Id.* at 38.384. *See id.*

^{385.} *Id.* at 40.

^{386.} *Id.*

superfluous, or an afterthought, as opposed to ingrained in everything we are doing."³⁸⁷ Another who "learned about global warming in college in 1977" said, "we have been talking about the world of closed systems since the 1970s, and I wish we were farther ahead."388

One group of lawyers identified legal barriers, and the time and difficulty of getting sustainability projects and actions done, as the part of their work that they liked least. Within this group, a common complaint heard is that the laws themselves get in the way. One criticized a township code that requires LEED projects to get a variance for energy-efficient lighting and waterless urinals, rather than simply allowing them.³⁸⁹ The need to get a variance, of course, adds time and expense to these projects because of the need to prove that a variance is warranted.³⁹⁰ A land use lawyer frequently butts against "wrongheaded legislation that won't let us do the best possible plan," such as requirements for more parking spaces than are needed for a particular place.³⁹¹

For others, the difficulty of navigating existing laws and policies to get more sustainable projects and activities approved is what they like least. One complained how it is difficult to satisfy all stakeholders for a proposed project or activity, saying that "ninety-nine percent of the time not everyone is going to be happy."³⁹² Another complained how bureaucracy and lengthy review processes for complex projects (in a municipal setting) can "wear you down."³⁹³ This lawyer said it can also wear clients down.³⁹⁴ Hopefully, the lawyer added, they "stay the course, and stay enthusiastic."395

One attorney's work towards more sustainable outcomes repeatedly puts that attorney in the position of doing something for the first time, and not only for clients.³⁹⁶ The attorney installed six geothermal wells at home for heating and cooling, and subsequently received six water bills from the city. Then the attorney then had to work to get a city ordinance changed to fix the problem.³⁹⁷ The attorney said that this takes a personal toll; trying to be sustainable is unnecessarily difficult.³⁹⁸

Id. 389.

- Master Report of Interviews, supra note 68, at 38. 391.
- 392. Id.

- 394. See id.
- 395. Id.
- 396. Id. at 39. 397.
- Id.
- 398. Id.

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Id. at 39. 387.

Id. at 38. 388.

See JOSEPH WILLIAM SINGER, PROPERTY 648-49 (Vicki Been et al. eds., 3d ed. 2009). 390.

^{393.} Id. at 40.

VI. FUTURE OF SUSTAINABILITY IN LAW PRACTICE

The future of sustainability in law practice depends on answers to two questions: What are the major obstacles? Where are the jobs?³⁹⁹

A. Roadblocks to Sustainability

The question about the major obstacles to sustainability elicited many of the same answers as the question about the aspects of sustainability work that lawyers find least enjoyable or most frustrating. But the question about greatest obstacles to sustainability is less subjective and invited a broader perspective than a lawyer's own practice. Perhaps for that reason, the range of answers focused primarily on two points: public opinion and the limits of existing law.

Many said that public opinion is an obstacle because of public ignorance, providing many of the same explanations described above (e.g., ideology, lack of basic understanding about science and the environment).⁴⁰⁰ This, others said, contributes to the slow pace of change, which was also discussed above.⁴⁰¹ But many attorneys see the biggest obstacle to sustainability in terms of a personal unwillingness on the part of the public to make changes in their lives. People "have a hard time changing habits."⁴⁰² Another attorney said: "We have a consumer mindset. I grew up with parents of the Great Depression, and we were encouraged to save and reuse. How do you inculcate a philosophy of the light footprint? People talk the sustainability talk, but they don't walk the talk."⁴⁰³ One described "personal avarice and selfishness" as obstacles to sustainability.⁴⁰⁴

Other lawyers pointed not to ignorance or unwillingness to change but to numerous incorrect mental models or understandings of sustainable development. They said that a major source of misunderstanding is rooted in the perceived economy versus environment aspect of environmental regulation. One attorney said people see environmental regulation "as just environmental, without looking at social and economic benefits. Some people simply do not see connections. They might do better with environmental regulation if they saw social and economic benefits."

^{399.} This Part is thus comprised primarily of answers to Question 12 ("What do you see as the greatest roadblocks to sustainability?") and Question 13 ("Where are the jobs in sustainability and law?" (current and future)) in the Appendix. See infra Appendix.

^{400.} One attorney added that "people are too busy doing what they are doing to sit back and think about what they are doing." Master Report of Interviews, *supra* note 68, at 41. Another said the basic obstacle is the "lack of ability to show in one to five minutes what people can do to effect positive change at home, church, synagogue, school, or work. How do you get person, organization, community, or business involved? Everyone looks at each other, and no one moves." *Id.*

^{401.} See supra Section V.D.

^{402.} Master Report of Interviews, supra note 68, at 42.

^{403.} Id. at 43. Another attorney explained that it is "hard to persuade the average person they should lead a sustainable lifestyle." Id. at 41.

^{404.} Id. at 42.

^{405.} Id. at 41.

A lawyer who works with many businesses said people often believe that "profitability and sustainability are at opposite ends of the spectrum. That is wrong but that is absolutely how it works, and it grows out of environmental regulatory experience."⁴⁰⁶ Instead of putting profitability and sustainability at opposite ends of a line, whereby one grows as the other diminishes, this lawyer uses a coordinate grid with a horizontal X-axis representing profitability, and a vertical Y-axis representing sustainability. The grid shows how high-values for both profitability and sustainability are possible.⁴⁰⁷ "I draw pictures like that because it helps people understand it."⁴⁰⁸

Another obstacle is based on the view that sustainability should be supplanted by resilience, particularly as the climate changes and the need to protect structures and systems from disruption becomes more evident.⁴⁰⁹ But one lawyer explained how both views are necessary:

Sustainability and resilience are different. I can take an industrial user and put them completely off the grid on a more sustainable platform, say biomass. Then I do resilience analysis and determine that a system with only one source of power is less resilient than the grid with many generation sources. Greywater reuse^[410] is much more resilient than rainwater capture. We have to pay attention to when we are charting for resilience and when we are charting for sustainability.⁴¹¹

Still another obstacle to sustainability is based on the incorrect understanding that sustainability is unnecessary, more expensive, or both. One lawyer has had "clients, who are not qualified to do LEED building, say it is too expensive or cannot be done."⁴¹² Many of these clients have constructed buildings in a conventional way for decades, and do not see the need for change.⁴¹³ This attorney could not convince the environmental section of his state bar association to support changes in the state's building code to support LEED certification.⁴¹⁴ In a somewhat similar vein, another attorney explained the greatest obstacle as short-term thinking about sustainability and energy-efficiency investments.⁴¹⁵ While the benefits of such investments last for decades and create cost savings far in excess of their initial investment, this attorney said that many businesses will not

412. Id. at 41.

^{406.} Id.

^{407.} Id.

^{408.} Id.

^{409.} Dernbach & Cheever, supra note 6, at 279.

^{410. &}quot;Greywater is gently used water from your bathroom sinks, showers, tubs, and washing machines. It is not water that has come into contact with feces, either from the toilet or from washing diapers." *About Greywater Reuse*, GREYWATER ACTION, https://greywateraction.org/greywater-reuse (last visited Sept. 19, 2017). Greywater can be reused for watering or irrigation, among other things. *See id.*

^{411.} Master Report of Interviews, supra note 68, at 42-43.

^{413.} See id.

^{414.} *Id.*

^{415.} Id. at 43.

undertake energy efficiency unless their savings repay the initial investment within eighteen months.⁴¹⁶

The biggest challenge, a finance attorney said, is "changing various cultural attitudes."⁴¹⁷ This attorney explained: "If you go to a hotel and tell them you will save them five million dollars in their energy bill" with energy-efficient retrofits, "there is no one whose job it is to think about this."⁴¹⁸ The attorney said that many universities are thinking about this, but they are the exception.⁴¹⁹ "At high levels at many corporations, they get it but they do not get it several levels down" in the organization.⁴²⁰ In energy-efficiency finance, it is more important "to get customers to feel safe doing this new thing than to get finance itself. Financing is more mechanical; you don't have to fight entrenched skepticism."⁴²¹ The attorney further said that changing these attitudes will require not only a new generation of environmental professionals but also "a new generation of clients."⁴²²

The other basic obstacle to sustainability, cited by these lawyers, is limits in existing law. One type of obstacle that some recounted, which was described above, occurs when the law itself prevents or impedes a desired project or activity.⁴²³ But many lawyers see the limits of existing law in broader terms. For many environmental lawyers, environmental law is a necessary but insufficient condition for sustainable development. "Our environmental laws were written in the 1970s and early 1980s," one attorney said.⁴²⁴ "They don't incorporate sustainability. They are narrow, siloed, media specific, and don't take into account net environmental and social impact. We have an outdated environmental legal system and a political system that is too polarized to fix it."⁴²⁵ Another explained the limits of environmental law in terms of the underpricing of resources, such as water, which means that "people are not incentivized to save or protect" those resources.

The missing ingredient, many said, is legal rules providing a structure that guides and encourages sustainable behaviors and projects. According to one lawyer, this includes specific standards "against which we can calibrate our actions to that which we should be achieving."⁴²⁷ For this lawyer, the specific problem is the way in which the EPA implements certain laws, including the lack of measurable standards relating to sustainability:

^{416.} *Id.* 417. *Id.* at 42.

^{417.} *Id.* at 418. *Id.*

^{419.} See id.

^{420.} *Id*.

^{421.} Id.

^{422.} Id.

^{423.} See supra Section V.D.

^{424.} Master Report of Interviews, supra note 68, at 42.

^{425.} Id.

^{426.} Id. at 43.

^{427.} Id. at 42.

Without question, the rigid adherence to the way we've always done it at EPA staff level is frustrating. I adore all of the people we work with, but some in the federal agencies are not as aware of new technologies as they could be. There is an information gap, a lack of scientific awareness. Beyond that, there is sometimes a resistance to doing things differently than they have always been done. When you put in an application for a new chemical, there is an optional field question about pollution prevention. Even when you do fill in that field, there is no standard against which EPA program people measure the value of that information. Our chemical could be ten out of ten here, and the incumbent technology awful. But from an advocacy perspective, there is no demonstrable, measurable standard against which to advocate for the preferability of that chemical.428

Interestingly, an EPA attorney made a similar point but in a different context. The least enjoyable thing for this attorney is people who cannot get past the broad definition of sustainability stated by the Brundtland Commission.⁴²⁹ We need to "get past 'kumbaya," the attorney said, explaining that the Brundtland Commission's definition is "too abstract to be meaningful to a lawyer."⁴³⁰ The challenge, this attorney added, is to figure out what sustainable development should mean in specific contexts.431

A lawyer with substantial corporate experience said the biggest problem in achieving sustainability is

the absence of universally applied standards or metrics so that sustainable behavior is properly rewarded, and capital can be appropriately allocated in the global market. There is a lot of work ongoing in that area, but that is the issue that needs to be solved. Once that is solved, that is your ultimate top-down answer to sustainability. Everybody would aspire to be in that choir.432

B. Jobs in Sustainability and Law

The importance of knowing where to find sustainability-related legal employment is obviously important to law students and lawyers who are seeking such work. It provides many insights into how many jobs there are, what kinds of jobs there are, how to break into the field, and what to expect in the future. And yet it also sheds considerable light on what it means to practice law related to sustainability.

Among the lawyers interviewed for this Article, many said that legal jobs related to sustainability are everywhere, but they are not ordinarily labeled as such. Rather, these lawyers said sustainability is or should be a critical part of all legal work. Many identified specific workplaces (e.g.,

^{428.} Id. at 39.

^{429.} See id. at 38.

^{430.} Id. See id.

^{431.} 432. Id. at 41.

in-house counsel) or subjects (e.g., climate change) that are particularly amenable to sustainability-related legal work. At the other end of the spectrum, however, are lawyers who say there is little or no work, in part because of competition from consultants and other nonlawyers.

Many of these lawyers believe that sustainability-related legal jobs truly are everywhere, but that sustainability is not a subject like environmental law or energy law. Echoing the point frequently made when they described their own work, they said that they see sustainable development as a tool,⁴³³ lens,⁴³⁴ or prism⁴³⁵ that can be applied to all areas of law. To no small degree, these jobs are created by the lawyers who fill them based on the sustainability expertise they develop, as well as their ability to generate and maintain client interest in sustainability.⁴³⁶ As one attorney explained:

There is not a sustainability niche as its own niche. Sustainability can, however, be embedded in lots of areas of legal practice. It may come in on a remediation issue or permitting issue. Sustainability can be a significant part of the practice of a real estate lawyer; brownfields law is a perfect example of sustainability. Corporate lawyers have to think about the supply chain. It is not stand-alone; it is a skill or competency that people ought to have in a lot of different areas of legal practice. A lawyer who can use knowledge of sustainability effectively—not just spotting issues and telling a client what they can't do—but also finding opportunities and being forward looking—that's the skill. But that is just being a good lawyer. Can you help the client get toward what they want?⁴³⁷

A lawyer with substantial experience in corporate law said there will be more such jobs in the future:

As the world changes to embrace sustainability principles, the legal jobs will change everywhere. It will be infused in so many elements of corporate behavior that it will become a language you need to be familiar with, to speak, to do the job you are doing, just as you need to understand math to do the things you do. That flavor will be in every legal job. That will be the evolution of sustainability-related entities and objectives, percolating into societal behavior, corporate behavior, and interpersonal behavior.⁴³⁸

An energy finance attorney explained the availability of legal jobs in terms of the necessary and inevitable transition toward sustainability:

There is a huge amount of work. Over the next twenty years, if we do it right, we are going to remake the entire economy. The grid will work

^{433.} Id. at 45.

^{434.} Id.

^{435.} Id. at 7.

^{436.} See id. at 44.

^{437.} Id.

^{438.} Id.

differently. There will be a lot more behind-the-meter energy generation. There will be a whole new level of communications connectivity that goes along with energy connectivity. People are rebuilding the food chain, and lots of other things are going on. It is doing all of the things that lawyers do but with a certain consciousness about what you are doing. If that is what your client's goals are, you can help them achieve their goals.⁴³⁹

"This is a great time to be a lawyer," one said.⁴⁴⁰ Another explained: "Sustainability aspects of all projects will require lawyers to negotiate, to draft, to counsel, to implement, and to do all those things. You will also need lawyers to deal with problems that occur."⁴⁴¹

These jobs involve a wide variety of different areas of law.⁴⁴² Of these, climate change, renewable energy, energy efficiency, and environmental law were frequently mentioned.⁴⁴³ Other lawyers mentioned finance, business and human rights, SEC disclosure, development of new companies, real estate and land use, green-leasing, and sustainable communities.⁴⁴⁴ A land use lawyer explained: "They are all over the place—real estate, land use, energy, environment, international, and combinations of the above. They are in business counseling, business acquisitions, insurance, and finance, including mortgages and general due diligence work. I'm just getting started."

The specific places where sustainability-related legal work is more likely to occur also vary considerably, according to the combined answers of these lawyers. Some law firms are doing more of this work than others; as indicated earlier, many lawyers publicly characterize themselves as doing sustainability-related legal work.⁴⁴⁶ Several attorneys suggested in-house positions with either corporations or governments.⁴⁴⁷ A corporate social responsibility lawyer explained:

The expansion of social equity within sustainability has resulted in new types of positions. If you put social equity in sustainability, there is an expansion of roles for lawyers. Most of the expansion I've seen in sustainability positions has been inside corporations. Since 2008, there are a lot more sustainability positions that lawyers can fill that exist in large-scale corporations.⁴⁴⁸

445. Id. at 44.

448. Id. at 46.

^{439.} Id. at 46.

^{440.} Id.

^{441.} Id. at 45.

^{442.} See id. at 44–49.

^{443.} See id.

^{444.} See id.

^{446.} See supra Part I.

^{447.} Master Report of Interviews, supra note 68, at 45-46.

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Among government opportunities, several attorneys mentioned inhouse positions for municipalities. An attorney for a major city that is committed to sustainable development said the city received seventy resumes when it posted a water and storm water legal job with a major sustainability component.⁴⁴⁹ Another lawyer said that there are many sustainability-related legal tasks at the local level, but cautioned that "local government attorneys may be doing standard subdivision work eighty percent of the time, and sustainability work twenty percent of the time."⁴⁵⁰

Several attorneys mentioned working for nongovernmental organizations oriented toward sustainable development, and one works at such an organization.⁴⁵¹ These organizations may or may not involve the actual practice of law, including litigation. This attorney's organization "employs a bunch of lawyers in our policy program and disclosure work."⁴⁵² Another option that several mentioned is using legal and advocacy skills in contexts where one is not strictly practicing law.⁴⁵³ "These jobs and few and far between," one lawyer said, "but you are advantaged if you have a legal background, because some of what you touch is regulatory in nature."⁴⁵⁴

In answering the question about where sustainability-related jobs are, many of these lawyers offered advice to would-be lawyers in sustainability work. Much of this advice mirrored what others said about the nature of legal work related to sustainability—that it is a lens or prism through which to analyze problems in any field.⁴⁵⁵ "Young people tell me they want to be a sustainability lawyer," an attorney with many corporate clients said.⁴⁵⁶ "And I tell them to become a corporate lawyer, and then look for ways to affect every business in a more sustainability-related way."⁴⁵⁷ One said the same point can be made for other fields: "Take what is otherwise a traditional environmental or real estate, land use, or insurance job, and figure out a way to bring these ideas into your work, and push the envelope."⁴⁵⁸ Another explained this challenge to young lawyers against the background of a substantial increase in corporate sustainability reporting that has occurred in recent years, thanks in part to the standardization of reporting and auditing.⁴⁵⁹ This lawyer said:

A young lawyer wanted to work on sustainable corporate reporting, but she wouldn't have been hired by a Fortune 500 corporation be-

^{449.} Id. at 47.

^{450.} Id. at 46.

^{451.} See id. at 45. 452. Id.

^{452.} *Id.* 453. *Id.* at 45

^{453.} *Id.* at 45, 47. 454. *Id.* at 44.

^{454.} *10.* at 44

^{455.} See supra Section VI.B.

^{456.} Master Report of Interviews, supra note 68, at 44.

^{457.} Id.

^{458.} Id. at 44-45.

^{459.} See id. at 47.

cause she didn't have enough expertise in conventional corporate reporting. So, her choice was to work on conventional corporate reporting and work toward sustainable corporate reporting, or do niche work as part of a larger team. The question is: How much time do you want to spend doing things you don't want to do in order to do things you do want to do? There are a few pure positions but they are hard to come by.⁴⁶⁰

As several lawyers acknowledged, they or others have essentially created their own jobs in this way. A corporate social responsibility lawyer said, "A lot of people who are in this space created their own jobs. It requires a lot of persistence and resilience."⁴⁶¹ If you want to work on climate change, another said, "jobs are where you create them."⁴⁶²

At the other end of the spectrum, a smaller number of those interviewed said that there are few, if any, jobs in law related to sustainability. "There is more traction in sustainability in engineering or science," an environmental attorney said.⁴⁶³ "It seems very soft in law right now."⁴⁶⁴ Another environmental lawyer said: "I've been trying to broaden my practice into the sustainability arena, and I really haven't found anything out there."⁴⁶⁵ One lawyer has tried and failed to convince colleagues at that lawyer's firm, as well as other firms, to embrace sustainability:

Most law firms have not figured out how to monetize sustainability. Until they do, they are not going to pay attention. I've had those conversations, and advocated that every firm should have a sustainability practice group, but it is hard for them to make money doing that. If they can't make money or commit to pro bono, how can you convince people to do it?⁴⁶⁶

As several attorneys see it, the lack of legal jobs is due in no small part to competition from consultants or nonlawyers. This lawyer's explanation is illustrative:

When this all started, a sustainability lawyer might be the only sustainability person in the room. Now, there are consultants and internal sustainability staff and officers at corporations who have their own sustainability expertise at less cost. That has lowered the number of opportunities for sustainability lawyers.⁴⁶⁷

^{460.} Id. at 46. 461. Id. at 47. 462. Id. at 44. Id. at 46. 463. 464. Id. 465. Id. Id. at 45. 466. Id. at 46. 467.

CONCLUSION

In a fundamental sense, this Article is about the role of law and lawyers in achieving the transition to a sustainable future. The lawyers who do sustainability-related legal work tend to have a solid operational understanding of what sustainable development means and requires. They do a wide variety of legal work in many legal fields for a diverse range of clients. Their clients often come to them precisely because of their sustainability expertise, and they have developed savvy ways of raising sustainability issues and options when their clients come to them for other reasons. They find ways of reducing the adverse environmental and social impacts of their clients' actions, and find ways to create positive impacts. They are also maximizing environmental, social, and economic opportunities for their clients, and identifying better choices (if the client is open to those opportunities and choices). They have come to sustainability by a variety of routes, but they are passionate and knowledgeable in what they do. And they tend to recognize that sustainability can be part of every legal practice.

But it should also be clear from the variety of views expressed in this Article that they do not all think exactly the same way about sustainable development or the role of sustainability in law practice. And readers with experience in the practice of law, particularly environmental law, will have almost certainly recognized that some of what these lawyers describe in sustainability terms is the same kind of work that was described decades ago, in terms of cost savings or protection of the client's legal position by going beyond compliance.⁴⁶⁸ A lawyer who works with business start-ups described the role of attorneys in this transition by contrasting attorneys who see sustainability as a form of compliance with existing laws, and those who (like this lawyer) see the need for laws and lawyers that support and encourage sustainable development at the necessary scale:

When I started this, I looked at law firms and consultancies and banking firms, to see what they were doing. Sustainability covers it all. My working hypothesis is that most lawyers are adopting that brand to primarily describe an environmental regulatory practice rather than a corporate innovation or client-focused sustainability perspective. From the client's perspective, they are interested in sustainability as a regulatory compliance matter, trying to minimize the regulatory burden on their clients. There is a big disconnect in capitalism that requires a least common denominator-environmental law. But these regulations are not aspirational; they are a bare minimum.⁴⁶⁹

Some of what these lawyers describe in sustainability terms is almost certainly a relabeling of work that was previously described in other terms.

^{468.} BRUCE SMART, BEYOND COMPLIANCE: A NEW INDUSTRY VIEW OF THE ENVIRONMENT (1992). 469.

Id. at 48.

And some of the work described here is more modest—the use of sustainability to achieve compliance with environmental laws by cheaper and more efficient methods. But much of it is more far reaching—helping companies, businesses, and governments to achieve their ambitious sustainability goals, or nudging them to understand how a sustainability perspective can reduce the environmental and social harms they would otherwise create and even create economic, environmental, and social benefits. Given the magnitude of the climate change challenge and other sustainability issues, the aspirational part of sustainability almost certainly represents the future direction of laws and lawyers.

For all of these lawyers, however, sustainable development provides a common perspective and set of principles to guide decision making. All of them see how it leads to better decisions, however much they or others might wish to see even better decisions or see better decision making employed at a vastly greater scale. By understanding what they all do, we better understand how law and lawyers can contribute to a more sustainable society.

APPENDIX

SUSTAINABILITY IN LAW PRACTICE

QUESTIONS FOR LAWYERS

Name:

Title and Employer:

Phone:

Email:

Date:

- 1. How long have you been in this position?
- 2. What kind of work do you do, and who are clients?
- 3. How did you get interested in sustainability?
- 4. What is your understanding of sustainability?
- 5. Under what circumstances do your clients raise sustainability issues with you?
- 6. Under what circumstances do you raise sustainability issues with your clients?
- 7. When you talk to clients about sustainability, what do you say?
- 8. Apart from client counseling, what type of other legal work do you do on sustainability?
- 9. What personal or professional characteristics are most essential to your sustainability work?
- 10. What do you find most rewarding about your sustainability work?
- 11. What do you find least enjoyable or most frustrating?
- 12. What do you see as the greatest roadblocks to sustainability?
- 13. Where are the jobs in sustainability and law? (current and future)

DEFINING AND CLOSING THE HYDRAULIC FRACTURING GOVERNANCE GAP

GRACE HEUSNER, ALLISON SLOTO & JOSHUA ULAN GALPERIN[†]

ABSTRACT

This Article makes the case for the importance of, and authority for, local leadership on fracking governance. We do this by first surveying the public governance structure related to hydraulic fracturing at the federal level, by reviewing the traditional scope of local land use authority, and through a close examination of four states. Specifically, we describe the fracking statutes and regulations in Colorado, North Dakota, Pennsylvania, and Texas, and take a close look at how municipalities in those states have attempted to deal with fracking within their borders. We also present a list of the most salient local impacts of hydraulic fracturing, including a description of the methods we employed to catalogue these local impacts. Finally, we make explicit how local governments might use that authority to address fracking by presenting a series of case studies that demonstrate different local governance mechanisms.

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INTRODUCTION

How many articles over the past half-decade have begun by describing the dramatic growth and impacts of fracking? A lot—over 1,200, to be precise.¹ We therefore leave that description to others. The purpose of this Article, instead, is to catalogue the full public governance structure around hydraulic fracturing, to identify expressed community concerns around fracking that are uniquely local in nature, and to provide guidance to local governments on how to manage these local impacts.

Beyond questions about broad issues of climate change and America's energy mix, much of the debate around hydraulic fracturing has centered on tensions between local communities, state governments, and industry.² These tensions can arise because local communities object to fracking, and local governments respond by banning the practice. Conversely, conflicts may arise when local communities express concerns but local governments are unprepared to act in line with their citizens' interests.³

As recent examples in Texas and Colorado have shown, if local governments ban fracking, they risk pushback from state governments,

^{1.} A November 2017 Westlaw search for "fracking" in law reviews and journals returns 1,243 results since January 2010.

^{2.} See, e.g., All Four Colorado Oil, Gas Ballot Measures Withdrawn as Promised, DENV. 11:14 AM) [hereinafter Ballot Measures Withdrawn], POST (Aug. 5, 2014, http://www.denverpost.com/2014/08/05/all-four-colorado-oil-gas-ballot-measures-withdrawn-aspromised; Molly Hennessy-Fiske, In Denton, Texas, Voters Approve 'Unprecedented' Fracking Ban, L.A. TIMES (Nov. 7, 2014, 7:19 PM), http://www.latimes.com/nationa/la-na-texas-fracking-20141108-story.html; Anna Driver & Terry Wade, Texas Governor Signs Law To Prohibit Local Oil Well Fracking Bans, REUTERS (May 18, 2015, 3:07 PM), http://www.reuters.com/article/frackingtexas/texas-governor-signs-law-to-prohibit-local-oil-well-fracking-bansidUSL1N0Y922Q20150518.

^{3.} *E.g.*, Interview by Allison Sloto with John Smith, Partner, Smith Butz, LLC (Jan. 25, 2016) (noting that local officials in several Pennsylvania towns are struggling with the proper methods for addressing fracking because of their concern about technical and legal questions).

and this pushback can result in express preemption of local authority.⁴ Preemption occurs when there is conflict between state and local laws or actions, as described in more detail in Part III.⁵ If states support hydraulic fracturing but local governments institute local bans, states have responded by undermining the local action.⁶ Where a conflict already exists between state law and the local ban, states will institute legal actions to undo the local ban. In spring 2016, the Colorado Supreme Court, for example, addressed this exact issue.⁷ If state law does not already prevent bans, states can legislate, post hoc, to unravel the ban. In 2015, this precise scenario occurred in Texas.⁸ In either case, an outright local ban on fracking may be self-defeating, because it could ultimately result in less local control over the negative (and positive) impacts of hydraulic fracturing.

There are, of course, different perspectives on the impacts of fracking, and the appropriate nature of regulation,⁹ but there is scientific understanding about the types of impacts that hydraulic fracturing may cause.¹⁰ The process of hydraulic fracturing itself can impact

water availability, spills of chemicals at the surface, and induced seismicity that very rarely can be felt. Issues associated with the more complete process of oil and gas drilling and production . . . include all of the above as well as groundwater quality degradation, reduced air quality, noise, night sky light pollution, impacts of sand mining for use in hydraulic fracturing process, landscape changes such as forest fragmentation, surface water quality degradation from waste fluid disposal, and induced seismicity from the injection of waste fluids deep into disposal wells.¹¹

As discussed further in Part IV, there are also community and economic impacts—both positive and negative—from hydraulic fracturing and its attendant activities. While the severity of these issues vary, the breadth and diversity creates a need for some degree of safeguards.

^{4.} See id.

^{5.} See PATRICIA E. SALKIN, 1 AMERICAN LAW OF ZONING § 6:28 (5th ed. 2017).

^{6.} See, e.g., Jacy Marmaduke, High Court Strikes Down Fort Collins' Halt to Fracking, COLORADOAN (May 4, 2016, 4:13 PM), http://www.coloradoan.com/story/news/2016/05/02/colorado-supreme-court-rules-against-fortcollins-fracking-moratorium/83798238.

^{7.} Id.

^{8.} See Driver & Wade, supra note 2.

^{9.} See, e.g., Michael Burger, Fracking and Federalism Choice, 161 U. PA. L. REV. ONLINE 150, 158–59 (2013).

^{10.} See, e.g., U.S. Geological Survey, What Environmental Issues are Associated with Hydraulic Fracturing?, USGS, https://www.usgs.gov/faqs/what-environmental-issues-are-associatedhydraulic-fracturing?qt-news_science_products=7#qt-news_science_products (last visited Sept. 17, 2017).

^{11.} U.S. Geological Survey, *Hydraulic Fracturing ("Fracking") FAQ*, USGS, https://web.archive.org/web/20161210142723/https://www2.usgs.gov/faq/categories/10132/3821 (last visited Sept. 17, 2017).

Given the potential impacts of hydraulic fracturing, and the potentially self-defeating nature of local fracking bans, local governments should address the impacts of fracking through more traditional local governance mechanisms that do not pose as great a risk to local authority. Ultimately, fracking is a land use not entirely different from other industrial land uses with which local governments have long histories of governing through zoning and planning tools as well as nonregulatory techniques. The election of President Donald Trump and Republican control in Congress suggests that oil and gas exploration will continue to be an issue attracting attention at all levels of governance, and therefore, the issues surrounding fracking remain relevant.¹²

On this premise, this Article seeks to make the case for the importance of, and authority for, local leadership on fracking governance. Parts I and II give an overview of the federal and state laws that address fracking and identify gaps in both regimes. In Part III, we describe the traditional scope of local land use authority. In Part IV, we present a list of the most salient local impacts of hydraulic fracturing, including a description of the methods we employed to catalogue these local impacts. Finally, in Part V, we make explicit how local governments might use that authority to address fracking by presenting a series of case studies that demonstrate different local governance mechanisms.

I. FEDERAL HYDRAULIC FRACTURING GOVERNANCE

The current federal hydraulic fracturing regulatory system is both fragmented and incomplete. This Part identifies aspects of fracking that are covered by federal regulations and highlights many of the gaps and shortcomings in that coverage. Major federal environmental legislation—the Clean Air Act (CAA),¹³ the Clean Water Act (CWA),¹⁴ the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA),¹⁵ the Endangered Species Act (ESA),¹⁶ the National Environmental Policy Act (NEPA),¹⁷ the Resource Conservation and Recovery Act (RCRA),¹⁸ the Safe Drinking Water Act (SDWA),¹⁹ and Toxic Substance Control Act (TSCA)²⁰—all nominally cover aspects of the fracking lifecycle. However, these statutes essentially all contain exemp-

16. 16 U.S.C. §§ 1531–1544 (2012).

^{12.} See, e.g., Gaurav Sharma, Making America 'Crude' Again: U.S. Oil and Gas Industry Feels the Trump Effect, FORBES (Jan. 27, 2017, 4:36 PM), http://www.forbes.com/sites/gauravsharma/2017/01/27/making-america-crude-again-us-oil-and-gas-industry-feels-the-trump-effect/#436b14632213.

^{13. 42} U.S.C. §§ 7401-7671 (2012).

^{14. 33} U.S.C. §§ 1281a, 1294–1287 (2012).

^{15.} Pub.L. 96-510, 94 Stat. 2767 (codified as amended in scattered sections of 26 U.S.C & 42 U.S.C.).

^{17. 42} U.S.C. §§ 4321–4347 (2012).

^{18. 42} U.S.C. §§ 6901–6986 (2012).

^{19. 42} U.S.C. §§ 300f–300j (2012).

^{20. 15} U.S.C. §§ 2601–2629 (2012).

tions, limitations, or nuances that limit their effectiveness in protecting the environment from negative impacts of fracking.

Overall, the federal government has not enacted a comprehensive fracking regulatory regime, instead leaving the majority of regulation to "a patchwork of state policies."²¹ There are few federal approvals required as part of a fracking operation; for example, there is no requirement to seek federal licensing approvals before beginning fracking activity.²² Yet federal regulations may apply "if the fracking operation risks harm to an endangered species, will result in a discharge to surface waters or a pretreatment facility," or involves the transport of hazardous chemicals.²³ Moreover, federal regulations may also apply when the operation includes methane or hazardous air pollutant emissions.²⁴ Still, fracking operations may avoid regulation under some of these regulatory frameworks because of explicit exemptions.²⁵

As a result, if a fracking operation and its ancillary activities do not fall into one of these federal regulatory systems, then no federal approval is needed under any environmental law.²⁶ For example, if a fracking project does not trigger requirements to obtain federal approvals under any of the federal environmental laws, there will not be a corresponding requirement to undertake an environmental review under NEPA or obtain a state permitting certification under the CWA.²⁷

The following Sections will provide an overview of the major federal environmental laws and analyze the degree to which these statutes address hydraulic fracturing.

A. Clean Air Act

The CAA seeks to decrease air pollution, but until recently, the CAA and accompanying administrative regulations did not address fracking directly. In 2012, the Environmental Protection Agency (EPA) instituted a new rule integrating fracking into the ambit of CAA regulation.²⁸ That rule encompassed several aspects of fracking. First, EPA set "[N]ew [S]ource [P]erformance [S]tandards (NSPS) for industrial categories that cause, or significantly contribute to, air pollution that may

^{21.} Emily C. Powers, Fracking and Federalism: Support for an Adaptive Approach That Avoids the Tragedy of the Regulatory Commons, 19 J.L. & POL'Y 913, 940–41 (2011).

^{22.} David B. Spence, Federalism, Regulatory Lags, and the Political Economy of Energy Production, 161 U. PA. L. REV. 431, 477 (2013).

^{23.} Id. at 477–78.

^{24.} See id. at 484.

^{25.} Id. at 478.

^{26.} *Id.*

^{27.} Id.

^{28.} Oil and Natural Gas Sector: New Source Performance Standards and National Emission Standards for Hazardous Air Pollutants Reviews, 77 Fed. Reg. 49,490, 49,490 (Aug. 16, 2012) (to be codified at 40 C.F.R. pt. 60, 63).

endanger public health or welfare."²⁹ The NSPS rules regulate volatile organic compound (VOC) emissions from gas wells, storage tanks, and other equipment, as well as "leaking components at onshore natural gas processing plants."³⁰ Among other things, oil and gas wells must now have equipment ("green completions") able to capture escaping volatile organic compound emission.³¹ EPA also promulgated "green completion" rules regulating the release of hazardous air pollutants.³² The final rule took effect on October 15, 2012.³³

More recent action demonstrates EPA's intent to expand air pollution regulation. In November 2015, EPA issued a request for additional data and information on hazardous air pollutants that was not available in 2012.³⁴ In May 2016, EPA finalized climate-change-related updates to its 2012 green completion rule to reduce greenhouse gas emissions.³⁵ The updates add methane to the pollutants covered by the 2012 rule, as well as requirements for detecting and repairing leaks, and requirements to limit emissions from pneumatic pumps used at well sites.³⁶ The agency explains that all of these actions will reduce methane emissions and reduce air pollution, help combat climate change, and provide more guidance about CAA permitting requirements for the oil and natural gas industry.³⁷

The cumulative impact of these rules has been to mandate many onshore natural gas fracking operations take action under the CAA to address VOCs and methane emissions.³⁸

^{29.} U.S. ENVTL PROT. AGENCY, OVERVIEW OF FINAL AMENDMENTS TO AIR REGULATIONS FOR THE OIL AND NATURAL GAS INDUSTRY 4 (2012), https://www.epa.gov/sites/production/files/2016-

^{09/}documents/natural_gas_transmission_fact_sheet_2012.pdf.

^{30.} Oil and Natural Gas Sector: New Source Performance Standards and National Emission Standards for Hazardous Air Pollutants Reviews, 77 Fed. Reg. 49,490, 49,492 (Aug. 16, 2012) (to be codified at 40 C.F.R. pt. 60, 63).

^{31.} Id.

^{32.} U.S. ENVTL. PROT. AGENCY, *supra* note 29; *see also* Oil and Natural Gas Sector: New Source Performance Standards and National Emission Standards for Hazardous Air Pollutants Reviews, 77 Fed. Reg. at 49,492; *What Are Hazardous Air Pollutants?*, EPA, https://www.epa.gov/haps/what-are-hazardous-air-pollutants (last visited Sept. 28, 2017) ("Hazardous air pollutants . . . [include 187 pollutants classified by EPA as those] known or suspected to cause cancer or other serious health effects, such as reproductive effects or birth defects, or adverse environmental effects.").

^{33.} Oil and Natural Gas Sector: New Source Performance Standards and National Emission Standards for Hazardous Air Pollutants Reviews, 77 Fed. Reg. at 49,490.

^{34.} Actions and Notices about Oil and Natural Gas Air Pollution Standards, EPA, https://www.epa.gov/controlling-air-pollution-oil-and-natural-gas-industry/actions-and-notices-about-oil-and-natural-gas (last updated July 12, 2017).

^{35.} Oil and Natural Gas Sector: Emission Standards for New, Reconstructed, and Modified Sources, 81 Fed. Reg. 35,824, 35,824 (Jun. 3, 2016) (to be codified at 40 C.F.R. pt. 60).

^{36.} Id. at 35,830, 35,844, 35,846.

^{37.} EPA Releases First-Ever Standards to Cut Methane Emissions from the Oil and Gas Sector, EPA (May 12, 2016), https://www.epa.gov/newsreleases/epa-releases-first-ever-standards-cut-methane-emissions-oil-and-gas-sector.

^{38.} See id.; see also Actions and Notices about Oil and Natural Gas Air Pollution Standards, supra note 34.

B. Clean Water Act

The CWA is the primary federal regulatory tool to manage surface water pollution.³⁹ Passed in 1972, the CWA set "effluent limitations and standards governing the discharge of pollutants into the waters of the United States."⁴⁰ The CWA ensures that these standards are met by requiring that point sources that discharge into waters of the United States—including both private facilities and publicly owned treatment works—obtain a permit pursuant to the National Pollutant Discharge Elimination System (NPDES).⁴¹ Either EPA, or states and Indian tribes that have adopted an EPA-approved water program may issue these permits.⁴² Most of the states in the United States operate under EPA-approved programs.⁴³

NPDES permits implement EPA standards by setting "effluent limitations," which "impose restrictions on the quantity or concentration of pollutants that may be discharged."⁴⁴ These limitations are set to a floor which is based on available control technology: either the "best available technology [] for toxic [or] non-conventional pollutants [or the] 'best conventional technology []' for a limited number of 'conventional pollutants" (including "pH, biological oxygen demand, total suspended solids, fecal coliform, and oil and grease").⁴⁵ Sources whose construction began after EPA promulgated national standards, called "new sources," must comply with "new source performance standards" for all pollutants representing "best available demonstrated control technology" at the time of construction.⁴⁶

Theoretically, there are two ways in which EPA could regulate water. First, the agency could regulate the direct discharge of wastewater from fracking sites. Second, EPA could regulate subsurface injection of produced wastewater. The CWA does only the former: it regulates the

^{39.} Kevin J. Garber et al., Water Sourcing and Wastewater Disposal: Two of the Least Worrisome Aspects of Marcellus Shale Development in Pennsylvannia, 13 DUQ. BUS. L.J. 169, 183 (2011).

^{40.} Jason Obold, Leading by Example: The Fracturing Responsibility and Awareness of Chemicals Act of 2011 as a Catalyst for International Drilling Reform, 23 COLO. J. INT'L ENVIL. L. & POL'Y 473, 486, 486 n.77 (2012); see also Garber et al., supra note 39 (stating effluent limits are generally either technology-based or water quality-based).

^{41. 33} U.S.C. § 1311(a) (2012) (proscribing discharge unless provided otherwise); *id.* § 1342 (outlining rules governing permits for discharge); *see also* Obold, *supra* note 40, at 486.

^{42. 40} C.F.R. § 123.1 (2017); see also Obold, supra note 40, at 486.

^{43.} See Jeffrey M. Gaba, Flowback: Federal Regulation of Wastewater from Hydraulic Fracturing, 39 COLUM. J. ENVTL. L. 251, 283 (2014); see also NPDES State Program Information, EPA, https://www.epa.gov/npdes/npdes-state-program-information (last updated Feb. 6, 2017) (outlining EPA process of delegating permitting authority).

^{44.} Gaba, supra note 43; see also 40 C.F.R. §§ 435.30-.34 (2017).

^{45.} Gaba, supra note 43, at 284; see also 33 U.S.C. \S 1311(b)(2)(A), 1311(b)(2)(E), 1314(a)(4), 1314(b)(4)(A).

^{46. 33} U.S.C. § 1316(a)(1)-(2), (b)(1)(B).

direct surface discharge of wastewater from fracking, but does not regulate the underground activities.⁴⁷

The CWA provides EPA with the authority to regulate the direct discharge of wastewater.⁴⁸ However, there are no categorical standards for the disposal of wastewater discharged from natural gas activities.⁴⁹ As a result, shale gas wastewater is generally transported to publicly owned treatment works, or private centralized waste treatment facilities⁵⁰—which may not always be properly equipped to treat hydraulic fracturing wastewater.

EPA has established a national effluent limitation for oil and gas extraction point source categories, and the applicable regulation states that "there shall be no [on-site direct] discharge of waste water pollutants into navigable waters from any source associated with production, field exploration, drilling, well completion, or well treatment."⁵¹ However, there is an exception for "wastewater that is of good enough quality for use in agricultural and wildlife propagation."⁵² For fracking specifically, EPA has interpreted its national effluent limitation for oil and gas extraction to apply to wastewater emitted from fracking in shale formations as well as sandstone gas facilities. However, EPA has concluded that fracking in coalbeds to produce coalbed methane is not subject to these same requirements.⁵³

"

As to the underground injection of discharged wastewater, the CWA has not been a successful tool for restricting the underground emission of fracking wastewater because only the actual surface discharge of fracking wastewater is subject to regulation.⁵⁴ Although one could argue that a subsurface discharge could trigger CWA if it had a link to surface pollution—for example, groundwater flowing into surface water—EPA has not enforced underground operations under the CWA.⁵⁵ Further, although some commentators argue that the CWA should not regulate groundwater, ⁵⁶ the majority of hydraulic fracturing's risk to wa-

56. Id.

^{47.} See Obold, supra note 40, at 486.

^{48. 40} C.F.R. §§ 435.30, 435.32 (2017).

^{49.} Natural Gas Extraction - Hydraulic Fracturing, EPA, https://www.epa.gov/hydraulicfracturing (last updated Dec. 30, 2016) (noting that there are "different management methods employed by industry" and describing the ways that EPA is working with industry to consider different policy frameworks for different disposal techniques).

^{50.} Id.

^{51. 40} C.F.R. § 435.32.

^{52.} Natural Gas Extraction - Hydraulic Fracturing, supra note 49.

^{53.} Unconventional Oil and Gas Extraction Effluent Guidelines, EPA, http://water.epa.gov/scitech/wastetech/guide/oilandgas/unconv.cfm (last updated Aug. 7, 2014).

^{54.} Obold, *supra* note 40, at 486.

^{55.} *Cf.* Obold, *supra* note 40, at 486 ("The CWA has been successful at regulating the surface activities of hydraulic fracturing operations, but has not been and should not be the vehicle for policing underground operations.").

ter is underground through injection.⁵⁷ Underground injection can occur at two parts of the fracking process. First, there is injection of fracking fluid to stimulate the well.⁵⁸ Second, there is often underground injection at the end of the process to dispose of produced wastewater back into the well.⁵⁹ Further, some of the most salient concerns about fracking stem from the injection of chemicals underground as part of the extraction process and into the wells themselves.⁶⁰ Thus, because the CWA does not regulate underground releases of polluted water, the Act is limited in its ability to regulate fracking.

In some respects, fracking regulations under the CWA have been eroded since 1987. In that year, Congress passed CWA amendments to exempt oil and gas exploration, production, and processing operations from permitting requirements.⁶¹ Then, in 2005, Congress further exempted onshore oil and gas facilities from stormwater permitting requirements under the CWA.⁶² Although this exemption only applies to stormwater that does not come in contact with any on-site waste it still demonstrates intent to chip away at the CWA power.⁶³

However, there has been some strengthening of fracking regulations after the 2008 Ninth Circuit Court of Appeals ruling in *Natural Resources Defense Council v. EPA*.⁶⁴ In that case, environmental groups challenged EPA's rule that exempted oil and gas construction stormwater from the CWA.⁶⁵ The Ninth Circuit Court of Appeals agreed with the environmental challengers, finding that the language of the CWA did not allow for a stormwater exemption.⁶⁶ The Ninth Circuit thus vacated EPA's rule that had exempted stormwater runoff from the CWA.⁶⁷ As a result of that decision, oil and gas construction activities discharging stormwater, even when contaminated only by sediment, must obtain an

60. Id. at 305.

63. See Adam Kron, EPA's Role in Implementing and Maintaining the Oil and Gas Industry's Environmental Exemptions: A Study in Three Statutes, 16 VT. J. ENVTL. L. 586, 596–97 (2015).

^{57.} John Craven, Fracking Secrets: The Limitations of Trade Secret Protection in Hydraulic Fracturing, 16 VAND. J. ENT. & TECH. L. 395, 408–09 (2014).

^{58.} Id. at 399–400.

^{59.} Inessa Abayev, Hydraulic Fracturing Wastewater: Making the Case for Treating the Environmentally Condemned, 24 FORDHAM ENVTL. L. REV. 275, 300 (2013).

^{61. 42} U.S.C. § 300h(d)(1)(B)(ii) (2012) (excluding from the SDWA definition of underground injection "the underground injection of fluids or propping agents (other than diesel fuels) pursuant to hydraulic fracturing operations related to oil, gas, or geothermal production activities"); see Sandra Zellmer, *Treading Water While Congress Ignores the Nation's Environment*, 88 NOTRE DAME L. REV. 2323, 2359–60 (2013).

^{62. 33} U.S.C. § 1362(24) (2012) ("The term 'oil and gas exploration, production, processing, or treatment operations or transmission facilities' means all field activities or operations . . . including activities necessary to prepare a site for drilling and for the movement and placement of drilling equipment, whether or not such field activities or operations may be considered to be construction activities."); see Zellmer, supra note 61.

^{64. 526} F.3d 591 (9th Cir. 2008).

^{65.} Id. at 593–94.

^{66.} Kron, supra note 63, at 596–97.

^{67.} Nat. Res. Def. Council, 526 F.3d at 594.

NPDES permit, as long as the well pad and access road are one acre or larger in size.⁶⁸ However, wastewater discharges containing other contaminants remain subject to the CWA permitting requirements.⁶⁹

More recently in June 2016, EPA finalized a rule to set standards for wastewater discharges produced by natural gas extraction and destined for publically owned wastewater treatment plants.⁷⁰ The agency also announced that it would discontinue rulemaking for coalbed methane extraction.⁷¹ Further limiting its regulation over fracking, EPA issued its Preliminary 2016 Effluent Guidelines Program Plan in June 2016.⁷² This plan concluded that "no additional industries warrant[ed] new or revised effluent guidelines" and so EPA is neither crafting new effluent guidelines nor revising any existing effluent guidelines.⁷³

Thus, while there have been several efforts in the last ten years to erode the CWA power and authority, the Ninth Circuit's decision in *Natural Resources Defense Council v. EPA* has helped provide more authority for EPA to regulate broader types of contamination in wastewater. However, there is still an opportunity for EPA to more comprehensively protect waters of the United States by utilizing CWA authority to regulate subsurface wastewater disposal that has a connection to surface waters.⁷⁴

^{68.} Thomas W. Merrill & David M. Schizer, *The Shale Oil and Gas Revolution, Hydraulic Fracturing, and Water Contamination: A Regulatory Strategy*, 98 MINN. L. REV. 145, 200 (2013); *see also* Amendments to the National Pollutant Discharge Elimination System (NPDES) Regulations for Storm Water Discharges Associated With Oil and Gas Exploration, Production, Processing, or Treatment Operations or Transmission Facilities, 71 Fed. Reg. 33,628, 33,639 (June 12, 2006) (to be codified at 40 C.F.R. pt. 122) (allowing an exemption for "small construction activities"); MICHAEL LAUFFER, IMPACT OF *NATURAL RESOURCES DEFENSE COUNCIL V. U.S. EPA* (9TH CIR. 2008) 526 F.3D 591 ON THE REGULATION OF STORM WATER DISCHARGES OF SEDIMENT FROM OIL AND GAS CONSTRUCTION ACTIVITIES 1, 4 (2009), http://www.swrcb.ca.gov/water issues/programs/stormwater/docs/public oil_gas_mem0021809.pdf.

^{69.} See 40 C.F.R. § 435.32 (2017).

^{70.} Effluent Limitations Guidelines and Standards for the Oil and Gas Extraction Point Source Category, 81 Fed. Reg. 41,845, 41,845 (Jun. 28, 2016) (to be codified at 40 C.F.R. pt. 435).

^{71.} Id. at 41,848.

^{72.} OFFICE OF WATER, U.S. ENVTL. PROT. AGENCY, EPA-821-R-16-001, PRELIMINARY 2016 EFFLUENT GUIDELINES PROGRAM PLAN 1-1 (2016), https://www.epa.gov/sites/production/files/2016-06/documents/prelim-2016-eg-plan_june-2016.pdf. 73. *Id.*

^{74.} One additional potential tool to regulate fracking through the Clean Water Act may be through the portion of the Act that "authorizes permit writers to develop specific technology-based limitations on pollutants in fracking wastewater based on 'best professional judgment' ('BPJ')." Gaba, *supra* note 43, at 303.

These limitations allow the permit writer to exercise judgment in establishing permit limits appropriate to the facility. *Id.* There are two circumstances in which permit writers may set best professional judgment limitations on pollutants: First, BPJ may be invoked "if there are no promulgated national standards applicable to the permittee." *Id.* at 304. Second, BPJ may be used if pollutants are not specifically regulated under the national standards, which "could form the basis for imposing additional technology-based limits on the discharge of fracking wastewater from private CTW [centralized wastewater treatment] facilities." *Id.*

C. Comprehensive Environmental Response, Compensation, and Liability Act

CERCLA was created in 1980 to authorize cleanup of contaminated properties and provide a cost recovery action for litigants.⁷⁵ Any of the following elements may establish a cost recovery action under CERCLA: "(1) the defendant [is a] 'responsible party'; (2) [] hazardous substances are disposed of at a 'facility'; (3) there is a 'release' or threatened release of hazardous substances into the environment; or (4) the release causes the incurrence of 'response costs.''⁷⁶ A CERCLA response action is thus available where hazardous substances resulting from a federally permitted release have contaminated the surface water, soil, or groundwater.⁷⁷

Under CERCLA, the definition of "hazardous substance" includes hazardous chemicals or substances included in TSCA, with the exception of petroleum.⁷⁸ This exception also includes crude oil, or "any fraction thereof."⁷⁹ In *Wiltshire Westwood Associates v. Atlantic Richfield Corp.*,⁸⁰ the Ninth Circuit reasoned that constituent parts of gasoline must also be excluded, or the exclusion would be meaningless.⁸¹ These constituents have been interpreted to include any distillation of petroleum, including diesel fuel and the compounds (such as benzene, toluene, ethylbenzene, and xylene) constituting diesel.⁸²

The petroleum exemption also applies to "natural gas, natural gas liquids, liquefied natural gas, or synthetic gas usable for fuel."⁸³ Adam Kron reasons that, given the statute's language, it may be possible to argue that the exclusion does not cover releases at modern natural gas wells.⁸⁴ This is because "the natural gas provision of the exclusion does not include the 'any fraction thereof' language in the petroleum provision, and it includes the modifier 'usable for fuel."⁸⁵ Kron argues that, since natural gas cannot be used for fuel until after a series of processing steps to remove several "toxic constituents," "a release of unprocessed natural gas or a release of the constituents removed by processing is not

79. Id.

^{75.} Sean H. Joyner, Superfund to the Rescue? Seeking Potential CERCLA Response Authority and Cost Recovery Liability for Releases of Hazardous Substances Resulting from Hydraulic Fracturing, 28 J. CONTEMP. HEALTH L. & POL'Y, 111, 129 (2011).

^{76.} U.S. v. Alcan Aluminum Corp., 964 F.2d 252, 258–59 (3d Cir. 1992); see also 42 U.S.C. § 9601(22) (2012) ("The term 'release' means any spilling, leaking, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping, or disposing into the environment.").

^{77.} Alcan Aluminum Corp., 964 F.2d at 261; see also 42 U.S.C. § 9601(10) (defining a "federally permitted release" as a discharge or emission that is allowed under a particular environmental statute given that statute's permitted allowances or discharge limits).

^{78. 42} U.S.C. § 9601(14).

^{80. 881} F.2d 801 (9th Cir. 1989).

^{81.} Id. at 805.

^{82.} Joyner, supra note 75, at 130.

^{83. 42} U.S.C. § 9601(14).

^{84.} Kron, supra note 63, at 595.

^{85.} Id. at 596.

exempt and still should trigger CERCLA's liability and notification provisions."⁸⁶

CERCLA allows "any injection of fluids or other materials authorized under applicable State law [] for the purpose of stimulating or treating wells for the production of crude oil, natural gas, or water, [] for the purpose of . . . recovery of crude oil or natural gas."⁸⁷ As a result, the underground injection of fluids for fracking is a federally-permitted release under CERCLA § 101(10)(I), as long as the release is permitted at the state level.⁸⁸ Thus, fracking injection is exempt from CERCLA liability.⁸⁹

However, there remains a debate over the limits of fracking fluid exemptions from cleanup liability.⁹⁰ Scholars note that EPA has used CERCLA § 104(e) to investigate water that may be contaminated with fracking fluids.⁹¹ Further, though petroleum and gas are excluded, courts have held that liability attaches to an entire site if multiple hazardous substances, such as diesel, are inextricably mixed together such that petroleum cannot be separated from the other chemicals.⁹²

To conclude, although the injection of fracking fluids into wells is generally exempt under CERCLA,⁹³ there is some ambiguity about whether EPA has the authority to investigate water contaminated with fracking fluid. However, spills are likely not as big of a concern for local governments given their infrequency.⁹⁴

D. Endangered Species Act

Fracking operations must comply with the ESA.⁹⁵ If a species is listed under the ESA, all federal agencies are prohibited from authorizing, funding, or carrying out actions (including issuing permits) that "result in the destruction or adverse modification of [critical] habitat."⁹⁶ In 2012, a United States Geological Survey (USGS) report documented that shale gas and coalbed methane natural gas extraction practices between

90. Craven, *supra* note 57, at 410.

92. Joyner, supra note 75, at 133-34.

93. 42 U.S.C. § 9601(10) (2012).

94. EPA estimates that the number of spills related to hydraulic fracturing is less than one hundred per year. See OFFICE OF RESEARCH & DEV., U.S. ENVTL. PROT. AGENCY, EPA/601/R-14/001, REVIEW OF STATE AND INDUSTRY SPILL DATA: CHARACTERIZATION OF HYDRAULIC FRACTURING-RELATED SPILLS 9 (2015), https://www.epa.gov/sites/production/files/2015-05/documents/hf_spills_report_final_5-12-15_508_km_sb.pdf (cataloguing 456 spills due to frack-ing over six years).

95. See 16 U.S.C. § 1536(a)(2) (2012).

96. Id.

^{86.} Id.

^{87. 42} U.S.C. § 9601(10)(I).

^{88.} Id.

^{89.} Joyner, supra note 75, at 133-34 (noting that hazardous substances at the EPA study site have been "so commingled with petroleum that they cannot be separated" and so CERCLA liability should attach to the entire site).

^{91.} Id.

2004 and 2010 in two Pennsylvania counties "create[d] potentially serious patterns of disturbance on the landscape."⁹⁷ This finding is particularly germane to the ESA because increases in habitat disturbances, such as habitat fragmentation, can have negative impacts on the populations of ESA-listed flora and fauna.⁹⁸

The ESA applies to private and public property, and proscribes both direct and indirect harms to listed species.⁹⁹ As a result, the ESA has a broad reach that can lead to extensive liability. Thus, the ESA can effectively limit local impacts of hydraulic fracturing—but a species must be listed to receive such protection.¹⁰⁰

E. National Environmental Policy Act

While NEPA nominally applies to fracking, in practice fracking operations are rarely subject to NEPA review for the reasons stated below. Established in 1969, Congress envisioned NEPA as a regulatory program that would require government agencies to consider environmental concerns by identifying the environmental impacts of federal programs and projects in an environmental impact statement (EIS).¹⁰¹ This intent was at least thwarted in part by the Energy Policy Act of 2005, which created a "rebuttable presumption" that oil and gas operations fall under a "categorical exception' to the normal procedural requirements."¹⁰² To rebut this presumption, a citizen bringing a suit must meet the high standard of "extraordinary circumstances warranting a full NEPA review."¹⁰³ Further, even if a particular project were subject to NEPA review, the operation would have to include federal actors or support in order to trigger NEPA, and would have to be sufficiently "extraordinary" to rebut the statutory exemption. Accordingly, only in rare circumstances does NEPA apply to fracking operations. Ultimately, while NEPA review could provide substantial information on certain fracking activities, it provides more in the way of transparency and review than in creating actual fracking safeguards.

99. Id. at 1151.

^{97.} E.T. SLONECKER ET AL., U.S. GEOLOGICAL SURVEY, OPEN FILE REPORT 2012-1154, LANDSCAPE CONSEQUENCES OF NATURAL GAS EXTRACTION IN BRADFORD AND WASHINGTON COUNTIES, PENNSYLVANIA, 2004–2010, at 1 (2012), http://pubs.usgs.gov/of/2012/1154/of2012-1154.pdf; see also Kalyani Robbins, Awakening the Slumbering Giant: How Horizontal Drilling Technology Brought the Endangered Species Act to Bear on Hydraulic Fracturing, 63 CASE W. RES. L. REV. 1143, 1154 (2013).

^{98.} See Robbins, supra note 97, at 1154-55.

^{100.} See, e.g., 16 U.S.C. 1536(a)(2) (delineating protections for species that have already been listed as endangered).

^{101.} Craven, supra note 57, at 410.

^{102.} Id. at 410-11; see also 42 U.S.C. § 15942 (2012).

^{103.} Craven, supra note 57, at 410–11 (quoting Daniel R. Cahoy et al., Fracking Patents: The Emergence of Patents as Information Containment Tools in Shale Drilling, 19 MICH. TELECOMM. & TECH. L. REV. 279, 313 (2013)).

F. Resource Conservation and Recovery Act

RCRA establishes a framework that "regulates hazardous waste from cradle to grave" through a specific use, transport, and disposal standards and procedures.¹⁰⁴ When Congress passed RCRA in 1976, the statute included regulation over oil and gas production and waste.¹⁰⁵ However, in 1980, Congress granted a temporary exemption to "exploration . . . [and] production" oil and gas wastes.¹⁰⁶ At that time, Congress directed EPA to study whether these wastes should be regulated under RCRA.¹⁰⁷ EPA's study found that the regulation of oil and gas wastes was unwarranted due to relatively low risks and the costs that would be imposed on oil and gas producers.¹⁰⁸ EPA also asserted that state and other federal regulation of oil and gas wastes was generally adequate.¹⁰⁹ Since then, identifying the contents of "waste generated from oil and gas operations is not subject to federal hazardous waste regulation" under Subtitle C of RCRA.¹¹⁰

However, EPA has recognized that some oil and gas exploration and production wastes were hazardous, and that some state regulations were lacking. Instead of regulating the wastes itself, EPA provided funding to the Interstate Oil and Gas Compact Commission (IOGCC) to review state regulations.¹¹¹ In 2009, IOGCC hosted two congressional briefings on Capitol Hill attesting to the adequacy of the states' fracking regulation writ large.¹¹² These briefings did not result in any changes to the oil and gas exemption under RCRA.¹¹³ Thus, RCRA continues to exempt waste generated from oil and gas operations.

^{104.} Id. at 409.

James R. Cox, Revisiting RCRA's Oilfield Waste Exemption as to Certain Hazardous 105. Oilfield Exploration and Production Wastes, 14 VILL. ENVTL. L.J. 1, 2-3 (2003).

^{106.} Id.

^{107.} Id. at 3. Id. at 5-6.

^{108.}

^{109.} Id. at 5. Craven, supra note 57, at 409. EPA exempted oil and gas from oversight in 1980, after a 110. study concluded that oil and gas exploration and production wastes did not warrant regulation under RCRA. Gaba, supra note 43, at 271-72. "This conclusion was not based on [the idea] that the wastes did not contain hazardous constituents . . . , [but that] existing state and federal programs adequately addressed management of these wastes and that classifying oil and gas wastes as hazardous would result in increased administrative burdens." Id. at 272-73. "[I]n 1988, EPA acknowledged that [the] exemption was 'unwarranted." Cameron Jefferies, Unconventional Bridges over Troubled Water -Lessons to Be Learned from the Canadian Oil Sands as the United States Moves to Develop the Natural Gas of the Marcellus Shale Play, 33 ENERGY L.J. 75, 99 (2012) (quoting Hannah Wiseman, Regulatory Adaptation in Fractured Appalachia, 21 VILL. ENVTL. L.J. 229, 244 (2010)).

Hannah Wiseman, Regulatory Adaptation in Fractured Appalachia, 21 VILL. ENVTL. L.J. 111. 229, 248 (2010).

Issues, INTERSTATE OIL & GAS COMPACT COMM'N, http://iogcc.ok.gov/hydraulic-112. fracturing (lasted visited Sept. 30, 2017).

Proper Management of Oil and Gas Exploration and Production Waste, EPA, 113. https://www.epa.gov/hw/proper-management-oil-and-gas-exploration-and-production-waste flast updated Apr. 10, 2017).

G. Safe Drinking Water Act

The SDWA seeks to protect public health by regulating the nation's drinking supply¹¹⁴ through "national health-based standards for drinking water to protect against both naturally-occurring and man-made contaminants that may be found in drinking water."¹¹⁵

The SDWA, passed in 1974, requires EPA to create a national maximum contaminate level when a particular contaminate "may have an adverse effect on the health of persons" and "there is a substantial likelihood that [it] will occur in public water systems."¹¹⁶ However, it is in the "sole judgment of the [EPA] Administrator [whether] regulation of such contaminant presents a meaningful opportunity for health risk reduction."¹¹⁷ Such discretion suggests that there is flexibility for the types of contaminants covered by the SDWA, but also a great deal of discretion endowed to the Administrator.

In lieu of federal agencies implementing their regulations, states may also apply to EPA for "primacy," defined by EPA as "the authority to implement the EPA's standards within an individual jurisdiction."¹¹⁸ If a state elects this option, it must submit an Underground Injection Control (UIC) proposal to EPA meeting EPA's minimum requirements.¹¹⁹ The UIC program regulates both the initial injection of fracking fluid and post-fracking injection of wastewater. EPA retains the right to take regulatory power back from a state if it determines that the state UIC program violates the SDWA.¹²⁰ As of 2015, EPA has delegated the authority to administer UIC programs to thirty-nine states.¹²¹

Despite state programs' prevalence, a 2014 Government Accountability Office (GAO) report found significant deficiencies in EPA's oversight of states' regulatory schemes.¹²² First, GAO "found that EPA was not consistently conducting annual on-site reviews of state programs, as is required by EPA's own guidance."¹²³ Second, GAO found that EPA

^{114.} Obold, supra note 40, at 482.

^{115.} Abayev, *supra* note 59, at 297 (quoting OFFICE OF WATER, U.S. ENVTL. PROT. AGENCY, EPA 816-F-04-030, UNDERSTANDING THE SAFE DRINKING WATER ACT (2004), https://www.epa.gov/sites/production/files/2015-04/documents/epa816f04030.pdf).

^{116. 42} U.S.C. § 300g-1(b)(1)(A)(i)-(ii) (2012).

^{117.} Id. § 300g-1(b)(1)(A)(iii); Angela C. Cupas, The Not-So-Safe Drinking Water Act: Why We Must Regulate Hydraulic Fracturing at the Federal Level, 33 WM. & MARY ENVTL. L. & POL'Y REV. 605, 609 (2009).

^{118.} OFFICE OF WATER, U.S. ENVTL. PROT. AGENCY, EPA 816-F-04-030, UNDERSTANDING THE SAFE DRINKING WATER ACT (2004), https://www.epa.gov/sites/production/files/2015-04/documents/epa816f04030.pdf.

^{119.} Obold, supra note 40, at 482.

^{120. 42} U.S.C. § 300h-1(c).

^{121.} Kron, supra note 63, at 618.

^{122.} *Id*.

^{123.} Id.

was not adequately updating its regulations to track state program requirements.¹²⁴

Fundamentally, fracking may impact drinking water in two primary ways. The first is when fracking fluid is injected to stimulate the well, and the second is when flowback wastewater is disposed in underground injection wells. The SDWA regulates neither.

First, the SDWA does not regulate the injection of materials into wells. Between 2000 and 2005, EPA conducted a study into coalbed methane and found that the "injection of certain extraction materials into [such] wells posed 'little or no threat to underground sources of drinking water."¹²⁵ In the wake of EPA's study, Congress passed the Energy Policy Act of 2005, which excluded most fluids used in the initial fracking injection from regulation under SDWA.¹²⁶ These amendments effectively "exempt[] fracking companies from compliance with UIC programs because their fracking fluids no longer require a permit."¹²⁷

The only aspect of fracking regulated under the SDWA is when diesel fuel is used as a fluid to initially inject water into a recovery well.¹²⁸ In that instance, EPA does have authority to regulate the underground injection of diesel fuel through the UIC program.¹²⁹ This means that "[a]ny service company that performs hydraulic fracturing using diesel fuel must receive prior authorization from the UIC program."¹³⁰

Second, the SDWA does not cover wastewater. The SDWA and the CWA establish minimal federal standards for management of wastewater. In Part C of the SDWA, underground drinking water sources are addressed, and the Act requires EPA to "establish and publish regula-

^{124.} *Id.*

^{125.} Cupas, *supra* note 117, at 606 (quoting OFFICE OF GROUND WATER AND DRINKING WATER, U.S. ENVTL. PROT. AGENCY, EPA 816-R-04-003, EVALUATION OF IMPACTS TO UNDERGROUND SOURCES OF DRINKING WATER BY HYDRAULIC FRACTURING OF COALBED METHANE RESERVOIRS ES-1 (2004)). "The formal battle over whether the Safe Drinking Water Act must regulate hydraulic fracturing began in 1997, when the Legal Environmental Assistance Foundation, Inc. filed a petition asking the EPA to withdraw its approval of Alabama's underground injection program." *Id.* "[T]he EPA's draft study noted that over ten chemicals associated with hydraulic fracturing required SDWA regulation, nine of which exceeded the regulatory standard, however, in the final draft of the study, the EPA either completely removed or favorably altered calculations regarding most of these chemicals." *Id.* at 614.

^{126.} Energy Policy Act of 2005, Pub. L. No. 109-58, § 322, 119 Stat. 594, 694; see also Abrahm Lustgarten, Former Bush EPA Official Says Fracking Exemption Went Too Far; Congress Should Revisit, PROPUBLICA (Mar. 9, 2011, 12:21 PM), http://www.propublica.org/article/formerbush-epa-official-says-fracking-exemption-went-too-far (describing the motivation behind the exemption).

^{127.} Craven, supra note 57, at 407; see also Spence, supra note 22, at 449-50.

^{128.} L. Poe Leggette et al., Federal Regulation of Hydraulic Fracturing: A Conversational Introduction, in 33 ENERGY & MINERAL LAW INST., THIRTY-THIRD ANNUAL INSTITUTE, 795, 824 (2012); see also U.S. ENVTL. PROT. AGENCY, Class II Oil and Gas Related Injection Wells, EPA, https://www.epa.gov/uic/class-ii-oil-and-gas-related-injection-wells (last updated Sept. 6, 2016).

^{129.} Natural Gas Extraction - Hydraulic Fracturing, supra note 49; see also Leggette et al., supra note 128, at 828-29.

^{130.} Leggette et al., supra note 128, at 828-29.

tions that set minimum requirements and restrictions for underground injections nationwide."¹³¹ These include standards "for inspection, monitoring, recordkeeping, and reporting requirements."¹³² Yet because Part C of the SDWA was specifically amended to exempt any "underground injection of" most fluids "related to oil, gas, or geothermal production," fracking wastewater is not regulated by SDWA either.¹³³ However, EPA maintains authority over its UIC Class II wells, which "accept injection of oil and gas wastewater . . . [s]o long as fracking for oil and gas production is not involved."¹³⁴

In 2009, Congress directed EPA to commission a new study to determine the comprehensive effects of fracking on the environment, including effects on drinking water.¹³⁵ In December 2016, EPA published the results of that study, finding that fracking can impact drinking water under certain circumstances—particularly during spills and improper disposal.¹³⁶

A final source of regulatory authority in the SDWA rests with EPA's emergency powers: under § 1431 of the SDWA, EPA has "the power to issue emergency orders if a contaminant in an underground source of drinking water may present an 'imminent and substantial endangerment to the health of persons."¹³⁷ However, because this provision applies only if there is substantial endangerment of human health, the SDWA would not protect drinking water supplies before there are negative human-health effects.¹³⁸

H. Toxic Substances Control Act and Emergency Planning and Community Right-to-Know Act

TSCA gives EPA the authority to require private companies to report the types and amounts of chemicals in their products.¹³⁹ These reporting requirements apply to companies that manufacture and/or import a chemical substance listed on the TSCA Inventory and are not otherwise exempt.¹⁴⁰ In 2014, EPA proposed a new rule mandating that companies report their usage of inorganic chemical substances—substances often

^{131.} Obold, supra note 40, at 482; see also 42 U.S.C. §§ 300h-300h-8 (2012).

^{132.} Craven, supra note 57, at 407 (quoting Rebecca Jo Reser & David T. Ritter, State and Federal Legislation and Regulation of Hydraulic Fracturing, 57 ADVOC. (TEX.) 31, 31 (2011)).

^{133.} See Energy Policy Act of 2005, Pub. L. No. 109-58, § 322, 119 Stat. 594, 694.

^{134.} Kron, supra note 63, at 617.

^{135.} Obold, supra note 40, at 487.

^{136.} OFFICE OF RESEARCH & DEV., U.S. ENVTL. PROT. AGENCY, EPA-600-R-16-236Fa, HYDRAULIC FRACTURING FOR OIL AND GAS: IMPACTS FROM THE HYDRAULIC FRACTURING WATER CYCLE ON DRINKING WATER RESOURCES IN THE UNITED STATES (2016).

^{137.} Craven, supra note 57, at 407-08 (quoting 42 U.S.C. § 300i(a) (2012)).

^{138.} Id. at 408.

^{139.} Leggette et al., *supra* note 128, at 823; *see also Hydraulic Fracturing Chemicals and Mixtures*, EPA, https://yosemite.epa.gov/opei/rulegate.nsf/byRIN/2070-AJ93 (last visited Sept. 30, 2017).

^{140.} Leggette et al., supra note 128, at 823.

used in fracking.¹⁴¹ The Advanced Notice of Proposed Rulemaking closed in September 2014, and the final rule has not yet been promulgated.¹⁴²

Moreover, EPA recently lowered the chemical volume that must be included in reported records in one calendar year, from 100,000 pounds to 25,000.¹⁴³ Some chemicals used in natural gas extraction are still exempt from reporting, including petroleum process streams and liquefied petroleum gas.¹⁴⁴

EPA also agreed to propose rules under §§ 8(a) and 8(d) of the Act that would require regulated parties to disclose information on "chemical substances and mixtures used in hydraulic fracturing."¹⁴⁵ These rules would also create new transparency and access to information by requiring manufacturers, processors, commercial distributors, and other regulated entities to disclose health and safety research addressing the regulated substances.¹⁴⁶ As a result, some observers expect that "the burden of compliance would more likely fall on service companies, as opposed to oil and gas well operators."¹⁴⁷ This would create a new degree of transparency, but would not control on-the-ground operations.

Under the Emergency Planning and Community Right-to-Know Act (EPCRA), operators must maintain material safety data sheets for certain chemicals that are stored at the drilling site above threshold quantities.¹⁴⁸ However, oil and gas operators are not required to prepare annual toxic chemical release forms, because the oil and gas industry is not one of the listed industries under the Act.¹⁴⁹ Further, although the EPCRA requires that operators provide the data sheets to local emergency planning committees upon request, it also allows operators to claim that certain chemical compositions are "trade secrets" and are thus exempt from disclosure.¹⁵⁰

On March 20, 2015, the Secretary of the Interior released final standards that would "improve safety and help protect groundwater by updating requirements for well-bore integrity, wastewater disposal and public disclosure of chemicals."¹⁵¹ These standards would also purport-

^{141.} See Hydraulic Fracturing Chemicals and Mixtures, 79 Fed. Reg. 28,664, 28,665–66 (proposed May 19, 2014) (to be codified at 40 C.F.R. ch. 1).

^{142.} Id. at 28,664; see also Regulatory Development and Retrospective Review Tracker: Hydraulic Fracturing Chemicals and Mixtures, EPA, https://yosemite.epa.gov/opei/RuleGate.nsf/byRIN/2070-AJ93 (last visited Oct. 30, 2017).

^{143.} Leggette et al., supra note 128, at 823.

^{144. 40} C.F.R. § 711.6(b)(1) (2017).

^{145.} Hydraulic Fracturing Chemicals and Mixtures, 79 Fed. Reg. at 28,664.

^{146.} Leggette et al., supra note 128.

^{147.} Id.

^{148. 42} U.S.C. § 11021 (2012).

^{149.} Wiseman, supra note 111, at 250 n.125.

^{150. 42} U.S.C. § 11042 (2012).

^{151.} Interior Department Releases Final Rule to Support Safe, Responsible Hydraulic Fracturing Activities on Public and Tribal Lands, BUREAU OF LAND MGMT. (Mar. 20, 2015),

edly include "measures to target where oil and gas leasing occurs[,] and protect" "special" areas where no drilling should be permitted.¹⁵² Specifically, key provisions of the rule include improved protection of ground-water supplies by requiring a certification of

well integrity and strong cement barriers between the wellbore and water zones through which the wellbore passes; [i]ncreased transparency by requiring companies to publicly disclose chemicals used in hydraulic fracturing to the Bureau of Land Management . . . within 30 days of completing fracturing operations; [h]igher standards for interim storage of recovered waste fluids from hydraulic fracturing to mitigate risks to air, water, and wildlife; [and] [m]easures to lower the risk of cross-well contamination with chemicals and fluids used in the fracturing operation by [increasing requirements for disclosure to the Bureau].¹⁵³

The rule, initially scheduled to come into effect in June 2015, applied only to land managed by the Bureau of Land Management (BLM). As a result, it was limited to development on public and tribal lands. Yet this rule represented a significant step forward in federal regulation of hydraulic fracturing. Then-Secretary of the Interior Sally Jewell noted that "[c]urrent federal well-drilling regulations are more than 30 years old and they simply have not kept pace with the technical complexities of today's hydraulic fracturing operations."¹⁵⁴

However, in June of 2016, a federal judge struck down the BLM rule.¹⁵⁵ Judge Scott Skavdahl found that BLM lacked the authority to regulate energy extraction on public lands because Congress did not delegate such authority to regulate fracking to the Department of the Interior.¹⁵⁶ In looking at the text of the 2005 Energy Policy Act, Judge Skavdahl concluded that Congress had "explicitly removed the only source of specific federal agency over fracking."¹⁵⁷ The case was appealed to the Tenth Circuit Court of Appeals, and the Tenth Circuit vacated the district court's decision in September 2017.¹⁵⁸

https://www.blm.gov/press-release/interior-department-releases-final-rule-support-safe-responsiblehydraulic-fracturing; *see also* Oil and Gas; Hydraulic Fracturing on Federal and Indian Lands, 80 Fed. Reg. 16,128, 16,128 (Mar. 26, 2015) (to be codified at 43 C.F.R. pt. 3160).

^{152.} BUREAU OF LAND MGMT., supra note 151.

^{153.} Id.

^{154.} Id.

^{155.} Wyoming v. U.S. Dep't of the Interior, No. 2:15-CV-041-SWS, 2016 WL 3509415, at *12 (D. Wyo. June 21, 2016).

^{156.} *Id.*

^{157.} *Id.* at *11.

^{158.} E.g., Jennifer A. Dlouhy, Federal Judge Strikes Down Obama's Effort to Regulate Fracking, BLOOMBERG (June 22, 2016, 8:20 AM), https://www.bloomberg.com/news/articles/2016-06-22/federal-judge-strikes-down-obama-s-effort-to-regulate-fracking; see also Wyoming v. Zinke, 871 F.3d 1133, 1146 (10th Cir. 2017) (vacating the district court's opinion and dismissing the case without prejudice because the Trump Administration began the process to rescind the proposed regulation in 2017).

I. Gaps in Federal Regulations

The significant gap in federal fracking governance appears to be an unprincipled, relatively arbitrary one.¹⁵⁹ In some ways, this is expected, as "the regulation of oil and natural gas exploration and production in the United States has always been primarily a state matter."¹⁶⁰ Because "economic motives drove the earliest government interventions into oil and gas production,"¹⁶¹ the federal regime did not emerge from a comprehensive endeavor to protect the environment from oil and gas activities. The gaps that have emerged in the federal regulation regime stem from the loopholes enacted throughout the past twenty-five years. These include the exemptions for oil and gas exploration from CERCLA, RCRA, and the SWDA. Such exemptions appear to have largely been political calculations,¹⁶² and not the result of a reasoned policy decisions to leave matters of primarily local concern to state and local governments.

The loopholes in federal fracking regulation might beg the question of whether the federal government is the most appropriate regulator. Some scholars argue that the federal government is not the appropriate level of government to regulate fracking.¹⁶³ These scholars have noted that not enough is currently known about the technology itself to institute a comprehensive federal regime.¹⁶⁴ Moreover, perhaps states are the best level of government to make these decisions about their oil and gas regulations, given the many intrastate effects of the technology¹⁶⁵ and tradition of local oil and gas regulation. Other arguments for state regulation include "the ability to tailor decisions to local environmental conditions; regulatory and policy innovation; adaptive management or other experimentalist or 'new governance' regimes; and interjurisdictional competition that can lead to economically efficient regulation."¹⁶⁶

Others, however, have argued that the federal government is actually the better actor to regulate fracking given the widespread economic, environmental, and energy-system impacts.¹⁶⁷ With the rapid expansion

^{159.} See Shalanda Helen Baker, Is Fracking the Next Financial Crisis? A Development Lens for Understanding Systemic Risk and Governance, 87 TEMP. L. REV. 229, 268 (2015).

^{160.} Spence, *supra* note 22, at 447.

^{161.} Id.

^{162.} See, e.g., Kron, supra note 63, at 612–13 (describing the "Halliburton Loophole" in the SWDA and the purported role that Vice President Cheney played in brokering the deal).

^{163.} See, e.g., David Spence, Energy Management Brief: Is It Time for Federal Regulation of Shale Gas Production?, ENERGY MGMT. & INNOVATION CTR., https://www.mccombs.utexas.edu/~/media/Files/MSB/Centers/EMIC/Briefs/Energy-Brief-Is-It-Time-for-Federal-Regulation-of-Shale-Gas-Production.pdf (last visited Sept. 30, 2017).

^{164.} Id.

^{165.} Burger, *supra* note 9, at 153 (noting that "most individual contamination events occur entirely within a single state or locality" but arguing that federal regulation is nonetheless preferable).

^{166.} Id. at 158-59 (quoting Michael Burger, "It's Not Easy Being Green" Local Initiatives, Preemption Problems, and the Market Participant Exception, 78 U. Cin. L. Rev. 835, 856 (2010)).

^{167.} See, e.g., id. at 153.

of fracking across the United States, there is a large risk of interstate pollution.¹⁶⁸ Federal regulation might also be favored in order to address

the interrelated problems of interstate externalities, the "race to the bottom," and NIMBYism (not in my backyard); the economic efficiencies gained through federal uniformity; the benefits of pooling resources in order to gather technical and scientific expertise; creating durable rules, and providing for enforcement; the potential for greater diversity of interest-group participation; and the mobilization around national moral imperatives.¹⁶⁹

In any event, local governance is rarely a part of this two-sided debate.

II. STATE REGULATIONS

The gap in federal regulations is not unique to that level of governance. Fracking affects every layer of regulation, from local to national, and yet there is no comprehensive regulatory framework at any level.¹⁷⁰ At the state level, categorizing fracking regulations is difficult because of the many steps and processes involved in fracking, and the variety of policies that exist in different states.¹⁷¹ Because fracking is a complex process involving a range of stakeholders, effects, and procedures, most states' regulations addressing fracking are fragmented across state statutes and codes.¹⁷² Each state has its own regulations and statutory provisions, and no comprehensive database has yet identified individual states' statutes and regulations that apply to each stage of the process.¹⁷³ Even if an organization were to attempt to catalogue these requirements, state regulations are often being revised as science regarding fracking develops and public opinion shifts.¹⁷⁴

"Currently, only twenty-seven states have laws in place to address hydraulic fracturing and related activities."¹⁷⁵ These laws employ a broad range of regulatory techniques to manage fracking.¹⁷⁶ For example, the state of New York announced a ban on hydraulic fracturing in December 2014, after a state Department of Health report concluded that more re-

^{168.} *Id.* at 161.

^{169.} Id. at 158 (quoting Michael Burger, "It's Not Easy Being Green" Local Initiatives, Preemption Problems, and the Market Participant Exception, 78 U Cin. L. Rev. 835, 837–38 (2010)).

^{170.} See Baker, supra note 159, at 268.

^{171.} See Hannah J. Wiseman, Regulatory Islands, 89 N.Y.U. L. REV. 1661, 1695-97 (2014).

^{172.} Id. at 1696-97.

^{173.} *Id.* at 1697. However, Professor Wiseman notes that "some are getting close," including the Interstate Oil and Gas Compact Commission. *Id.*

^{174.} Id. at 1698–99.

^{175.} Blake Lata, Hydraulic Fracturing: Evaluating Fracking Regulations, 4 U. BALT. J. LAND & DEV. 177, 181 (2015).

^{176.} See Alexandra Dapolito Dunn & Chandos Culleen, Engines of Environmental Innovation: Reflections on the Role of States in the U.S. Regulatory System, 32 PACE ENVTL. L. REV. 435, 462-64 (2015).

search into the technology was necessary to determine whether fracking is safe.¹⁷⁷ In 2013, California passed Senate Bill 4, which allowed fracking subject to a number of requirements including permitting, reporting information about fluids used, and providing permit copies to all neighboring property owners and tenants.¹⁷⁸ Some states, such as Maryland, have decided to propose regulations regarding fracking, "but with strict control over the process."¹⁷⁹ Other states, such as Montana, have allowed fracking with stringent, albeit less comprehensive regulation.¹⁸⁰

Such disparate fracking regulations across states may entice fracking operators to "race to the bottom."¹⁸¹ Shalanda Helen Baker, for example, believes that this pattern is already occurring: she cites states with more lax regulations, like West Virginia and Pennsylvania, as experiencing the environmental and social effects of fracking in ways that states that have banned fracking, like Vermont and New York, have not.¹⁸²

Recognizing that there is a significant federal gap and a wide variety of regulations across the twenty-seven states that have regulated fracking, we have singled out four states whose approaches to regulating fracking differs significantly. Pennsylvania, North Dakota, Colorado, and Texas all currently allow hydraulic fracturing and have seen large increases in the amount of fracking occurring within their borders over the past ten years. Investigating these states' policies demonstrates the array of options available for states to regulate land use within their borders. We believe that these four case studies illuminate the wide variety of activity currently occurring in the fracking space. As discussed further in Part V, local governments in these states are also exemplifying a third dimension in the fracking debate: local governance.

A. Colorado

1. Overview

Colorado has an extensive history of oil and gas development. The state's drilling has historically occurred on the Western Slope of the state, and more recently in the more densely populated Front Range area including Denver and Boulder.¹⁸³ Colorado state law gives primary regulatory authority over oil and gas development to the state, though local

^{177.} Id. at 463.

^{178.} Id. at 462-63.

^{179.} Id. at 463.

^{180.} See NATHAN RICHARDSON ET AL., RES. FOR THE FUTURE, THE STATE OF STATE SHALE GAS REGULATION 15 (2013), http://www.rff.org/research/publications/state-state-shale-gas-regulation (comparing the categories and quantity of regulation in different states).

^{181.} Baker, *supra* note 159, at 271.

^{182.} Id.

^{183.} CARY WEINER, COLO. STATE UNIV. EXTENSION, FACT SHEET NO. 10.639, OIL AND GAS DEVELOPMENT IN COLORADO (2014), http://extension.colostate.edu/docs/pubs/consumer/10639.pdf.

governments also have some explicit authority.¹⁸⁴ Colorado's principal oil and gas law is the 1951 Oil and Gas Conservation Act (COGCA).¹⁸⁵ The COGCA seeks to balance oil and gas development in a manner that is "consistent with protection of public health, safety, and welfare, including protection of the environment and wildlife resources."¹⁸⁶ It grants authority to the Colorado Oil and Gas Conservation Commission (COGCC) to make and enforce regulations as reasonably required to implement such power and authority; otherwise, the statute has very few other specific guidelines for the Commission.¹⁸⁷ However, the COGCC's implementing regulations are specific and cover a large number of subiects. The governor appoints seven of these commissioners and two are executive directors of state agencies.¹⁸⁸ The Commission's "mission is to provide for the responsible development of the oil and gas resources within the state," covering topics like operator registration, permits, notice to the public and landowners, and enforcement.¹⁸⁹ The Commission also runs and maintains an online database cataloging the state's rules.¹⁹⁰

Under the COGCA, local jurisdictions have authority to regulate local affairs, including land use.¹⁹¹ Colorado has a strong tradition of home rule, and as a result, local governments are authorized to address even those aspects of oil and gas development that the Commission's regulations cover, provided that "the local government regulations can be harmonized with state regulations and do not 'materially impede' or 'destroy' the state regulation."¹⁹² Thus, the state's interest in uniform policies across its jurisdiction and local governments' interest in flexibility and autonomy are sometimes at odds.¹⁹³ Colorado's state courts have held that state laws will only preempt local efforts if the local law causes an operational conflict with state law.¹⁹⁴ Further, two Colorado Supreme Court cases have held that local governments can regulate oil and gas operations, but "cannot completely prohibit state-sanctioned oil and gas development within their jurisdictions."¹⁹⁵

^{184.} Id.

^{185.} John Jennings, Current Topics in Colorado's Regulatory Landscape, 92 DENV. U. L. REV. ONLINE 183, 185-86 (2015).

^{186.} COLO. REV. STAT. § 34-60-102(1)(a)(I) (2017).

^{187.} See id. § 34-60-105(1).

^{188.} Jennings, supra note 185, at 186 (citing COLO. REV. STAT. § 34-60-104 (2014)).

^{189.} Id. (quotation omitted).

^{190.} *Id*.

^{191.} See id.

^{192.} Joel Minor, Local Government Fracking Regulations: A Colorado Case Study, 33 STAN. ENVTL. L.J. 61, 104–05 (2014) (quoting Bd. of Cty. Comm'rs v. Bowen/Edwards Assocs., 830 P.2d 1045, 1059 (Colo. 1992)).

^{193.} See Jennings, supra note 185, at 186-87.

^{194.} See id.

^{195.} Id.; see also Voss v. Lundvall Bros., 830 P.2d 1061, 1062 (Colo. 1992); Bd. of Cty. Comm'rs v. Bowen/Edwards Assocs., 830 P. 2d 1045, 1055-56 (Colo. 1992).

Litigation has erupted in Colorado as a result of localities enacting bans or other restrictions on fracking.¹⁹⁶ In May 2016, the Colorado Supreme Court struck down local government fracking bans, affirming a lower court's ruling that state law preempted a local fracking prohibition.¹⁹⁷ In addition to litigation, both industry-backed and industry-opposed groups proposed ballot initiatives to amend the state constitution in 2014.¹⁹⁸ Further, as the result of a politically-engineered compromise, the groups backing all four ballot measures withdrew their petitions before the general election in 2014.¹⁹⁹

2. Permitting & Reporting Requirements

Permitting and reporting requirements in Colorado are regulated by the 1965 Ground Water Management Act, which requires "every well intending to divert tributary, nontributary, designated, or Denver Basin groundwater first secure a permit."²⁰⁰ These subcategories each require slightly different permit processes.²⁰¹ For example, in areas of Colorado facing water shortages, additional water saving action (an "augmentation plan") is required.²⁰² These permits are usually distributed by the state engineer and may differ slightly depending on the type of groundwater to be removed.²⁰³

In 2011, the Colorado Legislature passed a law requiring "operators to keep a chemical inventory on-site at each well and make that information available to emergency responders and local governments within [twenty-four] hours in the event of a spill."²⁰⁴ The law also requires that operators report the amount and type of chemical added to their fracturing mixtures.²⁰⁵ Drilling operators are encouraged, but not required, to create a Comprehensive Drilling Plan intended to identify foreseeable oil and gas activities in a defined geographic area.²⁰⁶ All operators must file

^{196.} Jennings, *supra* note 185, at 186.

^{197.} Michael Wines, Colorado Court Strikes Down Local Bans on Fracking, N.Y. TIMES (May 2, 2016), https://www.nytimes.com/2016/05/03/us/colorado-court-strikes-down-local-bans-on-fracking.html.

^{198.} Ballot Measures Withdrawn, supra note 2.

^{199.} *Id*.

^{200.} Yong Eoh, Yes, No, Maybe So: Uncertainty in Texas Groundwater Withdrawal for Hydraulic Fracturing, 52 HOUS. L. REV. 1227, 1244 (2015) (citing COLO. REV. STAT. §§ 37-90-107, -137 (2013)).

^{201.} Id. at 1245.

^{202.} Id. at 1244-45.

^{203.} Id. at 1245.

^{204.} Francis Gradijan, State Regulations, Litigation, and Hydraulic Fracturing, 7 ENVTL. & ENERGY L. & POL'Y J. 47, 68 (2012) (quoting David O. Williams, Critics Claim Colorado Gas Drillers Playing Both Sides of 'Fracking' Debate, COLO. INDEP. (July 22, 2010), http://www.coloradoindependent.com/57895/critics-claim-colorado-gas-drillers-playing-both-sides-of-fracking-debate).

^{205.} Id. at 68-69.

^{206.} See 2 COLO. CODE REGS. § 404-1:216(a) (2017).

detailed and truthful reports at times specified by the state regulations and conduct tests to determine the presence of waste or pollution.²⁰⁷

Other aspects of hydraulic fracturing governed by the COGCC health and safety requirements (600 Series) include fire prevention and setback and mitigation requirements for various types of buildings.²⁰⁸ The 1200 Series establishes a comprehensive wildlife protection system.²⁰⁹

3. Casing & Cementing Standards

Colorado's "300 Series" of regulations regulates drilling, development, production, and abandonment of wells.²¹⁰ Rule 326 governs the mechanical integrity of wells. It specifies that there shall be a "test to determine if there is a significant leak in the well's casing, tubing, or mechanical isolation device."²¹¹ The Commission's regulations also cover well spacing requirements.²¹²

4. Air

Regulation 805 specifies that oil and gas facilities "shall be operated in such a manner that odors and dust do not constitute a nuisance or hazard to public welfare."²¹³ Operators must control fugitive dust caused by their operations.²¹⁴ The regulation controls emissions from production equipment, such as crude oil, and from well completions.²¹⁵

5. Water: Surface, Ground, and Wastewater

Colorado regulates groundwater, but no other type of water contamination: in 2012, the COGCC promulgated a final rule that will apply to oil and gas wells permitted on or after May 1, 2013.²¹⁶ That rule requires initial baseline samples of groundwater underlying the wells and subsequent monitoring from several locations on a proposed oil and gas well.²¹⁷

Well construction for oil and gas purposes is generally not allowed in any of the designated basins, and the operator must formally apply to change the water right.²¹⁸ For operators entering into agreements with

213. 2 COLO. CODE REGS. § 404-1:805(a).

216. Id. § 404-1:609.

^{207.} Id. § 404-1:206.

^{208.} See id. §§ 404-1.604, .606A, .609.

^{209.} Id. §§ 404-1:1201 to :1205 (requiring operators to identify impacted wildlife and creating area-specific restrictions).

^{210.} Id. §§ 404-1:300 to :341.

^{211.} Id. § 404-1:326.

^{212.} Minor, *supra* note 192, at 103.

^{214.} Id. § 404-1:805(c).

^{215.} Id. § 404-1:805(b).

^{217.} Id. § 404-1:609(b).

^{218.} Eoh, supra note 200, at 1246.

landowners to divert non-tributary groundwater from the aquifer underlying the landowner's land, no more than one percent of the amount of groundwater estimated to be in the aquifer may be withdrawn annually.²¹⁹

Operators seeking to withdraw groundwater outside of designated groundwater basins must usually secure a court-approved augmentation plan.²²⁰ According to Yong Eoh, "[t]his is because most wells exist in parts where surface streams are over-appropriated, and because these wells usually have junior water rights."²²¹

6. Recent Updates

A 2011 study by STRONGER,²²² an independent nonprofit that helps states develop hydraulic fracturing regulations, suggested several improvements to Colorado's regulatory framework.²²³ First, the group proposed that the COGCC set minimum and maximum surface casing depths to demonstrate that those depths protect fresh groundwater.²²⁴ Second, STRONGER recommended that the state COGCC and Colorado's Division of Water Resources "jointly evaluate available sources of water for use in hydraulic fracturing."²²⁵

In 2014, Colorado approved regulations crafted by the state's most productive oil and gas producers in conjunction with the Environmental Defense Fund.²²⁶ The regulations seek to "fix persistent leaks from tanks and pipes" by "require[ing] companies to install equipment to minimize leakage of toxic gases and to control or capture 95 percent of emissions."²²⁷ They also represent any state's first attempt to regulate methane emissions caused by fracking.²²⁸

In February 2015, a task force of twenty-one governor-appointed members²²⁹ unanimously recommended a series of action items "to har-

224. Id. at 5–6.

225. Id. at 7.

227. Id.

228. Id.

^{219.} Id.

^{220.} Id. at 1244-45.

^{221.} Id. at 1246.

^{222.} See generally STRONGER, STATE REVIEW OF OIL AND NATURAL GAS ENVIRONMENTAL REGULATIONS (2016), http://www.strongerinc.org/wp-content/uploads/2016/09/STRONGER-Presentation.pdf (last visited Sept. 30, 2017) (explaining the structure and purpose of the organization).

^{223.} STRONGER, COLORADO HYDRAULIC FRACTURING STATE REVIEW 5-7 (2011), http://cewc.colostate.edu/wp-content/uploads/2012/02/Colorado_HF_Review_2011.pdf.

^{226.} Jennifer Oldham, Colorado First State to Clamp Down on Fracking Methane Pollution, BLOOMBERG (Feb. 23, 2014, 7:20 PM), www.bloomberg.com/news/articles/2014-02-24/colorado-first-state-to-clamp-down-on-fracking-methane-pollution.

^{229.} These members included six representatives from the oil and gas industry, agricultural industry, or homebuilding industry; six members from local government and conservation communities; and seven members from a variety of other interests. KEYSTONE CTR., COLORADO OIL AND GAS

monize state and local regulatory structures" respecting the oil and gas industry.²³⁰ One such recommendation advised each municipality to create a Local Government Designee to work with the COGCC in an effort to improve communication between the localities and state government, and mitigate community-specific impacts.²³¹ This report also recommended that the Oil and Gas Commission focus on drafting rules that would enhance local governments' involvement in the drill permitting process.²³²

B. North Dakota

1. Overview

In the last ten years, North Dakota has emerged as the third-largest oil producing state in the United States.²³³ Fracking in North Dakota is governed by the oil and gas regulations in the North Dakota Century and Administrative Codes (NDAC) and enforced by the North Dakota Industrial Commission's Department of Mineral Resources.²³⁴ These regulations cover several aspects of the hydraulic fracturing process, including permitting requirements and rules regarding the disposition of fracturing fluids, disclosure, and record keeping.²³⁵

The North Dakota Department of Health Environmental Health Section administers provisions of the NDAC that protect the state's air, land, and water resources. The North Dakota Department of Trust Lands regulates oil and gas lease agreements, bonus payments and royalties, rightsof-way applications and procedures, surface damage agreements, and seismic surveys.²³⁶

2. Permitting & Reporting Requirements

In North Dakota, no entity or person may begin any operations for drilling a well without first obtaining a permit from the North Dakota Industrial Commission.²³⁷ Moreover, unless the Commission provides a waiver, it will not issue a permit for an oil or gas well to be located within 500 feet of a permanently occupied dwelling.²³⁸ If the Commission

TASK FORCE FINAL REPORT 4 (2015), http://www.cred.org/wpcontent/uploads/2015/04/OilGasTaskForceFinalReport.pdf.

^{230.} Id. at 3.

^{231.} Id. at 9–11.

^{232.} *Id.* at 5–8.

^{233.} Shale and Fracking Tracker: North Dakota, VINSON & ELKINS, http://www.velaw.com/Shale---Fracking-Tracker/US-State-Resources/North-Dakota (last visited Sept. 30, 2017).

^{234.} Id.

^{235.} *Id.* 236. *Id.*

^{230. 12}

^{237.} N.D. CENT. CODE § 38-08-05(1) (2017).

^{238.} Id. § 38-08-05(2).

issues a permit within 1,000 feet of an occupied dwelling, it reserves the right to impose additional conditions on the permit operator.²³⁹

Within thirty days of ceasing operations, any open pit must be reclaimed.²⁴⁰ North Dakota law requires that within sixty days of performing hydraulic fracturing, the owner, operator, or service company must "post on the [F]rac[F]ocus chemical disclosure registry all elements made viewable by the [F]rac[F]ocus website."²⁴¹ However, there are no express exceptions to reporting requirements for trade secrets or otherwise confidential information.²⁴²

3. Casing & Cementing Standards

North Dakota regulations specify that all wells drilled for oil or natural gas must be "properly cemented at sufficient depths to adequately protect and isolate all formations containing water, oil or gas or any combination of these; protect the pipe . . . and isolate the uppermost sand of the Dakota group."²⁴³ These regulations require operators to pressure test casing strings after cementing and before beginning other operations, like injecting fracking fluid, in the well.²⁴⁴ In addition, operators are required to keep a log describing the presence and quality of bonding of cement before completing any well and must file these reports within thirty days of completing the work.²⁴⁵ Further, North Dakota requires the application of an appropriate cement evaluation tool to test well bore and casing integrity before conducting hydraulic fracturing activity.²⁴⁶

Any exploration and production waste must be disposed of in a particular manner. This means that such waste must be stored in lined pits removed within seventy-two hours after operations have ceased, and disposed of at an authorized facility.²⁴⁷ Lastly, the North Dakota Industrial Commission may grant exceptions to these rules, "after due notice and hearing, when such exceptions will result in the prevention of waste and operate in a manner to protect correlative rights."²⁴⁸

4. Air

North Dakota regulations do not establish any particular requirements for air pollution or emissions, but they do specify that "[t]he commission may require surface air monitoring [] to detect movement of [sequestered] carbon dioxide that could endanger an underground source

240. N.D. ADMIN. CODE § 43-02-03-19.3 (2017).

Id

239.

^{241.} *Id.* § 43-02-03-27.1.

^{242.} See id. 243. Id. § 43-02-03-21.

^{243,} *Id.* § 43-62-63-2 244, *Id.*

^{245.} Id. § 43-02-03-21 to -25.

^{246.} Id. § 43-02-03-27.1.

^{247.} Id. § 43-02-03-19.3.

^{248.} Id. § 43-02-03-02.

of drinking water."²⁴⁹ Sequestered carbon dioxide might leak into underground drinking water if, for example, it escapes "the drilled holes [] of improperly constructed injection wells."²⁵⁰ Carbon dioxide might also leach into the drinking water supply if plugged wells are not adequately sealed, if there are faults or fractures in the surrounding rock formations, or from "[1]ateral and upward movement into hydraulically connected USDWs [underground sources of drinking water]."²⁵¹ Should carbon dioxide build up in any of these confined spaces, it could increase the pressure on the water source, potentially causing seismic events.²⁵²

5. Water: Surface, Ground, and Wastewater

Much of North Dakota's fracking regulation regarding water relates to carbon dioxide sequestration.²⁵³ Before issuing a permit, the Oil and Gas Commission must find that the drilling operation's storage facility for carbon dioxide will not adversely affect surface waters or any freshwater source.²⁵⁴ North Dakota regulations specify that drilling pits "shall be diked to prevent surface water from running into the pit,"²⁵⁵ and treatment facilities "shall be constructed and operated so as not to endanger surface or subsurface water supplies."²⁵⁶

For groundwater, all applications for permits to drill must provide leak detection and monitoring plans for all wells and surface facilities, and this plan must "[i]dentify potential degradation of groundwater resources, with a particular emphasis on underground sources of drinking water."²⁵⁷ Further, the operator must prepare a testing and monitoring plan to ensure that any sequestration project does not endanger underground sources of drinking water.²⁵⁸ This plan must include "periodic monitoring of ground water quality and geochemical changes."²⁵⁹

North Dakota has no additional requirements for wastewater disposal.²⁶⁰

6. Recent Updates

North Dakota has recently challenged the BLM's proposed rules for fracking on BLM-managed land, arguing that federal law lets states regu-

^{249.} Id. § 43-05-01-11.4(1)(h).

^{250.} Carbon Dioxide Capture and Sequestration: Storage Safety and Security, EPA, https://19january2017snapshot.epa.gov/climatechange/carbon-dioxide-capture-and-sequestration-storage-safety-and-security_.html (last updated Sept. 29, 2016).

^{251.} Id.

^{252.} Id.

^{253.} See N.D. CENT. CODE §§ 38-22-08 to -23 (2017).

^{254.} Id. § 38-22-08(7).

^{255.} N.D. ADMIN. CODE § 43-02-03-19.4 (2017).

^{256.} Id. § 43-02-03-51.3(13).

^{257.} Id. § 43-05-01-05(1)(g)(2).

^{258.} Id. § 43-05-01-11.4.

^{259.} Id. § 43-05-01-11.4(1)(d).

^{260.} See N.D. CENT. CODE §§ 38-01-01 to 38-22-23 (2017).

late oil and gas operations, and thus these regulations impermissibly override North Dakota's authority.²⁶¹ Several other states, including Colorado, Wyoming, and Utah, have joined the suit. As described above in Part II, Judge Skavdahl in Wyoming issued an injunction in September 2015 halting the implementation of these regulations.²⁶²

C. Pennsylvania

1. Overview

Fracking has been used as a method of gas extraction in Pennsylvania since the 1950s, but the practice has grown exponentially since the late 2000s.²⁶³ In response to this increased practice, Pennsylvania significantly updated its Oil and Gas Act in 2012 and in 2016.²⁶⁴ This Act explicitly preempts local control over fracking.²⁶⁵ The Coal and Gas Resource Coordination Act, the Oil and Gas Conservation Law, and the state's environmental protection laws also regulate fracking.²⁶⁶ Other environmental protection laws include the "Clean Streams Law, the Dam Safety and Encroachments Act, the Solid Waste Management Act, the Water Resources Planning Act[,] and the Community Right to Know Act."²⁶⁷

The Pennsylvania Department of Environmental Protection (DEP) enacts and enforces fracking regulations in Pennsylvania. David Spence argues that, consistent with his theory of "mission-orientation,"²⁶⁸ the delegation of fracking regulation to the DEP demonstrates a commitment

^{261.} Katherine Lymn, North Dakota Seeks to Join Suit Against Federal Fracking Rule, GRAND FORKS HERALD (Mar. 31, 2015, 2:21 PM), http://www.grandforksherald.com/news/business/3711856-north-dakota-seeks-join-suit-againstfederal-fracking-rule.

^{262.} Coral Davenport, Judge Blocks Obama Administration Rules on Fracking, N.Y. TIMES (Sept. 30, 2015), https://www.nytimes.com/2015/10/01/us/politics/judge-blocks-obama-administration-rules-on-fracking.html.

^{263.} See PA. DEP'T OF ENVTL. PROT., PENNSYLVANIA HYDRAULIC FRACTURING STATE REVIEW 10 (2010), http://www.strongerinc.org/wp-content/uploads/2015/04/PA-HF-Review-Print-Version.pdf.

^{264.} See PA. DEP'T OF ENVTL. PROT., FINAL REGULATIONS FOR OIL AND GAS SURFACE ACTIVITIES 1-2,

http://files.dep.state.pa.us/PublicParticipation/Public%20Participation%20Center/PubPartCenterPort al-

Files/Environmental%20Quality%20Board/2016/February%203/Fact%20Sheet%20for%20Final%2 0Ch%2078%20Regulation.pdf (last visited Sept. 30, 2017); Marie Cusick, *DEP Finalizes New Oil* and Gas Drilling, STATEIMPACT (Jan. 6, 2016, 3:10 PM), https://stateimpact.npr.org/pennsylvania/2016/01/06/dep-finalizes-new-oil-and-gas-drillingregulations.

^{265.} See Huntley & Huntley, Inc. v. Borough Council, 964 A.2d 855, 858 (Pa. 2009).

^{266.} Laws, Regulations and Guidelines, PA. DEP'T OF ENVTL. PROT., http://www.dep.pa.gov/Business/Energy/OilandGasPrograms/OilandGasMgmt/Pages/Laws,-Regulations-and-Guidelines.aspx (last visited Aug. 31, 2017).

^{267.} Id.

^{268.} This theory suspects that people attracted to work for an agency will exhibit policy preferences consistent with its statutory mission. Spence, *supra* note 22, at 458.

to minimizing the environmental impacts of fracking.²⁶⁹ DEP has more than doubled its drilling oversight staff since 2008.²⁷⁰ Spence's hypothesis may well be reflected by this increase in attention to drilling. However, some commentators argue that Pennsylvania regulators are still understaffed.²⁷¹

2. Permitting & Reporting Requirements

Drilling a well in Pennsylvania requires a license.²⁷² Revenue from drill permit application fees funds the DEP staff as well as the DEP oil and gas program more broadly.²⁷³ Pennsylvania is "not involved in regulating lease agreements between mineral property owners and producers . . . DEP does not audit payments, read or calibrate meters, or tanks, or otherwise involve itself in disputes over lease issues."²⁷⁴ Instead, authority over leasing state land for fracking operations lies with the Commonwealth's Department of Conservation and Natural Resources.²⁷⁵ For nonstate lands, there is no agency oversight of the private contracts between landowners and lease-seekers.²⁷⁶

The Pennsylvania Oil and Gas Act requires operators to notify the DEP at least twenty-four hours before they begin drilling a well, but there is no specific requirement that the operator notify the DEP before beginning the fracking process by injecting fluid into the pre-drilled well.²⁷⁷ The operator must then file a report within thirty days after completing drilling, and that report must include information about the well, such as the type of propping agent that will be used, average injection

^{269.} Id.

^{270.} Sabrina Shankman, New Gas Drilling Rules, More Staff for Pennsylvania's Environmental Agency, PROPUBLICA (Feb. 9, 2010, 12:44 PM), https://www.propublica.org/article/new-gasdrilling-rules-more-staff-for-pennsylvanias-environmental-agency.

^{271.} Katie Colaneri, *Well Inspectors Lured by Higher Pay to Industry Jobs*, STATEIMPACT (Oct. 7, 2013, 1:47 PM), https://stateimpact.npr.org/pennsylvania/2013/10/07/well-inspectors-lured-by-higher-pay-to-industry-jobs.

^{272.} Eoh, *supra* note 200, at 1240. This requirement exempts farmers, drilling for "farming purposes," as well as landowners drilling on their own property, or lessees drilling on leased property. 32 PA. CONS. STAT. § 645.4 (2017).

^{273.} Laura Legere, Drilling Decline in Pennsylvania Hurts Funding for DEP Regulators, PITTSBURG POST-GAZETTE: POWERSOURCE (May 19, 2015, 12:00 AM), http://powersource.postgazette.com/powersource/policy-powersource/2015/05/19/Oil-and-gas-drilling-decline-hurtsfunding-for-Pennsylvania-DEP-regulators.

^{274.} Laws, Regulations and Guidelines, supra note 266.

^{275.} See Laura Legere, Pennsylvania Legislature Wins in Court on Fracking Royalties, PITTSBURG POST-GAZETTE: POWERSOURCE (Jan. 7, 2015, 1:05 PM), http://powersource.postgazette.com/powersource/policy-powersource/2015/01/07/Court-Pennsylvania-DCNR-not-governorhas-authority-to-OK-natural-gas-leases-on-state-lands; see also PA. DEP'T OF CONSERVATION AND NAT. RES., M-O&G (11-09), OIL AND GAS LEASE FOR FOREST STATE LANDS 1, http://www.docs.dcnr.pa.gov/cs/groups/public/documents/document/dcnr_008504.pdf (last visited Aug. 31, 2017).

^{276.} See Pennsylvania – Leasing Tips for Natural Gas Drilling, THE NETWORK FOR PUB. HEALTH LAW https://www.networkforphl.org/_asset/6djnml/Pennsylvania-Leasing-Tips-FINAL.pdf (last visited Aug. 31, 2017).

^{277.} PA. DEP'T OF ENVTL. PROT., supra note 263, at 18.

rate, rock pressure, and well service company name.²⁷⁸ Pennsylvania's chemical disclosure rules require that drilling companies disclose to the DEP the names of chemicals (excluding trade secrets) that are used at a drilling site within six days of the conclusion of fracking.²⁷⁹ Recently-enacted regulatory changes require prospective drillers to identify public resources like schools and playgrounds that would be affected by drilling.²⁸⁰

3. Casing & Cementing Standards

Pennsylvania's standards for casing and cementing are expressed as performance standards—for example, casing must be "of sufficient cemented length and strength to attach proper well control equipment and prevent blowouts, explosions, fires and casing failures."²⁸¹ Such casing standards were updated in 2011.²⁸² "General provisions for well construction and operation require the operator to 'construct and operate the well' in a manner that will ensure the integrity of the well [and protect] 'health, safety, environment, and property."²⁸³ These plans must describe the casing that the operation is using, the proposed depths to which they will set casing, the proposed placement of centralizers, and detailed information about the type of cement they will use.²⁸⁴

4. Water: Surface, Ground, and Wastewater

Pennsylvania manages fracking wastewater in four ways: it is "(1) [r]eused to fracture additional wells; (2) [t]reated and discharged to surface water; (3) [i]njected into underground disposal wells; or (4) [t]ransported to out-of-state facilities.²⁸⁵

For groundwater, the 2012 Oil and Gas Act dictates that water withdrawals used for oil and gas drilling may not adversely affect the quality or quantity of water in the watershed.²⁸⁶ This Act requires operators to restore or replace a water supply with an alternative source of water of similar quantity and quality.²⁸⁷ Additionally, both the DEP and

^{278.} Id.

^{279. 58} PA. CONS. STAT. § 3222.1(b), (d) (2016); Gradijan, supra note 204, at 74-75; Spence, supra note 22, at 456.

^{280.} Cusick, supra note 264.

^{281.} Spence, supra note 22, at 455 (quoting 25 PA. CODE § 78.71(a) (2011)).

^{282.} Timothy James Furdyna, Strengthening State Regulation of Casing and Cementing in High Volume Hydraulically Fractured Natural Gas Wells, 9 APPALACHIAN NAT. RESOURCES L.J. 1, 24 (2015).

^{283.} Id. at 25 (quoting 25 PA. CODE § 78.73(a) (2015)).

^{284.} See PA. DEP'T OF ENVTL. PROT., supra note 263, at 11; see also Furdyna, supra note 282, at 25–26.

^{285.} PA. DEP'T OF ENVTL. PROT., *supra* note 263, at 10. The Pennsylvania DEP is not authorized to administer its own UIC program due to the EPA's federal primacy. *Id.* at 11.

^{286.} STRONGER, PENNSYLVANIA FOLLOW-UP STATE REVIEW 60 (2013), http://www.strongerinc.org/wp-content/uploads/2015/04/Final-Report-of-Pennsylvania-State-Review-Approved-for-Publication.pdf.

^{287.} Eoh, supra note 200, at 1240.

the Oil and Gas Act require operators to submit water management plans to identify where and how much water will be withdrawn during fracking operations.²⁸⁸ Where water contamination occurs, there is a legal presumption that the oil and gas well operator is responsible for the pollution if the contamination "occurs within six months of drilling and is within 1,000 feet of the well."²⁸⁹

There are few other specific requirements for protecting surface or wastewater.²⁹⁰ Both the landowner and operator must undertake baseline water quality tests before operation.²⁹¹ However, some regions facing water scarcity must develop water plans that identify existing and future uses of water available in these areas.²⁹²

5. Air

The General Permit for Air Pollution Control in Natural Gas Compression and/or Processing Facilities (GP-5) regulates air emissions in Pennsylvania.²⁹³ This general permit authorizes the construction, modification, and operation of natural gas or gas processing facilities.²⁹⁴ It is only applicable to non-major facilities (as defined by the CAA);²⁹⁵ major facilities need separate plan approval from the DEP before construction.296

6. Recent Updates

The nonprofit STRONGER recommended in 2013 that the DEP improve its data standardization for tracking violations and enforcement actions to facilitate accurate internal performance and transparency to the public.²⁹⁷ The team also recommended that the DEP complete a study for unconventional gas development to determine whether its program appropriately assesses wastes to detect radiation.²⁹⁸ Further, the organization recommended that DEP consider developing a process by which it determines surface casing depths to protect fresh groundwater, as its

^{288.} Id.

^{289.} PA. DEP'T OF ENVTL. PROT., supra note 263, at 5.

^{290.} See id. at 38.

^{291.} See id. at 5.

^{292.} Eoh, supra note 200, at 1240.

^{293.} STRONGER, supra note 286, at 113; see also GP-05, Natural Gas Compression Facili-DEP'T Envtl. ties. PA. PROTECTION ELIBRARY. http://www.elibrary.dep.state.pa.us/dsweb/View/Collection-9747 (last visited Sept. 2, 2017).

^{294.} STRONGER, supra note 286, at 113.

^{295.} 35 PA. CONS. STAT. § 4006.6(b) (2016). "Major" is as defined in Title V of the CAA: "[A]ny source that emits or has the potential to emit 100 tons per year or more of any criteria air pollutant." 42 U.S.C. § 7602(j) (2012).

BUREAU OF AIR QUALITY, PA. DEP'T OF ENVTL. PROT., COMMENT/RESPONSE DOCUMENT 296. FOR MODIFICATIONS TO THE GENERAL PLAN APPROVAL AND/OR GENERAL OPERATING PERMIT FOR NATURAL GAS COMPRESSION AND/OR PROCESSING FACILITIES (BAQ-GPA/GP-5) 4 (2015), http://www.elibrary.dep.state.pa.us/dsweb/Get/Document-105849/2700-PM-BAQ0205%20GP-5%20Comment%20and%20%20Response%20Document%201-13-2015.pdf.

^{297.}

STRONGER, supra note 286, at 11.

^{298.} Id. at 11-12.

methodology has been inconsistent thus far.²⁹⁹ STRONGER also suggested the state consider developing guidance for pre-drilling water sampling.³⁰⁰ DEP's annual reports suggest that Pennsylvania has considered some, but not all, of STRONGER's suggestions.³⁰¹

Recent legislative activity suggests that fracking will continue in Pennsylvania under regulation in the near future. Disagreeing with New York State's fracking ban in December 2014, Pennsylvania Governor Tom Wolf said he believes fracking can be done safely: "I want to do what I think we can do here in Pennsylvania and that is have this industry, but do it right from an environmental point of view, from a health point of view."³⁰² However, Governor Wolf also stated that he would support a moratorium on fracking in the Delaware River basin in the eastern part of the state and on new leasing in state parks and forests.³⁰³ On January 29, 2015, he signed a moratorium on drilling in Pennsylvania's state parks and national forests, comprising over two million acres of land.³⁰⁴

Later, in April 2015, Governor Wolf heard comments from the public on proposed fracking regulations that would increase the mandatory setbacks of oil and gas drilling operations to at least one mile from schools.³⁰⁵ "The new rules would also ban temporary fracking waste storage pits at well sites and increase requirements for ponds used as way stations for drilling waste."³⁰⁶ These rules were finalized in October 2016, and "require additional measures if fracking is taking place near public resources, and requires drillers to restore water supply that is degraded or damaged through fracking."³⁰⁷

303. Id.

^{299.} Id. at 12.

^{300.} Id. at 12–13.

^{301.} See generally OFFICE OF OIL & GAS MGMT., PA. DEP'T OF ENVTL. PROT., 2016 OIL AND GAS ANNUAL REPORT (2016), http://www.depgis.state.pa.us/oilgasannualreport/index.html (demonstrating none of the 2013 STRONGER recommendations had been adopted in 2016); OFFICE OF OIL & GAS MGMT., PA. DEP'T OF ENVTL. PROT., 2015 OIL AND GAS ANNUAL REPORT 22-23, 25-26 (2015), http://www.elibrary.dep.state.pa.us/dsweb/Get/Document-113887/8000-RE-DEP4621 (describing plans to study casing requirements and efforts to evaluate radiation levels in 2015); OFFICE OF OIL & GAS MGMT., PA. DEP'T OF ENVTL. PROT., 2014 OIL AND GAS ANNUAL REPORT (2014), http://www.elibrary.dep.state.pa.us/dsweb/Get/Document-

^{113130/2014} Annual Report for web_July1.pdf (describing future plans to study casing requirements in 2014).

^{302.} Katie Colaneri, *Wolf: New York's Fracking Ban is "Unfortunate,"* STATEIMPACT (Dec. 18, 2014, 5:09 PM), http://stateimpact.npr.org/pennsylvania/2014/12/18/wolf-new-yorks-fracking-ban-is-unfortunate.

^{304.} Jon Delano, Gov. Wolf Signs Moratorium on Fracking on State Lands, CBS PITTSBURG (Jan. 29, 2015, 12:07 PM), http://pittsburgh.cbslocal.com/2015/01/29/wolf-bans-new-gas-drilling-leases-on-public-land-as-promised.

^{305.} Reid R. Frazier, State Hears Comments on New Fracking Regulations, ALLEGHENY FRONT (Apr. 29, 2015), http://www.alleghenyfront.org/story/state-hears-comments-new-fracking-regulations.

^{306.} Id.

^{307.} David DeKok, *Pennsylvania Adopts New Fracking Regulations*, REUTERS (Oct. 7, 2016, 2:15 PM), http://www.reuters.com/article/us-usa-pennsylvania-fracking-idUSKCN1272B3.

In all, Pennsylvania has a fairly comprehensive set of fracking regulations covering the major categories of environmental risks. Under the leadership of Governor Wolf, the state appears to be taking a more protective approach to fracking that reflects some of the concerns that states like New York have recognized. However, as averred by STRONGER, there are some key areas in which Pennsylvania might strengthen its regulations, particularly with respect to pre-drilling water sampling and establishing a methodology to determine surface casing depths.

D. Texas

1. Overview

Texas's approach to fracking is highly decentralized; local jurisdictions have significant leeway in defining how oil and gas development occurs in the state.³⁰⁸ The Texas Railroad Commission administers the bulk of statewide regulatory authority, but the Texas Commission on Environmental Quality is responsible for administering air quality regulations, "waste disposal[,] and other pollution-related aspects of gas production."³⁰⁹ However, Texas has cut the Commission on Environmental Quality's budget by about a third since 2008, implicating the organization's ability to effectively enforce air pollution.³¹⁰

Spence believes that in delegating power to the Railroad Commission, Texas has demonstrated its emphasis on natural gas development without a corresponding emphasis on environmental values.³¹¹ In further support of this argument, a 2012 University of Texas poll showed that Texans are more likely to support fracking and believe it requires less regulation compared to Pennsylvanians or New Yorkers.³¹²

2. Permitting & Reporting Requirements

For oil and gas drilling, the Railroad Commission of Texas requires permits for the following: new wellbores; working over an existing wellbore to complete in a different reservoir; reentry of a plugged well; re-

^{308.} See Ryan Hackney, Note, Don't Mess with Houston, Texas: The Clean Air Act and State/Local Preemption, 88 TEX. L. REV. 639, 658 (2010) (noting that cities in Texas have a "great deal of discretion in managing their affairs, and their ordinances will only be deemed invalid where the legislature has limited their authority with unmistakable clarity.").

^{309.} Spence, *supra* note 22, at 458. See also Hackney, *supra* note 308, at 639, 649–50 (explaining that the Texas Commission on Environment Quality administers an air quality regulatory program).

^{310.} Lisa Song et al., *Fracking Boom Spews Toxic Air Emissions on Texas Residents*, INSIDE CLIMATE NEWS (Feb. 18, 2014), http://insideclimatenews.org/news/20140218/fracking-boom-spews-toxic-air-emissions-texas-residents.

^{311.} Spence, supra note 22, at 458.

^{312.} Id. at 459.

classification of a well from injection/disposal to an oil/gas producing well; and transferring of the well location.³¹³

Regarding water wells specifically, Texas groundwater conservation districts "have broad authority under the Texas Water Code to determine how and when a permit will be required" to be utilized in the district.³¹⁴ However, groundwater conservation districts are required to develop a permit program for "drilling, equipping, operating, or completing . . . wells[,]" except for wells that are statutorily exempt.³¹⁵ Drilling a well solely to support a rig actively engaged in oil and gas exploration is exempted from this permitting requirement.³¹⁶ Thus, many groundwater conservation districts have failed to issue permits for wells drilled for fracking. Nevertheless, some districts have conversely construed this exemption as inapplicable to water wells used for fracking.³¹⁷ These districts have argued that the exemption does not apply because the statute only exempts "drilling," not "drilling and operating," as Texas's statute regulating well drilling for livestock use does.³¹⁸

In 2012, the Railroad Commission of Texas implemented the Hydraulic Fracturing Disclosure Rule.³¹⁹ This rule requires Texas oil and gas operators to disclose the chemical ingredients and water volumes used in hydraulic fracturing treatments on the website FracFocus.³²⁰ However, this rule does not apply to components considered "trade secrets," to chemicals that are not disclosed to the operators themselves by manufacturers, or chemicals present in trace amounts.³²¹

3. Casing & Cementing Standards

Compared to Pennsylvania's emphasis on performance standards, Texas's substantive regulations focus on the attainment of specific technical goals.³²² Administrative Code Rule § 3.13 provides specification for well casing, cementing, drilling, well control, and completion requirements.³²³ The Railroad Commission regulations include well construction requirements and surface gauges used to measure contamination and protect groundwater.³²⁴ "Operators . . . must comply with gen-

^{313.} INFO. TECH. SERVS. DIV., R.R. COMM'N OF TEX., DRILLING PERMITS (W-1) ONLINE FILING USER'S GUIDE 9, 54–57 (2017), http://www.rrc.state.tx.us/media/20067/dpmanual.pdf.

^{314.} Trey Nesloney, Fracking Dry: Issues in Obtaining Water for Hydraulic Fracturing Operations in Texas, 45 TEX. ENVTL. L.J. 197, 207–08 (2015).

^{315.} Id. at 208 (quoting TEX. WATER CODE ANN. § 36.113(a) (West 2017)).

^{316.} Id.

^{317.} Id.

^{318.} Id. at 209 (quoting TEX. WATER CODE ANN. § 36.117(b) (West 2017)).

^{319. 16} TEX. ADMIN. CODE § 3.29 (2017).

^{320.} Hydraulic Fracturing, R.R. COMM'N OF TEX., http://www.rrc.state.tx.us/aboutus/resource-center/faqs/oil-gas-faqs/faq-hydraulic-fracturing (last visited Sept. 16, 2017).

^{321.} Gradijan, supra note 204, at 79.

^{322.} See Spence, supra note 22, at 458.

^{323.} Admin. § 3.13.

^{324.} R.R. COMM'N OF TEX., *supra* note 320 (follow "HOW DOES THE COMMISSION PROTECT GROUND WATER?" hyperlink).

eral proper wellhead practices for casing and well-waste disposal."³²⁵ However, these rules apply only to wells that will be "spudded" on or after January 1, 2014.³²⁶

4. Air

Although the Texas Commission on Environmental Quality regulates air quality, there are no regulations specifically related to air quality and fracking in Texas. A 2014 study revealed that there were "[o]nly five permanent air monitors . . . in [a] 20,000-square-mile region," and that the monitors were all located "far from the . . . drilling areas where emissions are highest."³²⁷ Further, the Texas Commission on Environmental Quality investigates only a small percentage of emissions complaints filed.³²⁸

5. Water: Surface, Ground, and Wastewater

Water use in Texas is regulated by the Texas Commission on Environmental Quality, which regulates the use of surface water, and local groundwater conservation districts, with authority over the use of groundwater in their regions.³²⁹

To protect groundwater, the Railroad Commission states that all wells drilled in Texas must have the surface casing "in the well . . . set below the depth of usable quality water."³³⁰ The Commission's rules also "include strict well construction requirements that [specify that] several layers of steel casings . . . [shall be utilized] to protect groundwater."³³¹ The rules also require that the production casing be "permanently cemented in place."³³²

332. Id.

^{325.} MILES HOGAN, LESSONS FROM THE WEST: FRACKING AND WATER RESOURCES 9 (2012), https://law.ucdavis.edu/centers/environmental/files/FrackingLessonsFromWest.pdf (citing ADMIN. § 3.13 (describing general well casing requirements)); see also ADMIN. § 3.14 (describing casing requirements for plugging a well); ADMIN. § 3.95 (describing casing requirements for underground storage of liquid or liquefied hydrocarbons in salt formations); R.R. COMM'N OF TEX., supra note 320 (follow "HOW IS HYDRAULIC FRACTURE FLOWBACK FLUID DISPOSED OF?" hyperlink).

^{326.} ADMIN. § 3.13(a).

^{327.} Molly Hennessy-Fiske, In Denton, Texas, Voters Approve 'Unprecedented' Fracking Ban, L.A. TIMES (Nov. 7, 2014, 7:19 PM), http://www.latimes.com/nationa/la-na-texas-fracking-20141108-story.html.

^{328.} See id.

^{329.} R.R. COMM'N OF TEX., *supra* note 320 (follow "DOES THE RAILROAD COMMISSION REGULATE WATER WITHDRAWALS BY THE NATURAL GAS DRILLING COMPANIES FOR HYDRAULIC FRACTURING?" hyperlink).

^{330.} *Id.* (follow "HOW DOES THE COMMISSION PROTECT GROUND WATER?" hyperlink).

^{331.} Id.

6. Recent Updates

While Texas's approach to regulating fracking provides a great deal of freedom to municipalities,³³³ local jurisdictions can go beyond the baselines state-level standards if they choose. For example, in November 2014, the town of Denton passed the first fracking ban in the state.³³⁴ In response to this, the Texas legislature passed a law stating that localities may not ban fracking in May 2015.³³⁵ This law represents a major departure from Texas's long-held tradition of local home rule and giving municipalities the "broad authority to manage the local impacts of industries."³³⁶ The state's assumption of historically local power may signal that localities' efforts to ban a technology actually backfire when they attempt to contravene a state-supported technology.³³⁷ Tensions between localities seeking to govern themselves and the state of Texas will likely continue to build over this issue.

E. Gaps in State Regulation

The four states surveyed here have made promising steps in regulating fracking—particularly in terms of requiring disclosure of chemicals used in fracking operations and specifying construction and maintenance techniques for casing and well pipes. However, there are still many opportunities for states to create a comprehensive and responsibly-managed fracking scheme. Specifically, there are gaps in terms of water and air regulation, as evidenced by Texas's large number of air quality complaints and low enforcement rate.

Further, even in states like Colorado that have a detailed and specific list of fracking regulations—and in fact, Colorado seems to also be a leader in governing traditionally local issues such as dust and other nuisances—there are still gaps around many of the local impacts described in Part IV below. In addition to some of the larger gaps noted above, such as insufficient air and water regulation, less tangible aspects of fracking have also been left unaddressed. For example, no state studied here has addressed how hydraulic fracturing may affect communities' social or economic welfare, such as impacts on property values or fracking's effects on tax revenue.

Likewise, although the social tensions and financial risks arising from fracking operations—including increased prices of the housing stock, commodity prices, crime, and substance abuse—have been documented in the academic literature,³³⁸ the case studies in Part V show that

337. See id.

^{333.} See Hackney, supra note 308, at 658.

^{334.} Hennessey-Fiske, supra note 2.

^{335.} Driver & Wade, supra note 2.

^{336.} Josh Galperin, *Fracking News: Texas Bans Bans*, YALE CTR. FOR ENVTL. L. & POL'Y (May 29, 2015), http://envirocenter.yale.edu/news/fracking-news-texas-bans-bans.

^{338.} Baker, supra note 159, at 266-67.

the regulation of many of these non-environmental impacts have not yet been widely implemented on the ground. The majority of these gaps are areas of regulation with almost entirely local effects, and most are nonenvironmental in nature. For example, there do not appear to be any ordinances addressing the environmental impacts from increased sand mining and processing, or the adverse effects on farming and farmland preservation. There are also no regulations targeting the effects of increased fracking on the local housing market due to increased scarcity and cost, or hedging against adverse effects on property values. We also did not find any governance systems that address or capitalize on charitable contributions, local employment, the effect of increased tax revenue, or revenue from leasing and royalties. Given the wide variety and extent of impacts that address the environmental effects of frackingfrom regulating groundwater depletion to noise pollution-this lack of regulation addressing non-environmental aspects of fracking provides an opportunity for local governments to act.

III. LOCAL LAND USE AUTHORITY

The importance of local governance in hydraulic fracturing is now receiving much-needed attention.³³⁹ And the timing is right, as 2016 was the hundredth anniversary of America's first zoning ordinance.³⁴⁰ Prior to assessing how local governments should regulate hydrofracking and its impacts, however, it is critical to understand what the sources of local power are and from where they originate.

Most state constitutions vest in their legislatures all of the legislative authority for the state, which allows states to "enact laws [to] regulate, prohibit, or require certain conduct, provided that such laws have some reasonable relation to the public health, safety, morals, or welfare."³⁴¹ This is commonly known as the "police power," under which zoning regulations are enacted and enforced.³⁴² Generally, state legislatures have chosen to delegate these land use powers to local governments.³⁴³

^{339.} See, e.g., Minor, supra note 192, at 62; John R. Nolon & Steven E. Gavin, Hydrofracking: State Preemption, Local Power, and Cooperative Governance, 63 CASE W. RES. L. REV. 995, 995, 998 (2013); Jesse J. Richardson, Jr., Local Regulation of Hydraulic Fracturing, 117 W. VA. L. REV. 593, 593–94, 596 (2014); Scott Martin, Note, What the Frack?! How Local Zoning Laws Keep Dangerous Mining Techniques Off Our Property, 21 J. ENVTL. & SUSTAINABILITY L. 209, 218–19 (2015).

^{340.} CITY OF N.Y. BD. OF ESTIMATE & APPORTIONMENT, BUILDING ZONE RESOLUTION (N.Y. 1916), http://biotech.law.lsu.edu/cphl/history/laws/1916NYCcode.htm; Amanda Erickson, *The Birth of Zoning Codes, a History,* CITYLAB (June 19, 2012), https://www.citylab.com/equity/2012/06/birth-zoning-codes-history/2275.

^{341.} PATRICIA E. SALKIN, 1 AMERICAN LAW OF ZONING § 2.2 (5th ed. 2017); see, e.g., N.Y. CONST. art. III, § 1.

^{342.} SALKIN, supra note 341; see, e.g., N.Y. CONST. art. III, § 1.

^{343.} SALKIN, supra note 341.

Zoning as a form of regulatory power first began in the early twentieth century.³⁴⁴ Before that time, governments had made very little use of the police power to regulate land development and uses.³⁴⁵ In the beginning, zoning was considered a "radical departure from the traditional private property concepts, because it was perceived as prohibiting a citizen from devoting his property to a purpose useful and entirely harmless, in the ordinary sense, in certain districts within a community."346 Yet courts upheld the exercise of such powers to promote orderly segregation of industrial, commercial, and residential uses in bustling, growing communities.³⁴⁷ In prohibiting uses from certain districts, localities (and the courts which upheld their ordinances) relied on nuisance and "general welfare" rationales.³⁴⁸ Zoning codes, in their earliest stages, sought to regulate the kinds of nuisance and harms that could only be addressed prior by use of restrictive covenants, building codes, or injunctions.³⁴⁹ Prohibiting certain uses or preferring "higher uses" for a district effectively acted as injunctions against the nuisances of non-preferred uses.³⁵⁰ Meanwhile, policy makers generally thought that zoning contributed to the people's general welfare by assuring orderly development and increased public services.351

The first zoning ordinance in the United States was the 1916 Zoning Resolution of the City of New York, which the New York Court of Appeals upheld as constitutional.³⁵² That resolution and court decision subsequently sparked a widespread adoption of state zoning enabling statutes and implementation of zoning codes.³⁵³ The Advisory Committee on City Planning and Zoning, part of the U.S. Department of Commerce, published a Model Standard State Zoning Enabling Act in 1922, which served as a model that many state legislatures followed in delegating zoning powers to their local governments.³⁵⁴ The Committee also published a companion guide in 1928, known as A Standard City Planning

^{344.} Id. § 7:1.

^{345.} Id.

^{346.} SARA C. BRONIN & DWIGHT H. MERRIAM, 1 RATHKOPF'S THE LAW OF ZONING AND PLANNING § 1:2 (4th ed. 2017).

^{347.} See SALKIN, supra note 341, § 7:1.

^{348.} BRONIN & MERRIAM, supra note 346.

^{349.} Id.; see, e.g., Hadachek v. Sebastian, 239 U.S. 394, 404-05 (1915).

^{350.} BRONIN & MERRIAM, supra note 346; see, e.g., Portage Twp. v. Full Salvation Union, 29 N.W.2d 297, 302 (Mich. 1947).

^{351.} BRONIN & MERRIAM, *supra* note 346; *see, e.g.*, Village of Euclid v. Ambler Realty Co., 272 U.S. 365, 387–89 (1926).

^{352.} BRONIN & MERRIAM, *supra* note 346; *see also* Lincoln Trust Co. v. Williams Bldg. Corp., 128 N.E. 209, 209–10 (N.Y. 1920); CITY OF N.Y. BD. OF ESTIMATE & APPORTIONMENT, *supra* note 340.

^{353.} BRONIN & MERRIAM, supra note 346.

^{354.} See BRONIN & MERRIAM, supra note 346; see also ADVISORY COMM. ON ZONING, U.S. DEP'T OF COMMERCE, A STANDARD STATE ZONING ENABLING ACT UNDER WHICH MUNICIPALITIES MAY ADOPT ZONING REGULATIONS (rev. ed. 1926), https://planning-org-uploaded-media.s3.amazonaws.com/legacy_resources/growingsmart/pdf/SZEnablingAct1926.pdf.

Enabling Act.³⁵⁵ In 1926, the U.S. Supreme Court definitively affirmed the ability of localities to zone when the Court upheld the zoning ordinance of the Village of Euclid, Ohio.³⁵⁶ Further, by 1931, every state had authorized zoning and "over 1,000 municipalities had adopted zoning codes."³⁵⁷

Today, it is well established that municipal governments have been delegated legitimate zoning powers to assure orderly development and regulate for the health, safety, and welfare of their residents.³⁵⁸ The following Sections provide an overview of the most common types of delegated powers and the source of those powers.

A. Home Rule Powers

Municipal home rule powers are one means by which local governments may regulate the impacts of hydraulic fracturing. Municipal home rule powers include grants of authority stemming from either state constitutions or enabling legislation that allow localities to zone and regulate land uses.³⁵⁹ Local home rule systems are complex and are not easily sorted into distinct categories,³⁶⁰ but this Part provides an overview of the most common systems.

The two broadest home rule categories are constitutional home rule powers and statutory home rule powers; however, localities do not easily fall into one category or the other.³⁶¹ Constitutional home rule states grant municipalities power directly from the state constitution, while localities in legislative home rule states draw their power from legislative acts.³⁶² In some states, municipalities possess a combination of constitutional and legislative home rule powers, or are only permitted to exercise certain constitutional home rule powers after adopting a municipal charter.³⁶³ In each of the above cases, municipal power must be exercised in a manner consistent with the general law of the state, and may be constrained by limits set by the general law of the state, the local charter, or both.³⁶⁴

In New York, for example, it is the state enabling legislation—the Municipal Home Rule Law—that grants localities their zoning power;

^{355.} ADVISORY COMM. ON CITY PLANNING & ZONING, U.S. DEP'T OF COMMERCE, A STANDARD CITY PLANNING ENABLING ACT (1928), http://nvlpubs.nist.gov/nistpubs/Legacy/BH/nbsbuildinghousing11.pdf.

^{356.} Village of Euclid, 272 U.S. at 397.

^{357.} BRONIN & MERRIAM, supra note 346.

^{358.} See Michael Lewyn, New Urbanist Zoning for Dummies, 58 ALA. L. REV. 257, 263 (2006) (citing Jerry Frug, *The Geography of Community*, 48 STAN. L. REV. 1047, 1091 (1996) (remarking that Euclidean zoning has become nearly universal in use throughout the United States)).

^{359.} SALKIN, supra note 341, § 2:7.

^{360.} Id.

^{361.} *Id*.

^{362.} See id.; BRONIN & MERRIAM, supra note 346, § 1:11.

^{363.} SALKIN, supra note 341, § 2:7.

^{364.} Id. §§ 2:7 to :8; see also BRONIN & MERRIAM, supra note 346, § 1:11.

courts have refused to hold that local governments can draw the power to zone directly and solely from the state constitution.³⁶⁵ In Pennsylvania, the Municipalities Planning Code delegates to localities the authority for zoning, planning, enacting subdivision and land use controls, and creating planned developments.³⁶⁶ Moreover, a constitutional provision in Texas gives home rule powers to cities with a population larger than 5,000, allowing them to regulate for the health, safety, and welfare of their citizens, while the state legislature delegates authority to municipalities with populations below 5,000.³⁶⁷

Colorado, on the other hand, illustrates how complex the delegation of authority to local governments can become:

There are five different types of local governments in Colorado: home-rule municipalities [via a constitutional provision authorizing localities to grant themselves home-rule powers by charter], statutory municipalities [which have only those powers explicitly granted to them by Titles 29 and 31 of Colorado's Revised Statutes, including zoning], home-rule counties, statutory counties, and special districts.³⁶⁸

B. Police Powers

Zoning regulations that restrict development and use of land stem from municipal police powers, which enable localities to regulate for the general health, safety, and welfare of their residents.³⁶⁹ Granted by enabling legislation or state constitution (depending on the legislatures' delegation of power), police powers address the regulation of uses that go beyond merely dictating in which districts they may take place.³⁷⁰ The police power is the basis for a wide variety of land use regulations, in-

Minor, supra note 192, at 90 (alteration in original) (quoting COLO. CONST. art. XX, § 6).

^{365.} See N.Y. CONST. art. IX; N.Y. MUN. HOME RULE L. § 10 (McKinney 2017); SALKIN, supra note 341, § 2:6.

^{366. 53} PA. CONS. STAT. § 10105 (2017); see also JOHN BOURDEAU, 22A SUMMARY OF PENNSYLVANIA JURISPRUDENCE MUNICIPAL AND LOCAL LAW § 14:47 (2d ed. 2017).

^{367.} TEX. CONST. art. 11, § 5; see infra Section V.B.4. for more detail on Texas' delegation of authority to municipalities.

^{368.} Minor, supra note 192, at 90 (citing Robert M. Linz, Researching Colorado Local Government Law, 38 Colo. Law. 101, 101 (2009); see also COLO. CONST. art. XX, § 6; COLO. REV. STAT. § 31-15-401 (2017).

[[]The Colorado constitution] enumerates many broad powers, including eminent domain, taxation, and election holding. But home rule powers are broader than those listed in the Constitution. Section 6 also grants home rule municipalities 'all other powers necessary, requisite or proper for the government and administration of its local and municipal matters,' and states that the enumeration of powers should not be construed to deny them 'any right or power essential or proper to the full exercise of [self-government] right[[s]." Section 6 provides that state law is superseded by ordinances passed pursuant to home rule charters.

^{369.} Lawton v. Steele, 152 U.S. 133, 136 (1894); BRONIN & MERIAM, *supra* note 346, § 1:8; *see also* City of Albany v. Anthony, 262 A.D. 401, 403 (N.Y. App. Div. 1941) (distinguishing between zoning ordinance and nonzoning police power ordinances, zoning ordinances are traditionally aimed at directly controlling where a use takes place as opposed to how it takes place).

^{370.} BRONIN & MERRIAM, supra note 346, § 1:8.

cluding, but not limited to: historic landmark district restrictions, environmental controls, architectural and aesthetic regulations, affordable housing mandates, and more.³⁷¹ A zoning ordinance enacted pursuant to a municipality's police power will only be held valid if it furthers an objective that is expressly or impliedly authorized by the state enabling statute.³⁷²

Some localities are currently using their police powers to regulate fracking, as will be discussed in more depth in Part V. For example, Arlington, Texas, has implemented a gas well permitting system that ensures developers will site wells in areas that minimize impacts on the community and may impose additional conditions such as proper land-scaping screening and the enforcement of basic safety standards.³⁷³ Though an updated ordinance has been crafted in Peters Township, Pennsylvania, it will retain many features of the current regulations, which include provisions limiting noise, odor, and dust disturbances, a requirement for pre- and post-fracking water testing, and an emphasis on roadway safety and maintenance.³⁷⁴

C. Preemption

1. Legal Nature

Municipalities may only exercise the authority granted to them by a state statute or constitution, and may not exceed the limitations inherent to this delegatory scheme. Otherwise, the ordinance is in direct conflict with the constitution or statute that delegates the power.³⁷⁵ Additionally, a number of states explicitly specify that "municipal legislation is valid only to the extent that it does not conflict with the general law of the state" (which includes the constitution as well as the general statutes of the state).³⁷⁶ Express preemption exists when the state legislature, in specific and unambiguous terms, preempts local action in order to further the interests of the state.³⁷⁷ For example, a state may expressly limit local authorities' power to regulate the location of airports.³⁷⁸ Implied preemp-

^{371.} *Id*.

^{372.} SALKIN, *supra* note 341, § 7:1.

^{373.} ARLINGTON, TEX., ORDINANCE 11-068 (2011), http://www.arlingtontx.gov/cityattorney/wp-content/uploads/sites/15/2014/05/GasDrilling-Chapter.pdf; see also Brett Shipp, Arlington Officials Report on Fracking Fluid Blowout, WFAA (June 17, 2015, 1:32 PM), http://www.wfaa.com/story/news/local/tarrant-county/2015/06/16/arlington-officials-report-onfracking-fluid-blowout/28844657 (explaining that despite these best efforts, however, Arlington was the site of a well blowout that spilled over 42,000 gallons of fracking fluid into residential neighborhoods).

^{374.} PETERS TOWNSHIP, PA., ORDINANCE 737 (2011), http://www.peterstownship.com/vertical/sites/%7B3BE5B086-2A15-4083-A63D-16B3DD03C8DD %7D/uploads/Minera Extraction Ord final version 737 8-2-11.pdf.

^{375.} SALKIN, *supra* note 341, § 6.28.

^{376.} Id.

^{377.} Jessica A. Bacher & John R. Nolon, *Mitigating the Adverse Impacts of Hydraulic Fracturing: A Role for Local Zoning?*, 37 No. 9 ZONING & PLAN. L. REP., Oct. 2014, at 1.

^{378.} See, e.g., Petition of Detroit (Airport Site), 14 N.W.2d 140, 142 (Mich. 1944).

tion, on the other hand, occurs when a state regulation does not explicitly prohibit localities from regulating in a certain arena, but the local law appears to conflict with the state interests at hand.³⁷⁹ In this case, it is up to the judiciary to determine whether there is either an irreconcilable conflict created by the local law with state regulation, or whether the state law "occup[ies] the field" to the extent that local regulation is automatically preempted.³⁸⁰ When a conflict is found between a state law and a local ordinance, the local ordinance must always give way to the state regulation.³⁸¹ For example, a locality is permitted to zone business classes—liquor stores, for instance—into specific areas, but cannot totally prohibit the sale of liquor within its jurisdiction when the state has licensed liquor sales.³⁸² This is because a complete prohibition contradicts the implied interests of the state.

Many states have enacted comprehensive oil and gas legislation that regulates how fracking operations are carried out, which preempt localities from adding additionally restrictive or contrary regulations.³⁸³ This is a particularly contentious issue in the context of fracking, as local regulations that severely restrict or prohibit drilling can frustrate state economic objectives. For example, elements of the drilling process that are preempted from local control might include the placement of boreholes and well casing regulations.³⁸⁴ However, several states have upheld localities' use of zoning power to determine the locations where fracking can take place. This can be accomplished by restricting drilling activities to certain drilling districts (e.g. the industrial district),³⁸⁵ or by use of the police power to implement a permitting scheme or passing ordinances regulating nuisance effects such as road wear, noise, odor, and dust.³⁸⁶

In Pennsylvania, local governments are expressly preempted from mandating the thickness of well casings or the type of equipment that drillers use.³⁸⁷ Yet despite these state-level limitations, the Supreme Court of Pennsylvania has upheld that Pennsylvania localities do have the legal authority to regulate where fracking may take place within their

^{379.} Bacher & Nolon, supra note 377.

^{380.} Id.

^{381.} SALKIN, supra note 341, § 6:28.

^{382.} See id.; see also, e.g., Town of Fenton v. Tedino, 401 N.Y.S.2d 397, 401 (N.Y. Sup. Ct. 1974); Twp. of Spring v. Majestic Copper Corp., 256 A.2d 859, 859–60 (Pa. 1969).

^{383.} See, e.g., COLO. REV. STAT. §§ 34-60-102 to -130 (2017); 58 PA. CONS. STAT. §§ 3202–74 (2017); N.D. CENT. CODE. §§ 38-08-01 to -22-23 (2017); TEX. NAT. RES. CODE ANN. §§ 81.002 to 123.005 (2017).

^{384.} See, e.g., COLO. REV. STAT. §§ 34-61-102, -105.

^{385.} See, e.g., Range Res.-Appalachia, LLC v. Salem Twp., 964 A.2d 869, 872 (Pa. 2009); Huntley & Huntley, Inc. v. Borough Council, 964 A.2d 855, 858–59 (Pa. 2009).

^{386.} See, e.g., PETERS TOWNSHIP, PA., ORDINANCES no. 737, § 713(O) (2011), http://www.peterstownship.com/vertical/sites/%7B3BE5B086-2A15-4083-A63D-

¹⁶B3DD03C8DD%7D/uploads/Minera_Extraction_Ord_final_version_737_8-2-11.pdf (discussed in more detail *infra* Section V.B.3.).

^{387.} See Range Res.-Appalachia, 964 A.2d at 875; Huntley, 964 A.2d at 861.

jurisdiction.³⁸⁸ In Colorado, the state's Supreme Court has determined that localities, such as Longmont and Fort Collins, do not possess the authority to constitutionally ban fracking within their borders; such action is preempted by the state oil and gas law, as bans arguably run counter to the state's interests in exploiting natural gas deposits.³⁸⁹

2. Politics and the Local Governance of Fracking

Preemption has become one of the central battlegrounds in the fracking debate. State governments, for example, may seek to increase oil and gas exploration, while local governments may remain sensitive to residents' concerns regarding the lifestyle, environmental, health, and economic risks of fracking. When states endeavor to overturn local regulations related to fracking, a key question is whether the local fracking rules are really different from other, well-established local regulations, or whether they are simply addressing an issue that is currently a political minefield.

D. Nonregulatory Governmental Approaches

In addition to traditional regulatory techniques, nonregulatory approaches can also be effective tools to address the impacts of hydraulic fracturing, whether used alone or in conjunction with regulatory measures. One of the most common nonregulatory approaches is crafting a community benefits agreement (CBA)-a site-specific, legally enforceable agreement between local government, the community, and a developer.³⁹⁰ A CBA lays out the project's benefits to the community and ensures the community's support of the project.³⁹¹ Allowing the community and the developer to engage in a more collaborative negotiation process than what is afforded under the usual land use application process, the developer minimizes risk while community members enjoy an increased degree of input to ensure the project is tailored to meet the unique needs of their locale.³⁹² Over the past two decades, CBAs have gained a higher profile in the land use processes in several states, such as New York and California, where they are employed to address a wide range of environmental and social-justice concerns.³⁹³ Though the scenarios involved in drilling are not analogous to a CBA's usual applica-

392. Id.

^{388.} See Range Res.-Appalachia, 964 A.2d at 872-73; Huntley, 964 A.2d at 864.

^{389.} City of Longmont v. Colo. Oil & Gas Ass'n, 369 P.3d 573, 578 (Colo. 2016).

^{390.} JULIAN GROSS ET AL., COMMUNITY BENEFITS AGREEMENTS: MAKING DEVELOPMENT PROJECTS ACCOUNTABLE 9 (2005); Community Benefits 101, PARTNERSHIP FOR WORKING FAMILIES, http://www.forworkingfamilies.org/resources/policy-tools-community-benefitsagreements-and-policies (follow "The Basics" hyperlink) (last visited Sept. 9, 2017).

^{391.} GROSS ET AL., supra note 390, at 9–10.

^{393.} Patricia E. Salkin & Amy Levine, Understanding Community Benefits Agreements: Equitable Development, Social Justice and Other Considerations for Developers, Municipalities and Community Organizations, 26 UCLA J. ENVTL. L. & POL'Y 291, 300 (2008); Center for N.Y. Law, The NYC Bar Ass'n Reports on CBAs In NYC's Land Use Practice, 16 CITY L. 49 (2010).

tions (for example, to a single development site such as a stadium project), modifications to the process could be made in order to enhance negotiations between community members, local government, and industry.³⁹⁴

Another nonregulatory approach is executing a memorandum of understanding (MOU), also known as a "letter of intent."³⁹⁵ An MOU effectively memorializes in writing the signing parties' intentions to enter into a formal contract, but does not legally bind the parties to adhering to the terms of the MOU.³⁹⁶ In terms of its applicability to hydraulic fracturing, local governments may use an MOU to air concerns and negotiate with industry without the pressure of adopting or adhering to formal regulatory measures.³⁹⁷ Finally, keeping open clear, direct, and honest lines of communication can greatly enhance the relationship between local government officials and industry operators, which greatly aids a locality's mission to effectively address impacts of concern.

Given the scope and history of local land use and environmental authority, governing fracking *qua* fracking is not the best tactic for controlling its impacts. Rather, local governments should govern fracking as they do other local industries because, while fracking does present local concerns and impacts that are distinct from other industries, at its core, fracking is merely another industry. Thus, by addressing fracking through those impacts that cause the most concern to local communities, it is easier to highlight the ways in which local governments can address those concerns using their familiar local powers. The following Part describes the ways in which these local powers overlap with the identified impacts of fracking.

IV. IDENTIFYING THE LOCAL IMPACTS OF HYDRAULIC FRACTURING

The federal and state governance systems do address a range of impacts from hydraulic fracturing, but a gap remains at the local level. Communities must cope with a set of impacts that are uniquely local in nature that federal and state regulations do not address, but local governments can for the most part manage these impacts by using traditional local governance tools. The authors of this Article, along with colleagues at Yale University and Pace University School of Law, undertook a project from 2013 to 2015 to catalogue and analyze the local impacts of hydraulic fracturing. In this Article, we provide our list of local fracking impacts as an illustration of major local concerns. The next Section de-

^{394.} See William Yukstas, Note, Managing Fractions: The Role of Local Government in Regulating Unconventional Natural Gas Resources – Recommendations For New York, 11 CARDOZO PUB. L. POL'Y & ETHICS J. 563, 595–603 (2013).

^{395.} Letter of Intent, BLACK'S LAW DICTIONARY (10th ed. 2014).

^{396.} Id.

^{397.} See infra Section V.B.1. (discussing Erie, Colo.).

^{398.} See infra Section V.B.4. (discussing Arlington, Tex.).

scribes the methods we used to catalogue local impacts, followed by a table illustrating those impacts. A complete list is available as an online appendix at www.bit.ly/frackingdatabase.

A. Methods

1. Project Origins

This project began in 2013 in a joint effort between the Yale Center for Environmental Law & Policy (YCELP), Yale Climate & Energy Institute, and Pace Law School's Land Use Law Center. Our overarching goals were to understand how local governments can fill fracking regulatory gaps at the federal and state levels, and to empower local government decision making on a range of challenges that shale oil and gas development pose. We hypothesized that outright fracking bans risk state preemption and uncontrolled drilling risks negative environmental and community impacts. Thus, our work has sought to support municipal leaders in developing balanced and effective regulatory and nonregulatory practices to address the effects of fracking. These practices would ideally mitigate land use and environmental damage, while preserving economic, social, and community benefits. We believe that, equipped with the proper tools, local authorities can effectively govern most aspects of fracking.

2. Meeting with Stakeholders

Our process has involved two stages. First, we focused on research, analysis, and stakeholder outreach to identify local impacts from fracking. Second, we investigated local government strategies to manage those impacts. Initially, we endeavored to synthesize fracking's local effects and incorporate local communities' concerns. These concerns include those founded on environmental impacts as well as social and economic impacts. Some impacts are clear and well documented, while others are speculative or largely unfounded. Nevertheless, we believe that only with an understanding of community concerns can local leaders address the tangible and intangible impacts of a significant new industry such as fracking.

To begin this process, we identified a variety of local fracking impacts based on data previously collected by the nonprofit organization Food and Water Watch.³⁹⁹ The Food and Water Watch data aggregated local resolutions, ordinances, and other legislative actions to ban hydraulic fracturing. Our team then accessed these legislative actions and, by reviewing the legislative findings of each, extracted details on the issues about which local governments were expressing concern.

^{399.} Mary Grant, Local Resolutions Against Fracking, FOOD & WATER WATCH (July 28, 2017), http://www.foodandwaterwatch.org/insight/local-resolutions-against-fracking.

These local actions ultimately included impacts that were well documented in the scientific literature as well as impacts that were less well researched, speculative, or unfounded but still deeply worrisome to community members. Our list does not seek to distinguish among these categories of impacts. Instead, we seek to provide sufficient information for local leaders to make informed decisions about how to manage hydraulic fracturing in their jurisdictions based on the concerns of their constituents. At the same time, we provide access to scientific literature, news reports, and other assessments of the science to help inform decision making with subjective and objective information.

After consolidating these initial impacts, we sought to verify and understand firsthand the challenges that local governments might face. To do this, we held an expert panel and roundtable workshop in December 2013 at the Pace Land Use Law Center's annual conference.⁴⁰⁰ This session involved key participants from local governments, advocacy groups, academia, and industry. At this meeting, the team presented the preliminary impacts list and incorporated additional impacts based on feedback from meeting participants. This session showed us that the impacts highlighted in local bans presented a one-sided perspective. As a result, we widened the project's focus to include beneficial aspects of shale development, relying heavily on the work of Daniel Raimi and Richard Newell at Duke University.⁴⁰¹

Building on the momentum from the December 2013 conference, we facilitated a second discussion at the Yale Law School in March 2014.⁴⁰² This latter session focused on local strategies and best practices for governing unconventional oil and gas development. The discussion also centered on issues of state preemption of local authority, and included examples of local land use efforts in various states addressing the impacts of fracking.⁴⁰³ With input from current or former local government officials in Pennsylvania, Texas, and New Mexico, the workshop demonstrated that local governments have a strong capacity to address the impacts of hydraulic fracturing and vary widely in both approaches and strategies.⁴⁰⁴

^{400.} Antonio Soares, *Hydro-Fracking LULC 12-05-13*, PACE UNIV. MEDIASPACE (Dec. 6, 2013), https://mediaspace.pace.edu/media/Hydro-Fracking+LULC+12-05-13/1 p21ysyb7/31792771.

^{401.} Shale Public Finance: Local Government Fiscal Impacts of Oil and Gas Development, DUKE ENERGY INITIATIVE, http://energy.duke.edu/shalepublicfinance (last visited Oct. 2, 2017).

^{402.} See Workshop Materials and Further Resources: March 2014 Workshop Materials, LAND USE COLLABORATIVE, http://sites.environment.yale.edu/collaborative/2015/08/11/hydraulic-fracturing (follow "Workshop Materials and Further Resources" hyperlink) (last visited Sept. 11, 2017).

^{403.} Id.

^{404.} Id.

3. Building the Impacts List

Throughout 2014, we expanded the impact list to include two additional types of resources beyond positive and negative community impacts. First, we explored the peer-reviewed and gray literature, as well as news media to collate information on each of the impacts that our research identified. Second, we scoured local hydraulic fracturing regulations from across the country in order to find templates, models, and examples of the types of strategies local governments use to address impacts of local concern.

The goal of including resources and regulatory strategies in the impact list was ultimately to create an online database where local officials could find thorough and varied fracking research to support their own decision making and leadership.

To do this, we gathered resources on each of the impacts the research team reviewed. We collected the available literature and consulted with experts to identify potential resources that explain, document, contextualize, or substantiate the impact. Some potential impacts, such as groundwater pollution from stray gas or fracking chemicals, have been subject to scientific study and subsequently documented in peerreviewed literature.⁴⁰⁵ Other impacts, like the increase in demand for local government services and a reduction in local government workforce retention are not as well documented.⁴⁰⁶ Where possible, the framework provides links to authoritative, peer-reviewed journal articles with an objective perspective on the impact. Where peer-reviewed resources were not available, the framework provides either non-peerreviewed studies or news reports with useful coverage of the impact. Containing more than 150 resources and links documenting and contextualizing potential local impacts, the framework represents a significant step towards equipping local governments with foundational knowledge to manage shale development.

To understand how the environmental, financial, and social consequences of fracking are incorporated into local law and policy, we then collected town resolutions and ordinances to augment those provided by Food and Water Watch. We surveyed a wide range of local ordinances and policy measures to procure a variety of regulatory and nonregulatory governance options for local authorities to consider. Then, we paired

^{405.} See infra Section IV.B. (discussing how the harms of groundwater pollution from stray gas or fracking chemicals has been documented in the journal Environmental Earth Sciences, among others); see also Birgit C. Gordalla, Ulrich Ewers & Fritz H. Frimmel, Hydraulic Fracturing: A Toxicological Threat for Groundwater and Drinking-Water?, 70 ENVTL. EARTH SCI. 3875, 3876 (2013).

^{406.} See infra Section IV.B. Though many local municipalities have identified an increased demand for local government services as an impact of fracking, no peer-reviewed journal has addressed this challenge. See infra Section IV.B., "Community and Government: Provision of Local Government Services" and "Community and Government: Workforce Retention," among others.

these local legal and policy strategies to corresponding impacts. While the measures and impacts in the framework are not exhaustive, the database provides a substantial resource and reference point for local governments seeking to secure local economic advantages, while safeguarding against potential negative effects from shale gas development.

At present, the impacts framework, summarized in Section V.B., and available in its entirety online in an interactive online format (*see* Appendix 1) or a static document (*see* Appendix 2), contains nearly forty unconventional oil and gas local impacts across the environmental, socio-economic, and public health spectrum that correspond with local measures that address these challenges. As stated above, while the catalogue of impacts is not an exclusive list of challenges a community may face, nor a complete picture of the potential benefits, the compiled list demonstrates the range of challenges a locality may face depending on local context. We seek to provide a balanced resource for governments seeking precedents of how other localities are addressing fracking, and suggest how governments might incorporate concerns of the scientific community, environmental advocates, industry, and local community members into municipal policy.

B. The Local Impacts of Hydraulic Fracturing

As noted above, we have compiled nearly forty oil and gas impacts of fracking across multiple areas of concern. The following list sets forth the impacts that we have surveyed, with more information located in the footnotes. For the online interactive database of these impacts, please see Appendix 1. See Appendix 2 for a static database saved as a PDF.

Local Impacts	
Agriculture: Farming and Farmland Preservation ⁴⁰⁷	
Agriculture: Farmland Preservation ⁴⁰⁸	

See ARLINGTON, TEX., ORDINANCE no. 11-068, art. VII, § 7.01B (2011),407 http://www.arlington-tx.gov/cityattorney/wp-content/uploads/sites/15/2014/05/GasDrilling-Chapter.pdf (creating setback requirements); MCKENZIE COUNTY, N.D., ZONING ORDINANCE art. I., § 1.2 (2016), http://county.mckenziecounty.net/usrfiles/Zoning_Ordinance_9-20-2016.pdf; PETERS ORDINANCE § 440.602(16) (2017),ZONING TOWNSHIP, PA., http://www.ecode360.com/attachment/PE3557/Peters%20Township%20Zoning%20Ordinance%20-%20August%202017.pdf (establishing compressor stations locations); MCKENZIE CTY., MCKENZIE COUNTY COMPREHENSIVE PLAN 1-1 (2016), [hereinafter MCKENZIE COUNTY COMPREHENSIVE http://planmckenzie.com/wp-PLAN].

content/uploads/2016/06/McKenzieCountyComprehensivePlan_FINAL-1.pdf (last visited Sept. 16, 2017) (creating a town-wide comprehensive plan and establishing economic development strategies).

^{408.} See Jon Hurdle, Fracking Under a Historic Farm, N.Y. TIMES: GREEN (Mar. 1, 2013 1:42 PM), http://green.blogs.nytimes.com/2013/03/01/fracking-to-unfold-under-a-historic-farm; Teri Weaver, NY Farmers Reject Anti-Hydrofracking Position at Farm Bureau Meeting, SYRACUSE.COM (Dec. 4, 2013),

Community and Government: Civic Discourse, Community Character, and Crime⁴⁰⁹

Community and Government: Provision of Local Government Services⁴¹⁰

Community and Government: Workforce Retention⁴¹¹

Economy: Charitable Contributions⁴¹²

Economy: Local Economic Development⁴¹³

Economy: Local Employment⁴¹⁴

Economy: Property Values⁴¹⁵

409. See MCKENZIE COUNTY, N.D., ZONING ORDINANCE art. II, § 2.6, art, IV, § 4.8 (addressing the termination of non-conforming uses and addressing temporary workforce housing, respectively); CECIL TOWNSHIP, PA., ORDINANCE no. 2-2010 § 3 (2010), https://pennstatelaw.psu.edu/_file/aglaw/Ordinances/Cecil_Township_2-2010_General.pdf (addressing resident notifications); MCKENZIE COUNTY COMPREHENSIVE PLAN, *supra* note 407, at 6-1 to 6-6 (creating a statement of housing strategies).

410. See ARLINGTON, TEX., ORDINANCE 11-068, art. V, § 5.03, art. VI, 6.01B (requiring burden of proof to fall on the operator and requiring periodic reports); JEFFERSON HILLS, PA., ORDINANCE no. 833, § 5(1)(H)(1) (2014).http://www.ecode360.com/documents/JE2362/source/LF834323.pdf (requiring use of a security guard); MCKENZIE COUNTY, N.D., ZONING ORDINANCE art. IV, § 4.8 (providing standards for temporary workforce housing); MIDLOTHIAN, TEX., ORDINANCE no. 2010-12, art. XIII (2010), http://www.midlothian.tx.us/documentcenter/view/500 (establishing fire prevention measures); NOTTINGHAM TOWNSHIP. PA. ORDINANCE 91. § 3 no. art. H, (2010),https://pennstatelaw.psu.edu/_file/aglaw/Ordinances/Nottingham_Township_No_91.pdf (ensuring pedestrian safety); PETERS TOWNSHIP, PA., ZONING ORDINANCE § 440.602(55) (addressing spill cleanup, site security, and accident preparedness); SOUTH FRANKLIN TOWNSHIP, PA. & GREEN HILLS BOROUGH, PA., JOINT ZONING § 185.72(0) (2014). http://southfranklintwp.org/ZoningOrdinance Final.pdf (ensuring reimbursement for operator compliance); MCKENZIE COUNTY COMPREHENSIVE PLAN, supra note 407 (requiring a statement of government strategies).

411. See Katie Walters, Watford City's First-Ever Affordable Housing for Public-Service Employees Dedicated, ROUNDUPWEB.COM (Aug. 14, 2013), http://www.roundupweb.com/story/2013/08/14/news/watford-citys-first-ever-affordable-housingfor-public-service-employees-dedicated/3160.html.

412. See TIMOTHY W. KELSEY ET AL., ECONOMIC IMPACTS OF MARCELLUS SHALE IN BRADFORD COUNTY: EMPLOYMENT AND INCOME IN 2010, at 7 (2012), http://aese.psu.edu/research/centers/cecd/publications/marcellus/economic-impacts-of-marcellus-shale-in-bradford-county-employment-and-income-in-2010.

413. See, e.g., DANIEL RAIMI & RICHARD G. NEWELL, SHALE PUBLIC FINANCE: LOCAL GOVERNMENT REVENUES AND COSTS ASSOCIATED WITH OIL AND GAS DEVELOPMENT 1 (2014); ANDREW RUMBACH, NATURAL GAS DRILLING IN THE MARCELLUS SHALE: POTENTIAL IMPACTS ON THE TOURISM ECONOMY OF THE SOUTHERN TIER 1 (n.d.), http://catskillcitizens.org/learnmore/MarcellusTourismFinal[1].pdf (describing the effect of fracking on tourism).

414. See, e.g., MARCELLUS SHALE EDUC. & TRAINING CTR., PENNSYLVANIA STATEWIDE MARCELLUS SHALE WORKFORCE NEEDS ASSESSMENT passim (2011), http://pasbdc.org/uploads/media_items/pennsylvania-statewide-marcellus-shale-workforce-needsassesment-june-2011.original.pdf (noting the increased need for local workforce); RAIMI & NEWELL, supra note 413, passim (assessing the potential for an increase in the local tax base).

415. See ARLINGTON, TEX., ORDINANCE no. 11-068, art. VII, § 7.01(B)-(C) (setting bonding and setback requirements, landscaping requirements, and fencing requirements, among other re-

http://www.syracuse.com/news/index.ssf/2013/12/ny_farmers_reject_anti-hydrofracking_position_at _farm_bureau_meeting.html.

Economy: Revenue from Fee-for-Service Payments⁴¹⁶

Economy: Revenue from Intergovernmental Transfers⁴¹⁷

Economy: Revenue from Leasing and Royalties⁴¹⁸

Economy: Tax Revenue⁴¹⁹

General Concerns⁴²⁰

Health and Safety: Health Concerns for Workers⁴²¹

Health and Safety: Local Health and Emergency Services⁴²²

Housing: Increased Scarcity and Cost⁴²³

Infrastructure: Improved Roads⁴²⁴

strictions); MCKENZIE COUNTY COMPREHENSIVE PLAN, *supra* note 407, at 1-2, 2-1, 2-5 to 2-6 (requiring a statement of land use strategies; building restrictions; and setback restrictions, among other requirements).

See ARLINGTON, TEX., ORDINANCE no. 11-068, art. VII, § 5.07(A) (describing a provision 416. where an operator pays annual administrative fees for each permit); BEDFORD, TEX., CODE OF V, § 79-72 (2017), ORDINANCES pt. 1, ch. 79, art. Π § 79-22(b), art. https://www.municode.com/library/tx/bedford/codes/code_of_ordinances?nodeId=PTIICOOR_CH7 9GADRPR (stating which fees must be paid prior to drilling/construction).

417. See, e.g., RAIMI & NEWELL, supra note 413, passim (describing that states collect taxes and fees associated with fracking operations in localities).

418. See, e.g., id. (noting that oil and gas operators on public land pay royalties to the government for use of the land); Jeffrey Jacquet, *Energy Boomtowns & Natural Gas: Implications for Marcellus Shale Local Governments & Rural Communities* 40 (Ne. Reg'l Ctr. for Rural Dev., Working Paper No. 43, 2009), http://aese.psu.edu/nercrd/publications/rdp/rdp43 (documenting increased local government revenue in Wyoming).

419. See, e.g., N.Y. STATE DEP'T OF ENVTL. CONSERVATION, FACT SHEET: ECONOMICS OF HIGH-VOLUME HYDRAULIC FRACTURING IN NEW YORK STATE, http://www.empireenergyforum.com/uploads/econimpact092011.pdf; Charles Costanzo & Timothy W. Kelsey, State Tax Implications of Marcellus Shale, PENNSTATE EXTENSION (Aug. 15, 2017), http://extension.psu.edu/publications/ua468 (describing the increasing local tax revenue accompanying fracking in Pennsylvania).

420. See ARLINGTON, TEX., ORDINANCE no. 11-068, art. VI, § 6.01 (2011), http://www.arlington-tx.gov/cityattorney/wp-content/uploads/sites/15/2014/05/GasDrilling-Chapter.pdf (bonding and insurance requirements); PETERS TOWNSHIP, PA., ZONING ORDINANCE § 400.602(55) (2017),

http://www.ecode360.com/attachment/PE3557/Peters%20Township%20Zoning%20Ordinance%20-%20August%202017.pdf (public safety and permit compliance).

421. See ARLINGTON, TEX., ORDINANCE no. 11-068, art. V, § 5.02 (requiring emergency response plan, hazardous materials management, liability insurance, blowout prevention, fire prevention, and storage tank regulations); CECIL TOWNSHIP, PA., ORDINANCE no. 2-2010, § 3(6) (Mar. 22, 2010), https://pennstatelaw.psu.edu/_file/aglaw/Ordinances/Cecil_Township_2-2010_General.pdf (requiring a first responders plan, and a preparedness, prevention, and contingency plans).

422. BURLESON, TEX., CODE OF ORDINANCES ch. 14, art. VII, div. I, § 14-353 (2017), https://library.municode.com/tx/burleson/codes/code_of_ordinances?nodeld=PTIICOOR_CH14BU_ARTVIIGADREX_DIVIGE_S14-353CIMA (describing the authority of the city manager's power); CECIL TOWNSHIP, PA., ORDINANCE no. 2-2010, § 3(6); Cross Creek Township, Pa. Ordinance no. 1:11 (Aug. 9, 2011), http://www.crosscreektwp.org/uploads/oil-and-gas-zoning-amendment-new-draft-2.pdf (amending ¶ 7(g)(i)) (requiring a Preparedness, Prevention, and Contingency Plan to the first responders and zoning officer); MCKENZIE COUNTY, N.D. ZONING ORDINANCES, art. IV, § 4.8 (2016), http://county.mckenziecounty.net/usrfiles/Zoning_Ordinance_9-20-2016.pdf (providing temporary workforce housing).

423. See Walters, supra note 411 (describing the provision of subsidized housing).

Infrastructure: Road Conditions and Safety⁴²⁵

Land Use: Future Growth and Development⁴²⁶

Land Use: Local Habitat and Species⁴²⁷

Land Use: Recreational Space⁴²⁸

424. See CRANBERRY TOWNSHIP, PA. ZONING ORDINANCES ch. 27, § 27-705(57)(C) (2016), http://www.ecode360.com/14180109 (requiring the permit applicant to enter into an agreement with the township before, during, and after natural gas development).

See, e.g., ARLINGTON, TEX., ORDINANCE no. 11-068, art. VII, § 7.01(A)(22) (requiring 425. that private roads must be approved before usage); BUFFALO TOWNSHIP, PA. ZONING ORDINANCE art. 3, § 312(E) (2009), http://buffalotownship.com/pdf/zoningordinance0209.pdf (operator must agree to deal with all necessary road degradation); CECIL TOWNSHIP, PA., ORDINANCE no. 2-2010, § 3(2)-(4) (operator must ensure safeguards to ensure road conditions and pedestrian safety); CROSS CREEK TOWNSHIP, PA. ORDINANCE no. 1:11, (requiring an impervious parking surface); JEFFERSON HILLS. PA. ORDINANCE 833. §§ 1(2)(F), no. 4(1)(B) (2014).http://www.ecode360.com/documents/JE2362/source/LF834323.pdf (requiring submission of a road restoration plan); JACKSON TOWNSHIP, PA., ORDINANCE no. 141 § IV(A) (2006), http://www.jacksontwppa.com/PDF%20Documents/Ordinances/Methane%20Gas%20Ordinance%2 0141.pdf (stipulating access road requirements); MOUNT PLEASANT TOWNSHIP, PA., CODE ch. 200, art. XII, § 200-103.1(B)(9) (2017), http://ecode360.com/11532552#15229488 (providing of inspection of proposed truck routes); MURRYSVILLE, PA., REVISED PENDING ORDINANCE no. 930-15 (2017), http://murrysville.com/wp-content/uploads/2017/02/Murrysville-Oil-and-Gas-Ordinance-Revised-for-County-Review-February-3-2017-Reduced-size.pdf requiring an operator to perform an inspection of proposed truck routes); PETERS TOWNSHIP, PA., ZONING ORDINANCE § 440.602(55)(H) (2017).

http://www.ecode360.com/attachment/PE3557/Peters%20Township%20Zoning%20Ordinance%20-%20August%202017.pdf (requiring a truck road use plan and requirement to fix property damage); Bd. of Trs. the Town of of Erie, Res. no. 12-74 (Colo. 2012). http://www.erieco.gov/documentcenter/view/4736 (describing the location of water supply and providing a traffic management plan); MCKENZIE COUNTY COMPREHENSIVE PLAN, supra note 407, at 3-19 (requiring a route for preferred heavy traffic network; MCKENZIE CTY., MCKENZIE COUNTY APPROACH PERMIT (2014),

http://county.mckenziecounty.net/usrfiles/APPROACH_PERMIT_APPLICATION_FINAL.pdf (holding contractor liable for damages).

426. See, e.g., ARLINGTON, TEX., ORDINANCE no. 11-068, art. VI, § 6.01(B)(1) (requiring an operator to hold a bond); BURLESON, TEX., CODE OF ORDINANCES ch. 14, art. VII, div. I, § 14-353 (noting the city manager's power).

See, e.g., AZTEC, N.M., CITY CODE ch. 15, art. II, § 15-12(1)(9) (2013), 427. http://www.aztecnm.gov/citycode/chapter15-oilgas.pdf (requiring a wildlife mitigation plan); CECIL TOWNSHIP, PA. ORDINANCE no. 2-2010, § 3(5) (a ban on burning brush, trees, or stumps); FORT WORTH, TEX., ORDINANCE 18449-02-2009 no. (2009),http://publicdocuments.fortworthtexas.gov/CSODOCS/DocView.aspx?id=4092&searchid=a64088c9 -ea99-477b-a3ef-a675e18f855f&dbid=0 (landscaping requirement); JEFFERSON HILLS, PA., ORDINANCE no. 833 § 1(2) (requiring of overlay districts); MOUNTAIN LAKE PARK, MD., ORDINANCE no. 2011-01, IV, art. § 2 (2011),http://www.harmonywithnatureun.org/content/documents/2000rdinance-

Mountain%20Lake%20Park--.pdf (noting rights of natural communities to exist); MOUNT PLEASANT TOWNSHIP, PA., CODE ch. 200, art. XII, § 200-103.1(B)(4) (setback requirements); MURRYSVILLE, PA., REVISED PENDING ORDINANCE no. 930-15 § 1(3) (defining a Best Management Practice as mitigation measures used to ensure energy development proceeds in an environmentally responsible manner); PETERS TOWNSHIP, PA., ZONING ORDINANCE § 440.602(55)(Z) (requiring compliance with all federal, state, and local laws, ordinances and regulations protecting the environment or environmental matters); RIO ARRIBA COUNTY, N.M. ORDINANCE no. 2009-01, art. 8, § 8.2 (2009), http://www.rio-arriba.org/pdf/2009-01_rio_arriba_county_oil_and_gas_ordinance.pdf (requiring environmental report); Bd. of Trs. of the Town of Erie, Res. no. 12-74 (Colo. 2012) http://www.erieco.gov/documentcenter/view/4736 (requiring a best management practices).

428. See, e.g., ARLINGTON, TEX., ORDINANCE no. 11-068, art. V, § 5.02(C)(14) (requiring a site restoration plan); JEFFERSON HILLS, PA. ORDINANCE no. 833 § 1(2) (requiring overlay districts);

Pollution: Air ⁴²⁹	
Pollution: Groundwater ⁴³⁰	
Pollution: Noise ⁴³¹	
Pollution: Surface Water ⁴³²	
Pollution: Visual ⁴³³	

MOUNT PLEASANT TOWNSHIP, PA., CODE ch. 200, art. XII, § 200-103.1(B)(4) (setback requirements); MIDLOTHIAN, TEX., CODE OF ORDINANCES ch. 4, art. 40.6, § 4.06.004 (2016), http://z2codes.franklinlegal.net/franklin/Z2Browser2.html?showset=midlothianset note (noting location criteria and specific use permits); NOTTINGHAM TOWNSHIP, PA. ORDINANCE no. 91, art. I, § 1 (2010), https://pennstatelaw.psu.edu/_file/aglaw/Ordinances/Nottingham_Township_No_91.pdf (ensuring pedestrian safety) (describing specific zoning districts); PETERS TOWNSHIP, PA., ZONING ORDINANCE § 440.602(55)(E) (permitted use zones); MCKENZIE COUNTY COMPREHENSIVE PLAN, *supra* note 407, at 4-2 (stating recreation and tourism strategies).

429. See, e.g., ARLINGTON, TEX., ORDINANCE no. 11-068, art. VII, § 7.01(A)(15) (flaring prohibitions, emissions restrictions); MIDLOTHIAN, TEX., CODE OF ORDINANCES ch. 4, art. 4.06, § 4.06.013(a)(13), (17) (muffling exhaust standards and gas emissions); MURRYSVILLE, PA., REVISED PENDING ORDINANCE no. 930-15 § 1; PETERS TOWNSHIP, PA., ZONING ORDINANCE § 440.602(55)(O) (controlling dust and odor); Bd. of Trs. of the Town of Erie, Res. no. 12-74 (Colo. 2012), http://www.erieco.gov/documentcenter/view/4736 (describing best management practices for the water supply).

430. See ARLINGTON, TEX., ORDINANCE no. 11-068, art. VII, § 7.01(A)(14)-(15), (A)(24), (I) (insurance requirements, wastewater pond regulations, saltwater well prohibitions, and disposal lines regulations).

See, e.g., id. § 7.01(F); BUFFALO TOWNSHIP, PA., ZONING ORDINANCE art. 6, § 603.5 431. (hiring an outside consultant); CECIL TOWNSHIP, PA., ORDINANCE no. 2-2010, § 3(16) (requiring a seventy-two ambient noise level evaluation); JEFFERSON HILLS, PA., ORDINANCE no. 814 (July 12, 2010), https://www.pdffiller.com/en/project/130271573.htm?f_hash=477fbc&reload=true (noise curfew and limit) (pending ordinance never adopted, codified with differences in language at JEFFERSON HILLS, PA. ORDINANCE no. 833, § 4(2)(I) (noise management plan)); NORTH STRABANE § 14 ORDINANCE no. 368. (2016).TOWNSHIP, PA. http://ecode360.com/documents/NO2412/source/LF931614.pdf (requiring engine mufflers); PETERS TOWNSHIP, PA., ZONING ORDINANCE § 440.602(55)(P) (noise control); Bd. of Trs. of the Town of Erie Res. no. 12-74 (Colo. 2012), http://www.erieco.gov/documentcenter/view/4736 (noting best management practices, elaborated in Appendix A of attached Memorandum of Understanding).

See, e.g., ARLINGTON, TEX., ORDINANCE no. 11-068, art. VII, § 7.01(A)(14), (A)(28), 432. (A)(31), (C)(1), (I) (describing pond design and landscaping features; storage tank regulations; saltwater disposal lines); AZTEC, N.M., CITY CODE ch. 15, art III, § 15-30 (2013), http://www.aztecnm.gov/citycode/chapter15-oilgas.pdf (storage tank regulations); BUFFALO TOWNSHIP, PA., ZONING ORDINANCE art. 3, § 331 (requiring heavy industry to provide a description of disposal methods); MIDLOTHIAN, TEX., CODE OF ORDINANCES ch. 4, art. 40.6, § 4.06.13 (specifying discharge regulations); MOUNT PLEASANT TOWNSHIP, PA., CODE ch. 171, art. 1, § 171.10, ch. 200, art. XII, § 200-103.5(B)(13), http://ecode360.com/14960721 (noting a liability coverage re-02-05(2005). ORDINANCE auirement): OTERO COUNTY, N.M., no. https://web.archive.org/web/20110813193603/http://co.otero.nm.us/Oil%20&%20Gas%20Ordinanc e/O&GDocs/Ord02-05 WORK.pdf (draft ordinance describing oil cleanup and disposal, accident report and spills); PETERS TOWNSHIP, PA., ZONING ORDINANCE § 440.602(55)(E)(5) (requiring water testing); SOUTH FAYETTE TOWNSHIP, PA., CODE ch. 240, art. XV § 240-95(A)(54), (A)(56) (2016), http://ecode360.com/11616851 (pond management); Bd. of Trs. of the Town of Erie Res. no. 12-74 (Colo. 2012), http://www.erieco.gov/documentcenter/view/4736 (attached Memorandum of Understanding describes responsible products program and best management practices); MCKENZIE COUNTY COMPREHENSIVE PLAN, supra note 407, at 1-4, 2-48 (natural resources management plan).

433. See ARLINGTON, TEX., ORDINANCE no. 11-068 art. VII, § 7.01(A)–(C), (H), (L) (describing minimal interference initiatives; visual blight reduction; setbacks; landscaping; gates requirements); BEDFORD, TEX., CODE OF ORDINANCES pt. 1, ch. 79, art. 1 § 79-6 (2017), https://www.municode.com/library/tx/bedford/codes/code_of_ordinances?nodeld=PTIICOOR_CH7 9GADRPR (seismic survey regulations); CECIL TOWNSHIP, PA., ORDINANCE no. 2-2010, § 3(3), (5),

Soil and Geology: Earthquakes and Ground Vibration ⁴³⁴
Soil and Geology: Erosion and Sedimentation ⁴³⁵
Soil and Geology: Increased Sand Mining and Processing ⁴³⁶
Soil and Geology: Soil Compaction ⁴³⁷
Water Resources: Strain on Water Infrastructure and Public Utilities ⁴³⁸

V. OVERLAP BETWEEN LOCAL CONCERNS AND LOCAL AUTHORITY

Our ongoing research has sought to identify both the positive and negative impacts of fracking. These impacts are local in nature, and their regulation falls under the umbrella of traditional local zoning authority.⁴³⁹

Positive impacts are generally economic in nature; drilling operations have been touted for creating jobs and providing desperately needed income for hardscrabble farmers who choose to lease their land.⁴⁴⁰ Fracking can also improve conditions in poor, rural municipalities that would otherwise not be able to afford to carry out functions such as fix-

435. See, e.g., MCKENZIE COUNTY., N.D., ZONING ORDINANCE art. IV, 4.9(1)(b), art. VI, § 6.1.3(3), 6.10.14; MURRYSVILLE, PA., CODE ch. 220, art. V, § 220-31(P)(7), (T)(1)(b)(1)(e), (T)(1)(c)(2), (T)(1)(d)(2), (T)(2)(g), (T)(2)(h)(2), (5) (erosion prevention and soil reclamation).

437. See, e.g., ARLINGTON, TEX., ORDINANCE no. 11-068, art. V, § 5.02(C)(14) (describing a site restoration plan); FORT WORTH, TEX., ORDINANCE no. 18449-02-2009 § 15-45(D) (2009), http://publicdocuments.fortworthtexas.gov/CSODOCS/PDF/i51koge5c5rho1n0sulvnile/47/Ordinanc e%2018449-02-2009.pdf (describing a reclamation plan); MCKENZIE COUNTY, N.D., ZONING ORDINANCE art. IV, § 4.9(1)(b), art. VI, § 6.7(2)(a) (requiring a runoff management plan).

438. See, e.g., BUFFALO TOWNSHIP, PA., ZONING ORDINANCE art. 3, §§ 307(G), 331(C) http://buffalotownship.com/pdf/zoningordinance0209.pdf (describing water withdrawal plan); BURLESON, TEX., CODE OF ORDINANCES ch. 14, art. VII, div. I, § 14-357(e)(10) (2017), https://library.municode.com/tx/burleson/codes/code_of_ordinances?nodeId=PTIICOOR_CH14BU_ ARTVIIGADREX_DIV1GE_S14-353CIMA (water needs questionnaire); FORT. WORTH, TEX., ORDINANCE no. 18449-02-2009 § 15-42(A)(17) (requiring a fresh water fracture pond permit).

439. See supra Section IV.A.

440. RAIMI & NEWELL, supra note 413, at 2.

^{(8)-(10) (}minimal interference initiatives); MCKENZIE COUNTY, N.D., ZONING ORDINANCE art. III, § 3.8, art. IV, § 4.9, art. V, § 5.8 (2016), http://county.mckenziecounty.net/usrfiles/Zoning_Ordinance_9-20-2016.pdf (conditional use permits; performance standards); MIDLOTHIAN, TEX., CODE OF ORDINANCES ch. 4, art. 40.6, § 4.06.007(e) (landscaping requirements); SOUTH FAYETTE TOWNSHIP, PA., CODE ch. 240, art. XV § 240-95(A)(54)(K), (N)-(O), (T)-(U) (facility design); Bd. of Trs. of the Town of Erie Res. no. 12-74 (Colo. 2012), http://www.erieco.gov/documentcenter/view/4736 (best management practices elaborated in Appendix A of attached MOU).

^{434.} See, e.g., ARLINGTON, TEX., ORDINANCE no. 11-068, art. VII, § 7.01(A)(6) (noting vibration control); BEDFORD, TEX., CODE OF ORDINANCES pt. 1, ch. 79, art. 1, § 79-6 (seismic survey regulations); MURRYSVILLE, PA., CODE ch. 220, art. V, § 220-31(CC)(3)–(4) (2017) http://ecode360.com/11539722 (geophysical exploration plan); PETERS TOWNSHIP, PA., ZONING ORDINANCE § 440.602(16), (42), (55)(0) (vibration and landslide control).

^{436.} See, e.g., MCKENZIE COUNTY., N.D., ZONING ORDINANCE art. II, 2.13.2, art. III, 3.4.3(13), (23), 3.8.1.2(7), (14), 3.8.2.2(2), (8) (specifying bond requirements for excavation and reclamation).

ing their roads or buying new firefighting equipment.⁴⁴¹ Further, local governments can potentially advance these functions as conditions of permitting fracking, or industry may provide for them via charitable donations to the localities in which they operate.⁴⁴² Such economic improvements may lead to increased population and property values, which in turn increase tax revenues.⁴⁴³

On the other hand, localities are concerned that fracking may also negatively impact the environment, health and safety, and sense of character of a community. Environmental concerns include water⁴⁴⁴ and air pollution,⁴⁴⁵ water depletion (especially in drought-prone areas in the West),⁴⁴⁶ nuisance effects (such as dust, odor, and noise),⁴⁴⁷ habitat fragmentation,⁴⁴⁸ and increased erosion.⁴⁴⁹ Excessive truck traffic can

443. See ECOLOGY AND ENV'T, INC., N.Y. STATE. DEP'T OF ENVTL. CONSERVATION, 002911 EG04_03_B3371, ECONOMIC ASSESSMENT REPORT FOR THE SUPPLEMENTAL GENERIC ENVIRONMENTAL IMPACT STATEMENT ON NEW YORK STATE'S OIL, GAS, AND SOLUTION MINING REGULATORY PROGRAM 4-114 (Aug. 2011), http://www.dec.ny.gov/docs/materials_minerals_pdf/rdsgeisecon0811.pdf; RAIMI & NEWELL, supra note 413, at 4.

444. See JACKSON TOWNSHIP, PA., ORDINANCE no. 141 § IV(E) (2006), http://www.jacksontwppa.com/PDF%20Documents/Ordinances/Methane%20Gas%20Ordinance%2 0141.pdf; SOUTH FAYETTE TOWNSHIP, PA., CODE ch. 240, art. XV § 240-95(A)(54)(f) (2016), http://ecode360.com/11616851.

§ 3(16)(g) (2010),ORDINANCE 2-2010,445. CECIL TOWNSHIP, PA., no. https://pennstatelaw.psu.edu/ file/aglaw/Ordinances/Cecil_Township_2-2010_General.pdf; MIDLOTHIAN, TEX., CODE OF ORDINANCES ch. 4, art. 40.6, § 4.06.013 (2016).http://z2codes.franklinlegal.net/franklin/Z2Browser2.html?showset=midlothianset note (noting location criteria and specific use permits); TOWNSHIP OF UPPER BURRELL, PA., CODE ch. 350, art. XVI, § 350-107(L)(7) (2016), http://ecode360.com/15010205#15010205.

446. See, e.g., MONIKA FREYMAN, HYDRAULIC FRACTURING & WATER STRESS: WATER DEMAND BY THE NUMBERS 7 (2014), http://www.colorado.edu/geography/class_homepages/geog_4501_s14/ceres_frackwaterbynumbers_ 021014.pdf; Michael Dillon, Water Scarcity and Hydraulic Fracturing in Pennsylvania: Examining Pennsylvania Water Law and Water Shortage Issues Presented by Natural Gas Operations in the Marcellus Shale, 84 TEMP. L. REV. 201, 210 (2011); Bobby Magill, Climate Change, Fracking, Water Shortages in Northern Colorado Top Environmental Concerns in Coming Decades, COLORADOAN (July 29, 2013, 8:45 AM), http://www.savethepoudre.org/news-articles/climatechange-fracking-water-shortages-in-n-colorado-coloradoan-2013-07-29.pdf.

447. See, e.g, AZTEC, N.M., CITY CODE ch. 15, art. III, § 15-30 (2013), http://www.aztecnm.gov/citycode/chapter15-oilgas.pdf (minimizing odor); NORTH STRABANE TOWNSHIP, PA., ORDINANCE no. 368, § 14 (2016), http://ecode360.com/documents/NO2412/source/LF931614.pdf (minimizing noise and light pollution).

448. Erik Kiviat, Risks to Biodiversity from Hydraulic Fracturing for Natural Gas in the Marcellus and Utica Shales, 1286 ANNALS OF THE N.Y. ACAD. OF SCI., May 23, 2013, at 1, 3–4; David M. Marsh & Nicole G. Beckman, Effects of Forest Roads on the Abundance and Activity of Terrestrial Salamanders, 14 ECOLOGICAL APPLICATIONS 1882, 1882 (2004); Alexandre Racicot et al., A Framework to Predict the Impacts of Shale Gas Infrastructures on the Forest Fragmentation of an Agroforest Region, 53 ENVTL. MGMT. 1023, 1026–28 (2014).

449. Matthew McBroom et al., Soil Erosion and Surface Water Quality Impacts of Natural Gas Development in East Texas, USA, 4 WATER 944, 945 (2012); Mary Beth Adams, et al., Effects of Natural Gas Development on Forest Ecosystems (2011) (Paper presented at the 17th Hardwood Forest Conference), http://www.nrs.fs.fed.us/pubs/gtr/gtr-p-78papers/23adamsp78.pdf.

^{441.} See PETERS TOWNSHIP, PA., ZONING ORDINANCE § 440.602(55)(I), (T), (U), (W) (2017), http://www.ecode360.com/attachment/PE3557/Peters%20Township%20Zoning%20Ordinance%20-%20August%202017.pdf.

^{442.} See KELSEY ET AL., supra note 412, at 5; RAIMI & NEWELL, supra note 413, at 4.

quickly wear down local roads.⁴⁵⁰ These, as well as concerns about accidents (such as spills), may actually negatively impact property values.⁴⁵¹ Finally, the rapid population increase accompanying drilling activity—associated with waste disposal, schools, courts, jails, and emergency response services—may completely overwhelm a small locality.⁴⁵²

A. What Local Governments Can Do

Local governments may draw from their traditional zoning and police powers to regulate unwanted impacts of fracking in the same manner as they have historically regulated industrial uses and activities within their communities. Local governments may use zoning power to restrict drilling activities to certain zones (e.g. the heavy industrial zone).⁴⁵³ or an overlay zone where drilling is permitted to occur (albeit with heightened restrictions above those that exist for the underlying zone).⁴⁵⁴ Local jurisdictions may make drilling a conditional use within a zone, requiring industry to seek a special permit in order to establish an operation.⁴⁵⁵ Local governments may even ban fracking completely within a municipality's borders as long as state law does not preempt doing so.⁴⁵⁶ Municipalities may also use their police power to pass local ordinances mitigating unwanted nuisances, such as noise, dust, odors, and safety concerns.⁴⁵⁷ For example, a noise ordinance can limit the maximum decibel level of fracking operations and the hours of the day in which they are permitted to occur.458

455. See, e.g., NORTH STRABANE TOWNSHIP, PA., ORDINANCE no. 368, § 3 (2016), http://ecode360.com/documents/NO2412/source/LF931614.pdf.

456. See, e.g., Wallach v. Town of Dryden, 16 N.E.3d 1188, 1191 (N.Y. 2014); Town of Dryden, N.Y. Ordinance Amending Prohibition on Gas Drilling (Aug. 2, 2011), http://dryden.ny.us/Downloads/PROPOSED_AMENDMENTS_ZONING_ORDINANCE.pdf.

457. PETERS TOWNSHIP, PA., ZONING ORDINANCE $\frac{1}{5}$ 440.602($\frac{1}{5}$)(N), (O), (P) (2017), http://www.ecode360.com/attachment/PE3557/Peters%20Township%20Zoning%20Ordinance%20-%20August%202017.pdf (discussing noise, light, odor nuisances).

458. See, e.g., TOWNSHIP OF UPPER BURRELL, PA., CODE ch. 350, art. XVI, § 350-107(L) (2016), http://ecode360.com/15010205#15010205 (requiring noise decibel limits during drilling operations).

⁴⁵⁰ NOTTINGHAM TOWNSHIP, PA. ORDINANCE 91, I, no. art. § 3 (2010), https://pennstatelaw.psu.edu/_file/aglaw/Ordinances/Nottingham_Township_No_91.pdf; TOWNSHIP OF UPPER BURRELL, PA., CODE ch. 350. art. XVI, § 350-107(K) (2016). http://ecode360.com/15010205#15010205.

^{451.} NOTTINGHAM TOWNSHIP, PA., ORDINANCE NO. 91, art. I, § 3; Jason Notte, *Fracking Leaves Property Values Tapped Out*, DAMASCUS CITIZENS FOR SUSTAINABILITY (Aug. 23, 2013), http://www.damascuscitizensforsustainability.org/2013/08/fracking-leaves-property-values-tapped-out.

^{452.} See infra Section V.B.2.

^{453.} See text accompanying infra note 507.

^{454.} Overlay zones are a generally accepted zoning mechanism that allow for a special zone, with its own unique regulations, to lie overtop the existing zoning. *See, e.g.*, Galveston Historical Found. v. Zoning Bd. of Adjustment, 17 S.W.3d 414, 415 (Tex. Ct. App. 2000) (overlay zone used to impose special restrictions on signs); Main St. Dev. Grp. v. Tinicum Twp. Bd. of Supervisors, 19 A.3d 21, 27–28 (Pa. Commw. Ct. 2011) ("[T]he MPC does not define overlay districts, but they have become common tools of land use in Pennsylvania.").

Some local governments are even adopting novel nonregulatory strategies, such as memoranda of understanding⁴⁵⁹ and road maintenance agreements.⁴⁶⁰ These techniques, the efficacy of which have been debated,⁴⁶¹ serve at the very least to foster better communication and relations between the local government and industry, and can result in industry being more sensitive to the concerns of the locality in which it is drilling.⁴⁶²

Compelling case studies from localities across the United States demonstrate these strategies in practice. This Article specifically examines Erie, Colorado; McKenzie County, North Dakota; Peters Township, Pennsylvania; and Arlington, Texas. Looking closely at the specific nature of each government's strategy will show that fracking, and the tools for governing it, are essentially the same in nature as any other land use, despite difficult political circumstances and complicated technical and environmental issues. These case studies also show that jurisdictions in different political, legal, economic, social, and geologically technical contexts can develop techniques that manage the most pressing impacts of hydraulic fracturing. The following studies borrow from more detailed case studies, which can be accessed from the link in Appendix 3.

B. What Local Governments Are Doing: Case Studies

1. Erie, Colorado: A Novel Nonregulatory Approach

In Colorado, there are four classes of localities, as determined by the state legislature:⁴⁶³ cities, towns, territorial charter cities, and home rule municipalities.⁴⁶⁴ "Home rule municipalities are those that have adopted a home rule charter pursuant to Article XX of the Colorado Constitution," which grants home rule power to those localities.⁴⁶⁵ Cities have a population of over 2,000, while towns have a population of 2,000 or less.⁴⁶⁶ Territorial charter cities are those that incorporated prior to 1877 and never reorganized under the more modern statutes; only one such city remains in the state.⁴⁶⁷ Only home rule municipalities possess home rule powers; the others may exercise only the powers granted to

^{459.} See infra Section V.B.1.

^{460.} See infra Section V.B.3.

^{461.} See infra Section V.B.1. on nonregulatory techniques in Erie, Colo.

^{462.} See infra Section V.B.1. on Erie, Colo.

^{463.} COLO. CONST. art. XIV, § 13.

^{464.} COLO. REV. STAT. § 31-1-201 (2017); KATHLEEN M. KELLY, IC COLORADO PRACTICE SERIES, METHODS OF PRACTICE § 54:1 (7th ed. West 2016).

^{465.} KELLY, supra note 464.

^{466.} Id.

^{467.} Id. §§ 54:1, 54:1 n.6.

them legislatively under Colorado Revised Statutes, section 31-15-101(2).⁴⁶⁸

In home rule municipalities, all state laws continue to apply until superseded by the charters or local laws of the locality. Where a local law is challenged under the doctrine of preemption, Colorado courts will determine whether the issue the local law is seeking to regulate is of local, state, or "mixed" local and state concern.⁴⁶⁹ If the matter is purely local, the home rule municipality's ordinance will supersede the state law.⁴⁷⁰ On the other hand, if the matter is found to be of state concern, state law will supersede the local regulation.⁴⁷¹ If the matter is of mixed state and local concern, then both the state and local governments can adopt laws regulating it,⁴⁷² but in the case of a conflict, state law will supersede the local law.⁴⁷³ Determining whether a matter is of local, state, or mixed concern is an issue for the courts, who must balance fact and policy in making their determination.⁴⁷⁴ The courts admit that often these categories can even merge, and thus each determination is made on an ad hoc basis using a multi-factor test.⁴⁷⁵ This makes for a rather litigious area of the law, and provides the backdrop for the raging fracking debate that has been ongoing for years within the state. In May 2016, the Colorado Supreme Court finally resolved the fiercely contested issue of whether local governments have the right to enact drilling moratoriums; the court established that such moratoriums conflict with-and are therefore preempted by-state oil and gas law.⁴⁷⁶

The town of Erie, Colorado, is located in the northern part of the state, nestled in the Front Range of the Rocky Mountains. It currently has 25,000 residents and expects its population to increase by forty percent

^{468.} COLO. REV. STAT. § 31-15-101(2); KELLY, *supra* note 464, § 54:2; *see also* City of Sheridan v. City of Englewood, 609 P.2d 108, 109 (Colo. 1980); City of Aurora v. Bogue, 489 P.2d 1295, 1296 (Colo. 1971); Svaldi v. City of Lakewood, 536 P.2d 331, 332 (Colo. App. 1975).

^{469.} KELLY, supra note 464, § 54:2.

^{470.} Id.; Vela v. People, 484 P.2d 1204, 1205 (Colo. 1971).

^{471.} City of Commerce City v. State, 40 P.3d 1273, 1279 (Colo. 2002).

^{472.} John E. Hayes & Kristy M. Hartl, Home Rule in Colorado: Evolution or Devolution, 33 COLO. LAW. 61, 62 (2004).

^{473.} Id.; see City of Commerce City, 40 P.3d at 1279.

^{474.} See City & Cty. of Denver v. Qwest Corp., 18 P.2d 748, 754–55 (Colo. 2001); Hayes & Hartl, *supra* note 472, at 62 (quoting Town of Telluride v. Lot Thirty-Four Venture, LLC, 3 P.3d 30, 37 (Colo. 2000)).

^{475.} City of Commerce City, 40 P.3d at 1278; City & Cty. of Denver v. State, 788 P.2d 764, 767-68 (Colo. 1990).

^{476.} City of Longmont v. Colo. Oil & Gas Ass'n, 369 P.3d 573, 585 (Colo. 2016); see also Cathy Proctor, Colorado Supreme Court Rules on Local Fracking Bans, DENV. BUS. J. (May 3, 2016, 8:30 AM), https://www.bizjournals.com/denver/blog/earth_to_power/2016/05/colorado-supreme-court-rules-on-local-fracking.html; Caitlin Hendee, Colorado Attorney General Threatens Boulder County with Legal Action Over Oil and Gas Moratorium, DENV. BUS. J. (Jan. 27, 2017, 4:27 PM), http://www.bizjournals.com/denver/news/2017/01/26/colorado-attorney-general-threatens-boulder-county.html (demonstrating that some holdouts are still not in compliance with the court's ruling; for example, Boulder County, Co. voted in December 2016 to extend its drilling moratorium through May 1, 2017, and the state Attorney General threatened to bring suit against the county to force compliance).

by 2025.477 Erie's median age is thirty-seven and its median household income is \$112,000.⁴⁷⁸ The debate over hydraulic fracturing in Erie, Colorado, began in the summer of 2012 over a drill pad sited near Red Hawk Elementary School: Erie residents were concerned by the proximity of the well pad to the school and residential homes, as well as the noise that emanated from the site.⁴⁷⁹ Though the site complies with all state setback and operation requirements, the rig generated significant local resistance against future drilling sites. The impacts of greatest concern to Colorado residents include water consumption and pollution; waste; air pollution; leaking wells and faulty containment equipment (a particular problem in recent large flooding events); and insufficient siting and setback requirements.480

In an attempt to address residents' concerns, Erie town administrators decided to take a nonregulatory approach and entered into negotiations with Encana and Anadarko, the two major companies running drilling operations in northern Colorado.⁴⁸¹ This approach is in stark contrast to other Colorado towns, such as Longmont, whose residents instead voted to outright ban fracking from its borders, but lost the fierce legal battle to establish its right to impose a moratorium.⁴⁸² The resulting Memorandum of Agreements (MOA) between Erie, Encana, and Anadarko requires companies to use best practice techniques such as a wider setback than the state requires; vapor recovery units; a noise, light, and dust mitigation plan; and steel-rimmed berms around tanks at the well site.⁴⁸³ When additional issues surfaced after drilling commenced (such as noise and vibration problems), Erie's Town Board continued to engage with the drilling companies and seek more mitigation measures instead of banning the operations.⁴⁸⁴ Due to the collaborative approach taken by town administrators and industry representatives-and especially in light of the Colorado Supreme Court's decision that local moratoriums are preempted by state law-Erie's MOU offers a potentially constructive pathway forward for other small towns confronted with the natural gas industry. At a minimum, the unique effort of crafting a MOU has created a better relationship between the town and industry, in which the town retains a significant amount of negotiating power.

See City of Longmont v. Colo. Oil & Gas Ass'n, 369 P.3d 573, 585 (Colo. 2016). 482.

See Quick Facts, TOWN OF ERIE, COLO., https://www.erieco.gov/240/Quick-Facts (lasted 477. visited Oct. 5, 2017).

Id.; Town of Erie 2017 Community Profile, TOWN OF ERIE, COLO., 478. https://www.erieco.gov/DocumentCenter/Home/View/43 (last updated Jan. 27, 2017).

Interview by Avana Andrade with Fred Diehl, Assistant to the Town Administrator, Erie, 479 Colo. (Dec. 2, 2014). Id.

^{480.}

¹²⁻⁷⁴ 2012). Res. no. (Colo. of Trs. of the Town of Erie, 481. Bd. http://www.erieco.gov/documentcenter/view/4736.

ORDINANCE 21-2015 (2015), 483. TOWN OF ERIE. COLO., no. http://www.erieco.gov/DocumentCenter/View/7078.

^{484.} Mark Jaffe, Erie Rejects Fracking Freeze, DENV. POST (Apr. 26, 2016, 12:28 AM), http://www.denverpost.com/2015/01/27/erie-rejects-fracking-freeze.

2. McKenzie County, North Dakota: A Rural Hybrid Approach

In North Dakota, authority is statutorily granted to all municipalities to regulate a wide variety of industries and uses, including passing ordinances (though the power to zone is not a power explicitly granted).⁴⁸⁵ All municipalities hold the same powers as townships.⁴⁸⁶ For a proposed municipal corporation to become a city, it must have a territory of under four square miles in area.⁴⁸⁷ Cities of under 500 inhabitants may incorporate "under the council or modern council forms of government," while cities of 500 or more inhabitants may incorporate under either the council, modern council, or commission forms of government.488

Home rule authority is statutorily granted to cities through the enabling clause found in North Dakota Century Code § 40-05.1-01: "Any city may frame, adopt, amend, or repeal home rule charters "⁴⁸⁹ The powers of home rule cities are laid out in § 40-05.1-06 and notably include both the authority "[t]o provide for the adoption, amendment, and repeal of ordinances, resolutions, and regulations to carry out its governmental and proprietary powers and to provide for public health, safety, morals, and welfare,"490 and "[t]o provide for zoning, planning, and subdivision of public or private property."491

In a similar vein, counties in North Dakota are statutorily established entities⁴⁹² that are also granted the power (if they choose to exercise it) to become home rule entities.⁴⁹³ Their authority, much like cities, includes the ability to pass, amend, and repeal ordinances⁴⁹⁴ as well as engage in planning and zoning for the health and welfare of their citizens.495

With a pre-boom population of 6,360 people, McKenzie County has been rapidly growing, recently landing the title of fastest growing non-metropolitan county in the country.⁴⁹⁶ Watford City's population more than quintupled, growing from less than 1,500 residents in 2010 to over 10,000 residents in 2014.⁴⁹⁷ This phenomenal growth rate is one of the

496. Stephanie Norman, County Is No. 1 in Nation for Population Growth, MCKENZIE CTY, FARMER (Apr. 15, 2014), http://www.watfordcitynd.com/?id=10&nid=2665.

^{485.} N.D. CENT. CODE § 40-05-01 (2017).

^{486.} Id. § 40-05-10.

Id. § 40-02-01. 487.

^{488.} Id.

Id. § 40-05.1-01. 489.

Id. § 40-05.1-06(9). 490. Id. § 40-05.1-06(13).

^{491.}

Id. § 11-01-01. 492.

^{493.} Id. § 11-09.1-01.

^{494.} Id. § 11-09.1-05(7).

^{495.} Id. § 11-09.1-05(9).

^{497.} RICHARD G. NEWELL & DANIEL RAIMI, DUNN COUNTY AND WATFORD, CITY NORTH DAKOTA: A CASE STUDY OF THE FISCAL EFFECTS OF BAKKEN SHALE DEVELOPMENT 2, 10-11 (2016),

https://energy.duke.edu/sites/default/files/attachments/5.%20A%20case%20study%20of%20the%20

impacts that the county has been most focused on mitigating. The county seeks to preserve its agrarian, "wholesome" community character, de-spite this "instant sprawl."⁴⁹⁸ This "instant sprawl" describes the "man camps," or miles of temporary housing units constructed for drill site workers that have popped up within a twenty-mile radius of Watford City in the few years since the shale boom has taken off.⁴⁹⁹ County officials have utilized a hybrid approach to address these growth concerns; the traditional zoning process was used to develop a Comprehensive Plan and Zoning Ordinance, while nonregulatory collaborations between the county, surrounding counties, and other stakeholders have assessed and planned for infrastructure and service needs.

The Comprehensive Plan expresses the community's vision for future development and features key priorities for guiding policy making. The county used the Comprehensive Plan to articulate an overarching goal of preserving the integrity of the rural communities while reaping the benefits of development, focusing on broad categories of concern: economic development; provision of government services; stewardship of resources: land use and adequate transportation; recreation; and housing.500

The Zoning Ordinance creates zoning districts with district-specific restrictions on development, though it allows all nonconforming uses at the time of adoption to continue.⁵⁰¹ The Ordinance focuses on allowed and conditional uses in the county and includes general restrictions such as requiring approved on-site sewage systems and road access for subdivisions.⁵⁰² Importantly, temporary workforce housing is considered a conditional use and is subject to significant regulation.⁵⁰³ In contrast to the other localities featured as case studies in this Article, the McKenzie County Ordinance places minimal restrictions on oil and gas development, avoiding regulations like sound restrictions that might be more common in more urbanized areas.⁵⁰⁴ Yet an extensive portion of the ordinance is devoted to addressing wind energy siting, extensive permitting

502. See, e.g., id. at art III, § 3.9.3, art. IV, § 4.1.

fiscal%20effects%20of%20Bakken%20shale%20development%20FINAL.pdf; see U.S. Census Bureau, Annual Estimates of the Resident Population: April 1, 2010 to July 1, 2015, AM. FACT https://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?src=bkmk FINDER. (last visited Oct. 5, 2017); see also Tom Haines, What If Your Small Town Suddenly Got Huge?, ATLANTIC (Sept. 12, 2014), https://www.theatlantic.com/business/archive/2014/09/what-if-yoursmall-town-suddenly-got-huge/379536.

Interview by Christopher Halfnight with Gene Veeder, Director, Economic Development, 498. McKenzie County, N.D. Job Development Authority and Tourism Bureau (Dec. 1, 2014). Ы

^{499.}

See, e.g., MCKENZIE COUNTY COMPREHENSIVE PLAN, supra note 407, at 1-4; Kate Rug-500. MCKENZIE CTY. FARMER (Mar. 27, 2013), gles, County Zone Plan Approved, http://www.watfordcitynd.com/?id=10&nid=2118.

MCKENZIE COUNTY, N.D., ZONING II. § 2.6 (2016), ORDINANCE art. 501. http://county.mckenziecounty.net/usrfiles/Zoning Ordinance 9-20-2016.pdf.

^{503.} Id. at art. 4, § 4.8.

^{504.} Id. at art. 1, § 1.3.

requirements, public hearings, setbacks, and post-leasing restoration of property—a contrast that mostly results from state authority over oil and gas regulation but also reflects local priorities.⁵⁰⁵

McKenzie County's nonregulatory strategies to address the increasing strains on local government infrastructure and services from the rapid population boom have primarily focused on assessing and prioritizing infrastructure and service needs, and then creating infrastructure and expanding staff to meet those needs. The county joined with eighteen other counties and entities to form Vision West ND, a consortium of local interests seeking to improve the regional economy, and released an Economic Development Strategic Plan, which included topics such as business retention, health care, environmental restoration, and traffic management.⁵⁰⁶

Although the oil boom in McKenzie County has dramatically slowed over the past two years due to a sharp drop in oil prices,⁵⁰⁷ the Trump Administration's focus on encouraging domestic energy production may spur another uptick in fracking.⁵⁰⁸ Though the future for McKenzie County is uncertain, their planning and zoning efforts (emphasizing controlled growth), diversification of the economy, and preservation of community character will serve them well going forward, and remain a prime example for local governments striving to achieve a balanced and adaptive approach to the region's development.

3. Peters Township, Pennsylvania: A Regulatory Approach

Pennsylvania municipalities have general authority to regulate for the wellbeing of their communities.⁵⁰⁹ However, the Pennsylvania Oil and Gas Law explicitly preempts certain local control over fracking; effectively, the law prevents localities from regulating how fracking occurs.⁵¹⁰ For example, local governments cannot mandate the thickness of well casings or the type of equipment that drillers use.⁵¹¹ Despite these

^{505.} Id. at art. 1–6.

^{506.} MCKENZIE CTY., N.D., ECONOMIC DEVELOPMENT STRATEGIC PLAN (June 2013), http://www.visionwestnd.com/pdf/strategic_plans/McKenzie%20County%20Final.pdf.

^{507.} Ernest Scheyder, In North Datoka's Oil Patch, A Humbling Comedown, REUTERS INVESTIGATES (May 18, 2016, 2:00 PM), http://www.reuters.com/investigates/special-report/usa-northdakota-bust.

^{508.} An America First Energy Plan, WHITE HOUSE, https://www.whitehouse.gov/america-firstenergy (last accessed Sept. 1, 2017) ("The Trump Administration is committed to energy policies that lower costs for hardworking Americans and maximize the use of American resources, freeing us from dependence on foreign oil."); see also Sharma, supra note 12.

^{509.} Pennsylvania Municipalities Planning Code Act of 1968, Pub. L. 805, No. 247, art. VI, § 603 (2005), http://mpc.landuselawinpa.com/MPCode.pdf (enabling legislation that empowers local governments to enact, amend, and repeal zoning ordinances in order to regulate for the health, safe-ty, and welfare of their citizens).

^{510.} See Huntley & Huntley, Inc. v. Borough Council, 964 A.2d 855, 868 (Pa. 2009); see also Range Res.-Appalachia, LLC v. Salem Twp., 964 A.2d 869, 875, 877 (Pa. 2009); supra Section II.A.

^{511.} Range Res.-Appalachia, 964 A.2d at 875.

state-level limitations, Pennsylvania localities do have the legal authority to regulate where fracking may take place.⁵¹²

In 2012, the state government tried to limit this local authority over fracking when it passed Act 13.⁵¹³ Peters Township was among a group of townships and individuals that challenged the law, arguing that its restrictions on local power were unconstitutional.⁵¹⁴ The resulting 2013 Pennsylvania Supreme Court decision in Robinson Township v. Commonwealth⁵¹⁵ overturned § 3304 of Act 13 and affirmed local authority to regulate the location of fracking operations, with certain limitations.⁵¹⁶ The Pennsylvania Supreme Court affirmed the Commonwealth Court's holding that § 3304 violates "substantive due process . . . because it allows incompatible uses in zoning districts and does not protect the interests of neighboring property owners from harm, alters the character of the neighborhood, and makes irrational classifications."517 Further, the court held that § 3304 violates the environmental rights provision of the Pennsylvania constitution because "a new regulatory regime permitting industrial uses as a matter of right in every type of pre-existing zoning district [including residential] is incapable of conserving or maintaining the constitutionally-protected aspects of the public environment and of a certain quality of life."518

Peters Township, located in Western Pennsylvania, is heavily residential and relatively wealthy (especially compared to its neighboring townships), with a population of 22,143 and median household income of \$108,500.⁵¹⁹ While the majority of wealthy community members would like to see Peters Township ban hydrofracking—as they harbor strong concerns about negative environmental, road, and property value impacts—the Pennsylvania Municipalities Planning Code does not appear to permit local governments to completely ban a legitimate use.⁵²⁰ Thus, the township has used the traditional zoning process to regulate the location of drill sites, compressor stations, and processing stations, as

^{512.} Huntley & Huntley, 964 A.2d at 864.

^{513.} Act No. 13 of Feb. 14, 2012, Pub. L. 87, No. 13 (codified at 58 PA. CONS. STAT. §§ 2301-3504 (2017)).

^{514.} Jason Cato, Peters Residents Opposed to Fracking Turn Out for Public Hearing, TRIBLIVE (Jan. 19, 2015, 9:21 PM), http://triblive.com/news/adminpage/7595230-74/drilling-peters-ordinance.

^{515. 83} A.3d 901, aff'g 52 A.3d 463 (Pa. 2002).

^{516.} Id. at 980-83 (Pa. 2013) (reaffirming the holdings in *Huntley* and *Range Resources*, which Act 13 had directly contravened).

^{517.} Robinson Twp. v. Commonwealth, 52 A.3d 463, 485 (Pa. Commw. Ct. 2012), aff'd, 83 A.3d at 901.

^{518.} Robinson Twp., 83 A.3d at 979.

^{519.} QuickFacts: Peters Township, Washington County, Pennsylvania, U.S. CENSUS BUREAU, https://www.census.gov/quickfacts/fact/table/peterstownshipwashingtoncountypennsylvania/PST045 216 (last visited Oct. 5, 2017).

^{520.} Pennsylvania Municipalities Planning Code Act of 1968, Pub. L. 805, No. 247, art. VI, § 603(b), (i) (2005), http://mpc.landuselawinpa.com/MPCode.pdf.

well as mitigate impacts including visual blight, noise and odor pollution, truck traffic and wear on local roads, and potential safety hazards.

The township, while regulating under the mandates of the nowoverturned provision of Act 13, originally crafted a Mineral Extraction Ordinance, which regarded drilling as a "conditional use" that the Township's Planning Commission must approve prior to extraction. ⁵²¹ The ordinance modified the township's existing zoning code by creating a "Mineral Extraction Overlay Zone," which the township can float over the existing zoning to permit drilling in areas over forty acres that are accessible via an existing road.⁵²² All types of drilling activity and stations are considered industrial uses under the zoning code. The regulations require setbacks; notification,⁵²³ signage, and fencing requirements;⁵²⁴ drilling noise decibel limits;⁵²⁵ minimization of visual blight,⁵²⁶ lighting,⁵²⁷ and dust/vibrations/odor; ⁵²⁸ road maintenance and repair requirements;⁵²⁹ and pre- and post-drilling water testing,⁵³⁰ all with the intent of mitigating to the fullest extent possible the negative impacts of drilling on both community members and the environment.

To ensure compliance with the 2013 *Robinson Township* decision,⁵³¹ the township reviewed and amended its ordinance in January

%20August%202017.pdf).

523. PETERS TOWNSHIP, PA., ZONING ORDINANCE § 440.602(55)(T) (2017), http://www.ecode360.com/attachment/PE3557/Peters%20Township%20Zoning%20Ordinance%20-%20August%202017.pdf.

524. Id. § 440.602(55)(T).

526. See PETERS TOWNSHIP, PA., ZONING ORDINANCE 440.602(55)(U)(V) (requiring that the operator paint machinery in "earth tones," and requiring fencing and/or landscape buffering to minimize the visual impact of fracking at the streetscape).

527. Id. § 440.602(55)(N) (stating that lighting may not shine on adjacent public or private property, and must point downward to illuminate only the drilling site).

528. Id. § 440.602(55)(O).

529. Id. § 440.602(55)(I).

530. Id. § 440.602(55)(E).

531. Robinson Twp. v. Commonwealth, 83 A.3d 901, aff'g 52 A.3d 463 (Pa. 2002).

^{521.} PETERS TOWNSHIP. PA., ORDINANCE No. 737 8. (Aug. 2011), http://www.peterstownship.com/vertical/sites/%7B3BE5B086-2A15-4083-A63D-16B3DD03C8DD%7D/uploads/Minera Extraction Ord final version 737 8-2-11.pdf (current version at PETERS TOWNSHIP, PA., ZONING ORDINANCE § 440.602(55) (2017),http://www.ecode360.com/attachment/PE3557/Peters%20Township%20Zoning%20Ordinance%20-

^{522.} PETERS TOWNSHIP, PA., ZONING ORDINANCE ch. 27, pt. 3, § 303(A)(1), pt. 5 § 504(A), pt. 7 § 713(C) (2016), http://www.peterstownship.com/vertical/sites/%7B3BE5B086-2A15-4083-A63D-16B3DD03C8DD%7D/uploads/Zoning(1).pdf, *repealed by* PETERS TOWNSHIP, PA., ZONING ORDINANCE §§ 400.00–.1200 (2017).

^{525.} Id. § 440.602(55)(P)(1) (explaining that noise regulations are robust; after establishing a pre-drilling noise level baseline, the drilling cannot exceed this ambient noise level by more than ten decibels from the hours of 7:00am-9:00pm, and not by more than five decibels between 9:00pm and 7:00am); id. § 440.602(55)(P)(2) (stating that in order to accommodate the "fluctuations" in drilling activities, the township also created a "sliding scale which provides adjustments in the permitted level of noise generated during operations to create flexibility in the regulations and prevent repeated violations."); see also id. § 440.602(16)(J) (explaining that the Township reserves the right to require operators to use devices such as sound walls, acoustical blankets, and mufflers, to ensure compliance with the permitted noise levels).

2015.⁵³² The township eliminated its mineral extraction overlay district, and instead now permits fracking to occur in its Light Industrial District.⁵³³ The ordinance still retains all of its provisions relating to environmental, health, and safety concerns. These specific requirements for drilling are valuable best practices that other localities may consider in order to regulate some of the impacts of fracking.⁵³⁴

4. Arlington, Texas: An Urban Hybrid Approach

Texas first enacted laws permitting the incorporation of cities in the 1850s.⁵³⁵ In the early 1900s, the Home Rule Enabling Act was created and modified, permitting cities to designate zones and districts wherein they could regulate size, height, bulk, and use of structures in furtherance of the public welfare.⁵³⁶ In 1927, the basis of Texas's modern Local Government Code was laid with the passage of the Zoning Act, a comprehensive piece of legislation outlining the mechanisms by which local governments could exercise their authority.⁵³⁷ Today, the authority for Texas localities' authority to zone is found in Chapter 211 of the Local Government Code.⁵³⁸

There are three types of Texan municipalities: general law, municipal home rule, and those chartered by special legislation.⁵³⁹ Each locality's governmental structure and powers are dependent on its classification; thus, a general-law city is bound by the general laws of the state, a home rule city is guided by its charter, and a special-law city regulates pursuant to the special legislative act that created it.⁵⁴⁰ There are three subtypes of general-law municipality: Types A, B, and C.⁵⁴¹ Each has its own distinct requirements for incorporation, such as population and terri-

^{532.} PETERS TWP. PLANNING COMM'N, MEETING MINUTES FOR JAN. 15, 2015, at 3–5 (Pa. 2015), http://www.peterstownship.com/vertical/sites/%7B3BE5B086-2A15-4083-A63D-16B3DD03C8DD%7D/uploads/Planning_Minutes_2015-01-15.pdf (approving draft mineral extraction ordinance).

^{533.} Id.

^{534.} PETERS TOWNSHIP, PA., ORDINANCE no. 804 (Sept. 26, 2016), http://www.ecode360.com/documents/PE3557/source/LF926970.pdf.

^{535.} Act of Mar. 15, 1875, 1875 Tex. Gen. Laws 113 (granting authority to incorporate Type A cities); Act of Jan. 27, 1858, 1858 Tex. Gen. Laws 69 (allowing the incorporation of Type B cities); DAVID B. BROOKS, 23 TEXAS PRACTICE SERIES: MUNICIPAL LAW AND PRACTICE § 21.01 (2d ed. 2016).

^{536.} Act of Apr. 2, 1921, 1921 Tex. Gen. Laws 169; BROOKS, supra note 535.

^{537.} Act effective of June 14, 1927, 1927 Tex. Gen. & Spec. Laws 424; BROOKS, supra note 535.

^{538.} TEX. LOC. GOV'T CODE ANN. § 211.001 (West 2016); BROOKS, supra note 535, § 21.01.

^{539.} BROOKS, *supra* note 535, § 3.03; *see also* LOC. GOV'T § 5.001 (Type A); LOC. GOV'T § 5.002 (Type B); LOC. GOV'T § 5.003 (Type C); LOC. GOV'T § 5.004 (home rule); LOC. GOV'T § 5.005 (special-law).

^{540.} LOC. GOV'T § 1.005; BROOKS, supra note 535, § 3.03.

^{541.} LOC. GOV'T § 6.001 (authority to incorporate as a Type A municipality); LOC. GOV'T § 7.001 (authority to incorporate as a Type B municipality); LOC. GOV'T § 8.001 (authority to Incorporate as a Type C municipality).

tory size requirements.⁵⁴² Cities with a population of over 5,000 may vote to adopt their own charter and become home rule cities.⁵⁴³

Arlington, Texas, is a home rule city⁵⁴⁴ of 392,772 people, with a median household income of \$53,6326, and is located inside of the nation's fastest-growing metroplex.⁵⁴⁵ While local officials at first thought fracking was a temporary phenomenon, it quickly became clear that fracking would become a permanent industry.⁵⁴⁶ Local citizens and the city are specifically concerned with avoiding state preemption (a constantly-looming issue in Texas); mitigating noise pollution;⁵⁴⁷ and ensuring the safe operation of heavy industry in a dense urban setting, such as through underground pipe management.⁵⁴⁸

The city has utilized a hybrid approach of engaging in the traditional zoning practice of passing a comprehensive ordinance—which requires multiple layers of approval for fracking to occur and contains clear guidelines for underground pipe laying, roads, and water use—as well as the nonregulatory approach of developing close working relationships through constant, symmetrical communication between enforcement staff and operators. The city has also instituted a call system to coordinate calls from operators and residents.⁵⁴⁹

Arlington's ordinance requires drillers to obtain a special use permit (SUP);⁵⁵⁰ approval of the permit is a multistep process with includes a neighborhood meeting, a gas well permit application, and a public City Council meeting.⁵⁵¹ The system reduces the administrative burden by allowing for entire "drill zones," which contain multiple well sites, to go through the approval process. Before a zone is approved, it must comply

548. Id. § 7.01(J).

^{542.} LOC. GOV'T § 6.001 (authority to incorporate as a Type A municipality); LOC. GOV'T § 7.001 (authority to incorporate as a Type B municipality); LOC. GOV'T § 8.001 (authority to incorporate as a Type C municipality); LOC. GOV'T § 9.001 (adoption or amendment of Home Rule charter).

^{543.} TEX. CONST. art. XI, § 5; LOC. GOV'T § 5.004.

^{544.} See CITY OF ARLINGTON, TEX., CITY CHARTER (2015), http://www.arlingtontx.gov/cityattorney/wp-content/uploads/sites/15/2014/05/CHARTChapter.pdf.

^{545.} QuickFacts: Arlington, Texas, U.S. CENSUS BUREAU, http://www.census.gov/quickfacts/table/PST045215/4804000 (last visited Oct. 5, 2017).

^{546.} Interview by Becky Gallagher, Yale Center for Law & Policy, with James Parajon, Deputy City Manager for Economic Development and Capital Investment, City of Arlington, Tex. (May 19, 2014) [hereinafter Interview by Becky Gallagher with James Parajon].

^{547.} ARLINGTON, TEX., ORDINANCE no. 11-068, art. VII, § 7.01(F) (2011), http://www.arlington-tx.gov/cityattorney/wp-content/uploads/sites/15/2014/05/GasDrilling-Chapter.pdf.

^{549.} Interview by Becky Gallagher, Yale Center for Law & Policy, with Collin Gregory, Gas Well Coordinator, City of Arlington, Tex. (Nov. 18, 2014) [hereinafter Interview by Becky Gallagher with Collin Gregory].

^{550.} CMTY. DEV. & PLANNING, CITY OF ARLINGTON, TEX., APPLICATION FOR GAS DRILLING AND PRODUCTION (2012), http://www.arlington-tx.gov/cdp-gaswells/wpcontent/uploads/sites/44/2014/12/Gas-Drilling-Production-Application.pdf.

^{551.} *Permitting Process*, ARLINGTON GAS WELL DRILLING, http://www.arlington-tx.gov/cdp-gaswells/applications-and-permits/permitting-process (last accessed Oct. 5, 2017).

with setback restrictions, be approved at a public meeting, and be fully licensed.⁵⁵² If the drill zone is approved, then all of the well sites within it are automatically approved.⁵⁵³ Once approved, the site is subject to frontage and setback requirements, ambient noise mitigation measures, water use and pollution regulations, road use restrictions, and charges for damages.⁵⁵⁴ Further, drillers must submit an underground pipe plan.⁵⁵⁵

Arlington's nonregulatory approach includes putting in place a three-person full-time fracking team, which does on-site inspections, processes and reviews documentation, and responds to complaints and calls from drillers and neighbors on a daily basis.⁵⁵⁶ An assistant director oversees the drilling program, and city administrative staff also supports the team.⁵⁵⁷ These dedicated staff and resources are intended to help the city maintain close working relationships with operators and ensure that drilling is safely conducted in a manner compliant with the city's ordinance.

The city hopes its hybrid approach—a comprehensive ordinance combined with funding the resources necessary for enforcement staff to cultivate close but professional relationships with both industry and neighbors—will allow it to retain its authority over local drilling.⁵⁵⁸ Whether or not state authority ultimately preempts the ordinance, the carefully worded provisions and dedication of the city to fund the execution of its regulations are certainly best practices for other local governments to emulate.

The above four case studies illustrate different paths forward that localities across the country have taken in their quest to control the local impacts of hydrofracking that most greatly impact their residents. Both traditional regulatory practices—such as zoning and ordinances—as well as nonregulatory approaches, like memoranda of understanding and open channels of communication, have been effective in addressing impacts from environmental, health, and safety concerns, to sprawl containment and economic development. Localities across the United States likewise facing the effects of hydraulic fracturing on their own communities can

^{552.} Id.

^{553.} Interview by Becky Gallagher with Collin Gregory, supra note 549.

^{554.} ARLINGTON, TEX., ORDINANCE no. 11-068, art. VII, § 7.01(J).

^{555.} Id.

^{556.} Interview by Becky Gallagher with Collin Gregory, *supra* note 549. The town even maintains a website for each drill site with updated information. *Gas Well Operators*, ARLINGTON GAS WELL DRILLING, http://www.arlington-tx.gov/cdp-gaswells/operators (last accessed Oct. 5, 2015).

^{557.} Interview by Becky Gallagher with James Parajon, *supra* note 546; *see also Staff Information*, ARLINGTON GAS WELL DRILLING, http://www.arlington-tx.gov/cdp-gaswells/staff (last accessed Oct. 5, 2017).

^{558.} See CITY OF ARLINGTON, TEX., FY15: CITY OF ARLINGTON 2015 PROPOSED BUDGET AND BUSINESS PLAN 179, http://www.arlington-tx.gov/budget/wp-content/uploads/sites/19/2014/08/FY-2015-Proposed-Budget-Book-Final.pdf (last accessed Oct. 5, 2017) (budgeting for over \$950,000 from gas well inspection fees).

inform their own processes by drawing inspiration from the best practices highlighted in these case studies.

CONCLUSION

Though many descriptive articles have been written about the growth of fracking in the United States, this Article has sought to demonstrate that local governments can regulate fracking in a manner that does not pose a risk to their local authority. Because of significant gaps in the state and federal regulatory apparatus that seem likely to continue with the Trump Administration, opportunity exists for local governments to craft regulatory and nonregulatory structures that meet the community's needs. Indeed, as our case studies and local impacts list have shown, local governments are acting to balance environmental. social, and economic risks of fracking with the benefits that this technology can bring. However, because of the legal relationship between state and local governments, local communities must beware of the risk of preemption if localities enact outrights fracking bans. We believe that with more comprehensive information about the impacts of fracking, as well as regulatory and nonregulatory tools that local governments can employ, municipalities will be better able to enact policies that withstand legal scrutiny and reflect local interests.

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APPENDIX 1

A full impacts list is available at the following address:

www.bit.ly/frackingdatabase

or by visiting

landuse.yale.edu

•

APPENDIX 2

A static version of the impacts list database is available as a PDF file at the following address:

http://sites.environment.yale.edu/collaborative/wpcontent/uploads/sites/9/2016/02/PUBLIC-Impact-List.pdf

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APPENDIX 3

A full investigation into the four case studies—Erie, Colorado; McKenzie, North Dakota; Peters Township, Pennsylvania; and Arlington, Texas—is available at the following address:

landuse.yale.edu

or directly, by visiting the following links:

Erie, Colorado

http://sites.environment.yale.edu/collaborative/wpcontent/uploads/sites/9/2016/01/Erie-CO-Collaborative-Case-Study.pdf

McKenzie County, North Dakota

http://sites.environment.yale.edu/collaborative/wpcontent/uploads/sites/9/2016/01/McKenzie-Co-ND-Collaborative-Case-Study.pdf

Peters Township, Pennsylvania

http://sites.environment.yale.edu/collaborative/wpcontent/uploads/sites/9/2016/01/Peters-Twp-PA-Collaborative-Case-Study.pdf

Arlington, Texas

http://sites.environment.yale.edu/collaborative/wpcontent/uploads/sites/9/2016/01/Arlington-TX-Collaborative-Case-Study.pdf

A NEW YORK APPELLATE COURT TAKES A FIRST SWING AT CHIMPANZEE PERSONHOOD. AND MISSES.

STEVEN M. WISE[†]

ABSTRACT

Beginning in late 2013, the Nonhuman Rights Project began filing common law habeas corpus petitions with attached expert affidavits on behalf of chimpanzees in New York State, alleging that, as autonomous beings, chimpanzees must be recognized as legal "persons" with the fundamental common law right to bodily liberty. One such petition, on behalf of a chimpanzee named Tommy in upstate New York, led to an intermediate appellate decision in 2014-the Lavery case-in which the court denied relief to Tommy on the unprecedented grounds that "personhood" (the capacity to have any legal right) requires a correlative ability to bear duties and responsibilities, and stated that chimpanzees lacked that capacity. Recognizing that its decision would strip rights from millions of humans who lacked the capacity for duties and responsibilities (e.g., infants, the comatose, and the mentally ill), the Lavery court opined that all humans would continue to be eligible for personhood because, as a species, they are "collectively" capable of bearing legal responsibility and submitting to social duties. The mainstream view, and the view of the New York Court of Appeals, has long held that the question of who is a person must be answered by reference to public policy, not biology. Lavery ignored this fundamental teaching and misapprehended the nature of the rights sought, as well as the philosophical and political foundations of those rights. Lavery merits scrutiny because it represents a misunderstanding of the relationship between rights and duties, constitutes a drastic and arbitrary departure from centuries of habeas corpus precedent, and contradicts a correct decision of the New York Court of Appeals.

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INTRODUCTION

In December 2013, the Nonhuman Rights Project, Inc. (NhRP) commenced three lawsuits on behalf of four chimpanzees that challenged the chimpanzees' status as legal "things" that lack the capacity to possess any legal rights.¹ The lawsuits petitioned for common law writs of habeas corpus and orders to show cause that demanded that each chimpanzee be recognized as a "person" under the common law of habeas corpus and within the meaning of New York Civil Practice Law and Rules (CPLR) Article 70.² The NhRP filed one such petition in the New York State

^{1.} Clients, Hercules and Leo (Chimpanzees): Two Former Lab Chimpanzees Exploited for Scientific Research, Waiting to Be Released to Sanctuary, NONHUMAN RIGHTS PROJECT [hereinafter Hercules and Leo], https://www.nonhumanrightsproject.org/hercules-leo (last visited Mar. 21, 2017); Client, Kiko (Chimpanzee): A Former TV Animal Actor, Partially Deaf from Physical Abuse, NONHUMAN RIGHTS PROJECT [hereinafter Kiko], https://www.nonhumanrightsproject.org/client-kiko (last visited Mar. 21, 2017); Client, Tommy (Chimpanzee): Our First Nonhuman Animal Client, NONHUMAN RIGHTS PROJECT [hereinafter Tommy], https://www.nonhumanrightsproject.org/clienttommy (last visited Mar. 21, 2017).

Hercules and Leo, supra note 1; Nonhuman Rights Project, Inc. ex rel. Hercules v. Stanley, No. 32098/2013 (N.Y. Sup. Ct. Suffolk Cty. filed Dec. 5, 2013); Kiko, supra note 1; Nonhuman Rights Project, Inc. ex rel. Kiko v. Presti, No. 151725/2013 (N.Y. Sup. Ct. Niagara Cty. filed Dec. 3, 2013); Tommy, supra note 1; Nonhuman Rights Project, Inc. ex rel. Tommy v. Lavery, No. 002051/2013 (N.Y. Sup. Ct. Fulton Cty. filed Dec. 2, 2013). Article 70 governs the procedure applicable to all habeas corpus actions and requires the court to issue an order to show cause rather than a writ of habeas corpus when the petitioner does not demand production of the detainee in court. N.Y. C.P.L.R. 7001, 7003(a) (McKinney 2017). As the NhRP was not demanding production of the chimpanzees, it sought an order to show cause in all cases. See Verified Petition at 16, Nonhuman Rights Project rel. ex Kiko v. Presti, N.Y. Sup. Ct. (Dec. 2, 2013), https://www.nonhumanrightsproject.org/content/uploads/Niagara-Verified-Petition-E.Stein-and-S.Wise_pdf; Verified Petition at 16, Nonhuman Rights Project ex rel. Hercules & Leo v. Stanley, N.Y. Sup. Ct. (Dec. 2, 2013), https://www.nonhumanrightsproject.org/content/uploads/Suffolk-Verified-Petition-of-E.Stein-and-S.Wise_.pdf; Verified Petition at 16, Nonhuman Rights Project ex rel. Tommy Lavery, N.Y. v. Sup. Ct. (Dec. 2. 2013).

Supreme Court, Fulton County on behalf of Tommy, a chimpanzee living alone in a cage in a warehouse on a used trailer lot (Tommy Petition).³

Attached to the Tommy Petition were approximately 100 pages of expert affidavits from many of the most respected chimpanzee cognition researchers in the world, which demonstrated that chimpanzees possess numerous complex cognitive abilities that individually and together are sufficient for legal personhood for the purpose of common law habeas corpus.⁴ Their most significant cognitive ability was autonomy, which subsumes many of their other cognitive abilities, including their possession of (1) an autobiographical self; (2) episodic memory; (3) selfdetermination: (4) self-consciousness; (5) self-knowingness; (6) selfagency; (7) referential and intentional communication; (8) empathy; (9) a working memory; (10) language; (11) metacognition; (12) numerosity; and (13) material, social, and symbolic culture; as well as their ability: (14) to plan; engage in (15) mental time-travel; (16) intentional action; (17) sequential learning; (18) mediational learning; (19) mental state modeling; (20) visual perspective-taking; (21) cross-modal perception; (22) to understand cause-and-effect and experiences of others; (23) to imagine, (24) imitate, (25) engage in deferred imitation, (26) emulate, and (27) innovate; and (28) to use and make tools.⁵

As habeas corpus "is deeply rooted in our cherished ideas of individual autonomy and free choice,"⁶ the NhRP argued that, as a matter of common law liberty and equality, a chimpanzee's capacity for autonomy was sufficient to mandate his or her personhood for the purpose of a common law writ of habeas corpus.⁷ After holding an ex parte hearing on the Tommy Petition, the trial court found that the word "person" as used in CPLR Article 70 did not include chimpanzees and refused to sign the requested order to show cause.⁸ The NhRP appealed to the New York State Supreme Court, Appellate Division, Third Judicial Department (Third Department) which, in *People ex rel. Nonhuman Rights Project, Inc. v. Lavery*,⁹ held that Tommy was not a person entitled to a common

https://www.nonhumanrightsproject.org/content/uploads/Petition-re-Tommy-Case-Fulton-Cty-NY.pdf.

^{3.} Verified Petition, Nonhuman Rights Project ex rel. Tommy v. Lavery, supra note 2, at 3.

^{4.} Id. at 5-6.

^{5.} *Id.* at 6.

^{6.} Nonhuman Rights Project ex rel. Hercules & Leo v. Stanley, 16 N.Y.S.3d 898, 903 (N.Y. Sup. Ct. 2015).

^{7.} Petitioner's Memorandum of Law in Support of Order to Show Cause & Writ of Habeas Corpus and Order Granting the Immediate Release of Tommy at 62–63, Nonhuman Rights Project, Inc. *ex rel.* Tommy v. Lavery, No. 002051/2013 (N.Y. Sup. Ct. Fulton Cty. filed Dec. 2, 2013), https://www.nonhumanrightsproject.org/content/uploads/Memorandum-of-Law-Tommy-Case.pdf.

^{8.} People ex rel. Nonhuman Rights Project, Inc. v. Lavery, 998 N.Y.S.2d 248, 249 (N.Y. App. Div. 2014), leave to appeal den., 38 N.E.3d 828 (N.Y. 2015).

^{9.} Id.

law writ of habeas corpus or any other legal right because chimpanzees are unable to bear duties and responsibilities.¹⁰

At first blush, the *Lavery* decision—a brief five-page opinion about the novel issue of legal personhood for a chimpanzee—may appear a minor coda to the rich and lengthy history of habeas corpus. The court, however, for the first time in Anglo-American history, held that only an entity capable of bearing duties and responsibilities may be a person for any purpose, including habeas corpus. The decision further contradicted the New York Court of Appeals decision in *Byrn v. New York City Health & Hospitals Corp.*,¹¹ which stated that personhood is not determined by reference to biology or taxonomy, but is a matter of public policy.¹² *Lavery* merits scrutiny as it represents a drastic departure from centuries of habeas corpus precedent and contradicts the decision of New York's highest court.¹³

Part I of this Article will set out the salient parts of the *Lavery* decision. Part II will explain how *Lavery* rested in substantial part on the court's failure to consider that the fundamental right to bodily liberty is an immunity-right for which a capacity for bearing duties and responsibilities is irrelevant. Part III will describe how the *Lavery* court's decision also rested in substantial part upon its misinterpretation of social contract theory. Part IV will note that jurisprudential writers, legislatures, and courts have long recognized entities that lack the capacity to bear duties and responsibilities as "persons." Part V will explain how *Lavery* improperly took judicial notice of the alleged scientific fact that chimpanzees cannot bear duties and responsibilities. Part VI will discuss why the *Lavery* court erred in finding that humans who are unable to bear duties and responsibilities nevertheless are persons with the same habeas corpus rights as humans who are able to bear duties and responsibilities because humans "collectively" have that capacity.

I. THE LAVERY DECISION

After the *Lavery* court located no precedent in either state law or English common law that a nonhuman animal could be a person "capable of asserting rights for the purpose of state or federal law,"¹⁴ it acknowl-

^{10.} Id. at 251.

^{11. 286} N.E.2d 887 (N.Y. 1972).

^{12.} *Id.* at 889. The Third Department did not analyze the NhRP's public policy arguments that, both as a matter of liberty and equality, Tommy was entitled to be released pursuant to the common law of habeas corpus. *Lavery*, 998 N.Y.S.2d at 249.

^{13.} See Lavery, 998 N.Y.S.2d at 251; Bryn, 286 N.E.2d at 889.

^{14.} Lavery, 998 N.Y.S.2d at 249–50. None of the cases cited concerned either general common law or common law habeas corpus specifically. See id. at 250; see also United States v. Mett, 65 F.3d 1531, 1533–34 (9th Cir. 1995) (discussing whether a corporation has standing to raise a Sixth Amendment claim); Waste Mgmt. of Wis., Inc. v. Fokakis, 614 F.2d 138, 139 (7th Cir. 1980) (analyzing whether federal courts can hear a corporation's collateral attack under the Civil Rights Act); Sisquoc Ranch Co. v. Roth, 153 F.2d 437, 440–41 (9th Cir. 1946) (holding that a corporate employer could not rely on the fact that its employee was inducted into the military as support for a

edged that this "does not, however end the inquiry as the writ has over time gained increasing use given its 'great flexibility and scope."¹⁵

The court then opined that "the liberty rights protected by such writ, the ascription of rights has historically been connected with the imposition of societal obligations and duties. Reciprocity between rights and almost exclusively upon a pair of law review articles by the same author. the court stated that "[u]nder this view, society extends rights in exchange for an express or implied agreement from its members to submit to social responsibilities. In other words, 'rights [are] connected to moral agency and the ability to accept societal responsibility in exchange for [those] rights."¹⁷ The court further stated that "legal personhood has consistently been defined in terms of both rights and duties."¹⁸ Citing Black's Law Dictionary's definition of person as "[a]n entity (such as a corporation) that is recognized by law as having the rights and duties [of] a human being,"¹⁹ the court stated that "[c]ase law has always recognized the correlative rights and duties that attach to legal personhood."²⁰ It noted that "[a]ssociations of human beings, such as corporations and municipal entities, may be considered legal persons, because they too bear legal duties in exchange for their legal rights."²¹

Finally, the court took judicial notice, sua sponte, that

[n]eedless to say, unlike human beings, chimpanzees cannot bear any legal duties, submit to societal responsibilities or be held legally accountable for their actions. In our view, it is this incapability to bear any legal responsibilities and societal duties that renders it inappropriate to confer upon chimpanzees the legal rights—such as the fun-

16. Id.

18. Id. at 250-51 (citing Person, BLACK'S LAW DICTIONARY (7th ed. 1999)).

19. Id. (quoting Person, BLACK'S LAW DICTIONARY (7th ed. 1999)).

20. Id. at 251 (citing Smith v. ConAgra Foods, Inc., 431 S.W.3d 200, 203–04 (Ark. 2013) (citing Calaway v. Practice Mgmt. Servs., Inc., 2010 Ark 432, *4 (2010) (defining a "person" as "a human being or an entity that is recognized by a law as having the rights and duties of a human being")); Wartelle v. Women's & Children's Hosp., Inc., 704 So. 2d 778, 780 (La. 1997) (finding that the classification of an entity as a "person" is made "solely for the purpose of facilitating determinations about the attachment of legal rights and duties"); Amadio v. Levin, 501 A.2d 1085, 1098 (1985) (Zappala, J., concurring) (noting that "(p)ersonhood' as a legal concept arises not from the humanity of the subject but from the ascription of rights and duties to the subject")).

21. *Id.* at 251 (citing Pembina Consol. Silver Mining & Milling Co. v. Pennsylvania, 125 U.S. 181, 189 (1888); Western Sur. Co. v. ADCO Credit, Inc., 251 P.3d 714, 716 (Nev. 2011); State v. A.M.R., 51 P.3d 790, 791 (Wash. 2002); State v. Zain, 528 S.E.2d 748, 755–59 (W. Va. 1999)).

habeas petition on its own behalf); Graham v. State, 267 N.Y.S.2d 1009, 1009 (N.Y. App. Div. 1966) (holding that the writ of habeas corpus is not available as a method to secure the return of property).

^{15.} Lavery, 998 N.Y.S.2d at 250 (quoting People ex rel. Keitt v. Mcann, 220 N.E.2d 653, 655 (N.Y. 1966)).

^{17.} Id. (quoting Richard L. Cupp, Jr., Children, Chimps, and Rights, Arguments from "Marginal" Cases, 45 ARIZ. ST. L.J. 1, 14 (2013)); Richard L. Cupp Jr., Moving Beyond Animal Rights: A Legal/Contractualist Critique, 46 SAN DIEGO L. REV. 27, 69 (2009) [hereinafter Cupp, Moving Beyond Animal Rights).

damental right to liberty protected by the writ of habeas corpus—that have been afforded to human beings.²²

II. LAVERY RESTED IN SUBSTANTIAL PART ON A FAILURE TO CONSIDER THAT THE RIGHT TO BODILY LIBERTY DEMANDED WAS AN IMMUNITY-RIGHT AND NOT A CLAIM-RIGHT

The great Yale jurisprudence professor, Wesley N. Hohfeld's, conception of the comparative structure of rights has for a century been employed as the overwhelming choice of courts, jurisprudential writers, and moral philosophers when they discuss what rights are.²³ Hohfeld began his famous article by noting that "[o]ne of the greatest hindrances to the clear understanding, the incisive statement, and the true solution of legal problems frequently arises from the express or tacit assumption that all legal relations may be reduced to 'rights' and 'duties'"²⁴ and that "the term 'rights' tends to be used indiscriminately to cover what in a given case may be a privilege, a power, or an immunity, rather than a right in the strictest sense."²⁵

Lavery apparently made this erroneous "express or tacit assumption" and, as explained below, accordingly mistook the NhRP's demand for Tommy's fundamental "immunity-right" to bodily liberty that is protected by a common law writ of habeas corpus for a "claim-right." This mistake, combined with the improper linkage of personhood for the purpose of a common law writ of habeas corpus to an ability to bear duties and responsibilities, caused the Lavery court to commit a serious "category of rights" error. Accordingly, the court's statement that "the ascription of rights has historically been connected with the imposition of societal obligations and duties" was incorrect.²⁶ The statement was particularly inappropriate in the context of a common law writ of habeas corpus to enforce the fundamental common law immunity-right to bodily liberty, with the court implying that any entity unable to fulfill duties and responsibilities could therefore be indefinitely deprived of her autonomy and essentially enslaved for life.²⁷ No case cited by the court supported this proposition or concerned bodily liberty or habeas corpus.²⁸

^{22.} Id.

^{23.} See generally Wesley N. Hohfeld, Some Fundamental Legal Conceptions as Applied in Judicial Reasoning, 23 YALE L. J. 16 (1913).

^{24.} Id. at 28.

^{25.} Id. at 30.

^{26.} Lavery, 998 N.Y.S.2d at 249 (N.Y. App. Div. 2014), leave to appeal den., 38 N.E.3d 828 (N.Y. 2015).

^{27.} The argument does not change because Hohfeld may have originally described his system of rights with respect to "persons" and/or believed that "persons" meant human beings. Hohfeld, for example, knew that human fetuses were both human and not "persons." *See* Dietrich v. Inhabitants of Northampton, 138 Mass. 14, 15–16 (1884). Moreover, who or what Hohfeld understood to be a "person" a century ago is irrelevant to how his system of legal rights generally operates. It does not require New York courts to apply Hohfeldian rights only to those "persons" Hohfeld may have imagined. This is especially true in New York, where "person" is not synonymous with "human,"

Hohfeld pointed out that John Chipman Gray, the distinguished jurisprudential writer, made the same mistake in his *Nature and Sources of the Law*.²⁹

In [Gray's] chapter on "Legal Rights and Duties," the distinguished author takes the position that a right always has a duty as its correlative; and he seems to define the former relation substantially according to the more limited meaning of "claim." Legal privileges, powers, and immunities are *prima facie* ignored, and the impression conveyed that all legal relations can be comprehended under the conceptions, "right" and "duty."³⁰

A claim-right such as breach of contract, which the NhRP did not demand, does correlate with a duty.³¹ Even then, only a so-called "Will" theorist, as opposed to an "Interest" theorist, would agree that the requirement of being able to bear duties and responsibilities would apply to Tommy's lawsuit to enforce a contractual right, while only the most restrictive Will theorist would limit a claim-right to entities that possess the capacity to assert claims within a moral community.³² Yet this restrictive Will Theory marks *Lavery*'s personhood test for the immunity right to bodily liberty, an immunity-right that the U.S. Supreme Court referred to when it stated that ""[t]he right to one's person may be said to be a right of complete *immunity*: to be let alone."³³

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and where the determination of who and who is not a "person" turns not on biology, but on public policy and moral principle. Byrn v. New York City Health & Hosp. Corp., 31 N.Y.2d 194, 201 (N.Y. 1972). It is no better public policy or good moral principle to act irrationally and with bias in determining who *is* a "person" than it is in determining what rights one should have *as* a "person."

^{28.} See Lewis v. Burger King, 344 Fed. App'x 470, 472 (10th Cir. 2009) (rejecting plaintiff's claim that her service dog had standing to sue under the Americans with Disabilities Act of 1990); Cetacean Cmty. v. Bush, 386 F.3d 1169, 1179 (9th Cir. 2004) (holding that cetaceans lacked standing under the Endangered Species Act and were not within that statute's definition of "person"); Tilikum *ex rel.* People for the Ethical Treatment of Animals, Inc. v. Sea World Parks & Entm't, 842 F. Supp. 2d 1259, 1263 (S.D. Cal. 2012) (explaining that the legislative history makes clear Thirteenth Amendment was only intended to apply to human beings); Citizens to End Animal Suffering & Exploitation, Inc. v. New England Aquarium, 836 F. Supp. 45, 49 (D. Mass. 1993) (finding that a dolphin is not a "person" within meaning of Administrative Procedure Act, section 702).

^{29.} Hohfeld, *supra* note 23, at 34, see JOHN CHIPMAN GRAY, THE NATURE AND SOURCES OF THE LAW 27-62 (Colum. Univ. Press 1909).

^{30.} Hohfeld, *supra* note 23 at 34. Gray's error becomes obvious when one reads that, in the same book, he agreed that both nonhuman animals and supernatural beings could be "persons." See GRAY, *supra* note 29, at 27–28; *see also* Visa Kurki, *Why Things Can Hold Rights: Reconceptualizing the Legal Person* 3 (Univ. of Cambridge Faculty of Law Research Paper, No. 7/2015 (citing JOHN CHIPMAN GRAY, THE NATURE AND SOURCES OF THE LAW 19 (David Campbell & Philip Thomas eds., 1997)), https://papers.srn.com/sol3/papers.cfm?abstract_id=2563683.

^{31.} STEVEN M. WISE, RATTLING THE CAGE: TOWARD LEGAL RIGHTS FOR ANIMALS 56–57 (2000) [hereinafter WISE, RATTLING THE CAGE]; Steven M. Wise, Hardly a Revolution – The Eligibility of Nonhuman Animals for Dignity-Rights in a Liberal Democracy, 22 VT. L. REV. 793, 807–11 (1998) [hereinafter Wise, Hardly a Revolution].

^{32.} WISE, RATTLING THE CAGE, supra note 31, at 57; Wise, Hardly a Revolution, supra note 31, at 808-10.

^{33.} Union Pac. R.R. Co. v. Botsford, 141 U.S. 250, 251 (1891) (emphasis added) (quoting THOMAS M. COOLEY, A Treatise on the Law of Torts or the Wrongs Which Arise Independent of Contract 29 (Chicago, Callaghan & Co. 1879).

An immunity-right correlates not with a duty, but with a disability.³⁴ Other examples of immunity-rights are the right not to be enslaved guaranteed by the Thirteenth Amendment to the U.S. Constitution, in which all others are disabled from enslaving those covered by that Amendment,³⁵ and the First Amendment right to free speech, which the government is disabled from abridging.³⁶ One need *not* be able to bear duties and responsibilities to possess the fundamental right to bodily liberty any more than the right to be free from enslavement or the right to free speech.

The U.S. Supreme Court has illustrated the difference between a claim-right and an immunity-right.³⁷ Eight years before *Harris*, the Supreme Court in *Roe v. Wade*³⁸ recognized a woman's immunity-right to privacy and against interference by the state with her decision to have an abortion in the earlier stages of her pregnancy.³⁹ After the *Harris* plain-tiff claimed she therefore had the right to a state-financed abortion she was herself unable to afford, the Supreme Court recognized that the woman's immunity-right to an abortion correlated with the state's disability to interfere in her decision to have the abortion but did not correlate with the state's duty to fund the abortion.⁴⁰ Therefore, she had no claim against the state for payment for her abortion.⁴¹

The NhRP argued that Tommy's common law immunity-right to bodily liberty protected by common law habeas corpus correlates solely with the respondents' disability to imprison him. The existence or nonexistence of Tommy's ability to bear duties and responsibilities was irrelevant, as it is irrelevant to every immunity-right.⁴²

III. LAVERY MISUNDERSTOOD THE MEANING OF SOCIAL CONTRACT

Lavery stated that

the liberty rights protected by such writ, the ascription of rights has historically been connected with the imposition of societal obligations and duties. Reciprocity between rights and responsibilities stems from principles of social contract, which inspired the ideals of freedom and democracy at the core of our system of government.... Under this view, society extends rights in exchange for an express or

^{34.} WISE, RATTLING THE CAGE, supra note 31, at 57-59; Wise, Hardly a Revolution, supra note 31, at 810-15.

^{35.} U.S. CONST. amend. XIII, § 1.

^{36.} U.S. CONST. amend. I.

^{37.} Harris v. McRea, 448 U.S. 297, 316-18 (1980).

^{38. 410} U.S. 113 (1973).

^{39.} Id. at 154.

^{40.} Harris, 448 U.S. at 301-02.

^{41.} Id. at 314-15.

^{42.} Petitioner's Oral Argument, Nonhuman Rights Project, Inc. *ex rel.* Tommy v. Lavery, 998 N.Y.S.2d 248 (N.Y. App. Div. 2014), https://www.nonhumanrights.org/content/uploads/Tommy-Appellate-Court-Transcript-100814.pdf.

implied agreement of its members to submit to social responsibilities. In other words, "Rights [are] connected to moral agency and the ability to accept societal responsibility for [those] rights."⁴³

Here, *Lavery* misunderstood social contract, which addresses the authority of the state over the individual.⁴⁴ At its most elementary, social contract "is an agreement 'between the people and the government they create [that] binds the agencies of government to respect the blueprint of government and the rights retained by the people."⁴⁵ Courts generally invoke social contract in terms of the state's positive duty toward persons in the "aid, care and support of the needy" and in consideration of fundamental procedural rights.⁴⁶ Individuals surrender some freedoms to the state in exchange for the state's protection of other freedoms.⁴⁷ The *Lavery* court's position that social contract means "[s]ociety extends rights in exchange for an express or implied agreement from its members to submit to social responsibilities" is therefore incorrect.⁴⁸ It is the government that grants express or implied agreement to be responsible.⁴⁹

Lavery correctly notes that social contract emphasizes the accountability of the state to civil society.⁵⁰ John Locke argued that individuals would be bound morally by the law of nature not to harm each other, but without government to defend them people would have no security in their rights.⁵¹ Under the social contract, "the State has an interest in protecting its citizens [T]his surely is at the core of the Lockean 'social contract' idea."⁵² To this end, fundamental rights impede and temper the exercise of state power. Thus, rights cases invoke a breach of state responsibilities, not social responsibilities of the individual.⁵³

^{43.} People ex rel. Nonhuman Rights Project, Inc. v. Lavery, 998 N.Y.S.2d 248, 251 (N.Y. App. Div. 2014), leave to appeal den., 38 N.E.3d 828 (N.Y. 2015).

^{44.} J.W. GOUGH, THE SOCIAL CONTRACT 2-3 (Oxford Univ. Press 1936).

^{45.} State v. Santiago, 122 A.3d 1, 210 (Conn. 2015).

^{46.} Tucker v. Toia, 371 N.E.2d 449, 451 (N.Y. 1977); Khrapunskiy v. Doar, 909 N.E.2d 70, 75 (N.Y. 2009) (citing *Tucker*, 371 N.E.2d at 451).

^{47.} State v. Webb, 680 A.2d 147, 161 (Conn. 1996); William Uzgalis, John Locke, in STANFORD ENCYCLOPEDIA OF PHILOSOPHY (Summer 2017), https://plato.stanford.edu/entries/locke.

^{48.} Lavery, 998 N.Y.S.2d 248, 249 (N.Y. App. Div. 2014).

^{49.} See generally Lemmon v. People, 20 N.Y. 562, 602-04 (1860).

^{50.} Lavery, 998 N.Y.S.2d at 251.

^{51.} See e.g., JEAN-JACQUES ROUSSEAU, THE SOCIAL CONTRACT 12, 17 (Putnam ed., 1906) ("It is a vain and contradictory agreement to stipulate absolute authority on one side and obedience without limit on the other. Is it not clear that there is no obligation towards one from whom you have the right to demand everything? And does not this one condition, without equivalent or exchange, involve the nullity of the act?").

^{52.} Roberts v. Louisiana, 431 U.S. 633, 646-47 (1977) (discussing criminal law).

^{53.} In re Foster Care Status of Shakiba P., 587 N.Y.S.2d 300, 301 (N.Y. App. Div. 1992) ("Recognizing that 'it is the unique mandate of our courts to enforce the obligations we owe to children under our social contract[.]"); People v. Wynn, 424 N.Y.S.2d 664, 667 (N.Y. Sup. Ct. 1980) (holding criminal rights to be from "a system of justice evolved over centuries from origins rooted in a fundamental philosophy processed from experience in our political and social ascent from historical tyrannies. It is a corporal part of our social contract covenanted by the [C]onstitution"); 500 W. 174 St. v. Vasquez, 325 N.Y.S.2d 256, 257 (N.Y. Civ. Ct. 1971) ("Perhaps chief among the assurances which together make up the social contract is the judiciary's promise

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What social contract does not require is that the rights-holder be subject to correlative responsibilities. The individual holds the rights; but the government bears the responsibilities.⁵⁴ Lavery's requirement that a legal person must be capable of reciprocal duties and responsibilities in order to have the right to habeas relief conflicts with social contract's actual focus on the responsibilities of the government.⁵⁵

Lavery's confusion can be traced in part to its reliance upon the idiosyncratic theories of Professor Richard Cupp, who conflates social contract with the philosophical theory of contractualism that denies all rights to nonhuman animals and human beings alike because of their failure to qualify as rational agents. In Cupp's view, and therefore *Lavery*'s, contractualism necessarily connects rights to moral agency and the ability to accept societal responsibilities.⁵⁶ But Cupp fails to substantiate his singular notion that social contract requires that rights correlate with responsibilities, in support of which he cites no relevant case law, and fails to address the problem that the immunity-right to bodily liberty does not correlate with any duties.⁵⁷ Cupp's errors became *Lavery*'s.

Had the *Lavery* court not misunderstood social contract, it still would have erred in applying it for, as the U.S. Supreme Court has recognized, social contract lies "among the great juristic myths of history.... As a practical concept, from which practical conclusions can be drawn, it is valueless."⁵⁸ In contrast to *Lavery*, social contract theorists generally recognize that the foundation upon which contractualist arguments rests does not support the "express or implied agreement [of

57. Even contractualist philosophers may argue it embraces nonhuman animals. *E.g.*, THOMAS M. SCANLON, WHAT WE OWE EACH OTHER 179, 183–84 (1998).

never to close the courthouse doors. Through them should walk unhindered every citizen with a dispute to settle or a grievance to air.").

^{54.} In re Gault, 387 U.S. 1, 20 (1967) (holding that the social compact "defines the rights of the individual and delimits the powers which the state may exercise"); *id.* at 18–22 (discussing due process).

^{55.} Thus, in *State v. Lyon*, a New Jersey habeas corpus action brought by a slave, the court stated that "[i]n cases of this kind the state is bound to protect the rights of all who are within its dominion, and fulfill the duties which are imposed by the social contract." 1 N.J.L. 462, 464 (N.J. 1789).

^{56.} People ex rel. Nonhuman Rights Project, Inc. v. Lavery, 998 N.Y.S.2d 248, 250–51 (N.Y. App. Div. 2014), leave to appeal den., 38 N.E.3d 828 (N.Y. 2015); Cupp, Moving Beyond Animal Rights, supra note 17, at 68–71.

^{58.} FPC v. Nat. Gas Pipeline Co., 315 U.S. 575, 605 n.6 (1942) (citing Gerard C. Henderson, *Railway Valuation and the Courts*, 33 HARV. L. REV. 1031, 1051 (1920)); *see also* Kentucky v. Dennison, 65 U.S. 66, 92 (1861) (discussing the imperfect obligation within the social compact "which binds every organized political community to avenge all injuries aimed at the being or welfare of its society. Certainly, this is the first and highest of all governmental duties; but nevertheless it is, in juridical language, a 'duty of imperfect obligation,' incapable in its essence of precise exposition or admeasurement, and its fulfillment depends on moral and social considerations, accosting the community at large, which a judicial tribunal can neither weigh, define, nor enforce"); Watson v. Employ. Liab. Assurance Corp., 348 U.S. 66, 79 n.2 (1954) ("Phrases like ... 'the principles of the social compact' were in fashion ... for stating intrinsic limitations on the exercise of all political power. More recently, the power of this Court to strike down legislation has been more acutely analyzed and less loosely expressed. Rhetorical generalizations have not been deemed sufficient justification for invalidating legislation").

rights-bearers] to submit to social responsibilities" because there is no such agreement.⁵⁹ Contractualism consists of hypotheticals, not legal fact.

Moreover, habeas corpus has always been available to those who are not part of the fictitious American "social contract." In *Rasul v. Bush*,⁶⁰ the Supreme Court stated, "Application of the habeas statute to persons detained at the base [in Guantanamo] is consistent with the historical reach of the writ of habeas corpus. At common law, courts exercised habeas jurisdiction over the claims of aliens detained within sovereign territory of the realm"⁶¹

These Guantanamo petitioners were not part of any social contract. In fact, the U.S. government alleged they desired to destroy any social contract that existed. Still they were eligible for habeas corpus. American courts followed a similar practice in the early years of the Republic.⁶² In *Jackson v. Bulloch*,⁶³ for example, a black slave was freed pursuant to habeas corpus despite being doubly excluded from the social compact both because he was black and because he was a slave.⁶⁴

IV. JURISPRUDENTIAL WRITERS, LEGISLATURES, AND COURTS RECOGNIZE ENTITIES WHO LACK THE CAPACITY FOR DUTIES AND RESPONSIBILITIES AS PERSONS

Lavery not only contradicts *Byrn*, but also sister common law and civil law countries that have declared that an entity may be a person without having the capacity to bear any duties and responsibilities. For instance, in 2012, an agreement between the indigenous peoples of New Zealand and the Crown granted New Zealand's Whanganui River "legal personality" so that the river owns its riverbed and is itself incapable of being owned.⁶⁵ In July of 2014, the Te Urewara park in New Zealand was designated a "legal entity, and has all the rights, powers, duties, and liabilities of a person."⁶⁶ In 2000, the Indian Supreme Court designated

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^{59.} Lavery, 998 N.Y.S.2d at 250; see e.g., Jean Hampton, Contract and Consent, in A COMPANION TO CONTEMPORARY POLITICAL PHILOSOPHY 179, 379–83 (Robert E. Goodin & Philip Pettit eds., 1993); Charles W. Mills, Race and the Social Contract Tradition, in READINGS IN POLITICAL PHILOSOPHY: THEORY AND APPLICATIONS 144, 144–47 (Diane Jeske & Richard Fumerton eds., 2012).

^{60. 542} U.S. 466 (2004).

^{61.} *Id.* at 481-82, 481 n.11 (citing *inter alia* Somerset v. Stewart, Lofft 1, 98 Eng. Rep. 499 (K.B.1772); Case of the Hottentot Venus, 13 East 195, 104 Eng. Rep. 344 (K.B.1810)).

^{62.} See, e.g., United States v. Villato, 2 U.S. 370, 372 (1797) (granting habeas relief to a Spanish-born prisoner charged with treason on the ground that he had never become a citizen of the United States).

^{63. 12} Conn. 38 (1837).

^{64.} Id. at 38-39.

Tutohu Whakatupua Agreement Between the Whanganui and the Crown of New Zealand 65. 30 August 2012), 10 (signed [2012] NZTS http://www.harmonywithnatureun.org/content/documents/193Wanganui%20River-Agreement--.pdf. 2014. 3 (N.Z.), 66. Te Urewera Act s http://www.legislation.govt.nz/act/public/2014/0051/latest/DLM6183705.html.

the Sikh's sacred text as a legal person.⁶⁷ Pre-Independence Indian courts designated mosques as legal persons to the same end.⁶⁸ A pre-Independence Indian court designated a Hindu idol as a person with the capacity to sue.⁶⁹

More to the exact point, on November 3, 2016, a Mendoza, Argentina court granted a writ of habeas corpus on behalf of a chimpanzee named Cecelia. The court declared Cecelia a "non-human legal person," and ordered her transferred to a Brazilian sanctuary.⁷⁰ Rejecting the claim that Cecelia could not avail herself of habeas corpus because she was not human,⁷¹ the court stated that

societies evolve in their moral conducts, thoughts, and values, and also in their legislations. More than a century ago most of the individual rights that are expressly recognized today in the constitutions of the different countries and by the Human Rights International Treaties were ignored and in some cases they were even overlooked, or worse, insulted like the rights related to gender perspective

... At present, we can see an awareness of situations and realities that, although they have persisted since time immemorial, have not been recognized before by social actors. That is the case of gender violence, marriage equality, equal voting rights, etc. There is an identical situation with the awareness of animal rights.⁷²

The Mendoza court stated that classifying

animals as things is not a correct standard [that]... chimpanzees have the capacity to reason, they are intelligent, are conscientious of themselves, they have culture diversity, expressions of mental games, they manifest grief, use and construction of tools to access food or to solve simple problems of daily life, abstraction capacity, skills to handle symbols in communication, conscience to express emotions such as happiness, frustration, desires or deceit, planned organization for intraspecific battles and ambush for hunting, they have metacognitive capabilities, they have a moral, psychic, and physical status, they have their own culture, they have affectionate feelings (they ca-

^{67.} Shiromani Gurdwara Parbandhak Comm., Amritsar v. Som Nath Dass, AIR 2000 SC 421 (India), https://indiankanoon.org/doc/1478973.

^{68.} Masjid Shahid Ganj Mosque v. Shiromani Gurdwara Parbandhak Comm., AIR 1938 (Lahore) 369, ¶15 (full bench) (India), https://indiankanoon.org/doc/1035515.

^{69.} Pramath Nath Mullick v. Pradyunna Nath Mullick, 52 IA 245, 264 (India 1925), https://indiankanoon.org/doc/290902.

^{70.} Terecer Juzgado de Garantías [Third Court of Guarantees], 3/11/2016, "Presented by A.F.A.D.A About the Chimpanzee "Cecilia" – Non Human Individual," (Arg.), 22–24, 32, https://www.nonhumanrightsproject.org/content/uploads/Chimpanzee-Cecilia_translation-FINAL-for-website-2.pdf.

^{71.} *Id.* at 19.

^{72.} Id. at 19-20.

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ress and groom each other), they are capable of lying, they have symbols for human language and use tools.⁷³

The court concluded it was "undeniable that great apes, like the chimpanzee . . . have non-human rights."⁷⁴

Moreover, several states, including Connecticut, New York, and Massachusetts, expressly allow nonhuman animals to be trust "beneficiaries."⁷⁵ In so legislating, these states recognize nonhuman animals as "persons" with the capacity for legal rights, as only persons may be trust beneficiaries.⁷⁶ Before these statutes, "trusts for animals were void, because a private express trust cannot exist without a beneficiary capable of enforcing it, and because non-human lives cannot be used to measure the perpetuities period."⁷⁷

For example, in 1996, the New York Legislature enacted Estates Powers and Trusts Law (EPTL) 7-6 (now EPTL 7-8) (a), which permitted "domestic or pet animals" to be designated as trust beneficiaries. The Sponsor's Memorandum stated the statute's purpose was "to allow animals to be made the beneficiary of a trust."⁷⁸ This section thereby acknowledged these nonhuman animals as persons capable of possessing legal rights. In *In re Fouts*,⁷⁹ the court recognized that five chimpanzees were "income and principal beneficiaries of the trust" and referred to its chimpanzees as beneficiaries throughout.⁸⁰ In 2010, the legislature removed "Honorary" from the title and the twenty-one year limitation on

See RESTATEMENT (THIRD) OF TRUSTS § 43 (2003) ("A person who would have capacity 76. to take and hold legal title to the intended trust property has capacity to be a beneficiary of a trust of that property; ordinarily, a person who lacks capacity to hold legal title to property may not be a trust beneficiary."); RESTATEMENT (THIRD) OF TRUSTS § 47 (Tentative Draft No. 2, 1999); RESTATEMENT (SECOND) OF TRUSTS § 124 (1959); KATE MCEVOY, 20 CONN. PRAC., CONN. ELDER LAW § 2:16 (2016 ed.); Gilman v. McArdle, 65 How. Pr. 330, 338 (N.Y. Sup. Ct. 1883) ("Beneficiaries may be natural or artificial persons, but they must be persons . . . In general, any person who is capable in law of taking an interest in property, may, to the extent of his legal capacity, and no further, become entitled to the benefits of the trust."), rev'd on other grounds, 99 N.Y. 451 (1885); see also Beneficiary, BLACK'S LAW DICTIONARY (9th ed. 2009) ("A person for whose benefit property is held in trust; esp., one designated to benefit from an appointment, disposition, or assignment (as in a will, insurance policy, etc.), or to receive something as a result of a legal arrangement or instrument. 2. A person to whom another is in a fiduciary relation, whether the relation is one of agency, guardianship, or trust. 3. A person who is initially entitled to enforce a promise, whether that person is the promisee or a third party.") (emphases added).

77. Margaret Turano, Commentary, *Practice Commentaries*, MCKINNEY'S N.Y. EST. POWERS & TR. L. § 7-8.1 (2010).

78. Bill Jacket, S.B. 5207, Ch. 159, Leg. 219th, 1996 Sess. (N.Y. 1996) (including Memorandum of Support from bill sponsors Norman Levy and Richard Gottfried).

79. 677 N.Y.S.2d 699 (N.Y. Sur. Ct. 1998).

80. *Id.* at 699; Feger v. Warwick Animal Shelter, 870 N.Y.S.2d 124, 126 (N.Y. App. Div. 2008) ("[T]he law now recognizes the creation of trusts for the care of designated domestic or pet animals upon the death or incapacitation of their owner.").

^{73.} Id. at 23–24.

^{74.} Id. at 24.

^{75.} See CONN. GEN. STAT. ANN. § 45a-489a (West 2009); N.Y. EST. POWERS & TRUSTS § 7-8.1 (McKinney 2010); MASS. GEN. LAWS ANN. ch. 203E, § 408(h) (West 2012) ("The measuring lives shall be those of the beneficiary animals, not human lives.").

trust duration, and amended section (a) to read: "Such trust shall terminate when the living animal beneficiary or beneficiaries of such trust are no longer alive" thereby dispelling any doubt that animals are capable of being beneficiaries in New York.⁸¹

The NhRP argued that a person is any entity with the capacity to bear rights *or* duties. But *Lavery* rejected this argument and relied upon two sources to support its claim that a person is any entity with the capacity to bear rights *or* duties.⁸² However, both sources actually support the NhRP's position. The first source was the tenth edition of *Black's Law Dictionary*, which stated that "a person is any being whom the law regards as capable of rights *and* duties," quoting the seventh edition.⁸³ In turn the sole support for this statement in the seventh edition of *Black's Law Dictionary* was the tenth edition of John Salmond's *Jurisprudence*.⁸⁴ But every edition of Salmond, including the tenth edition, actually provides that "a person is any being whom the law regards as capable of rights *or* duties," just as the NhRP argued.⁸⁵ When the NhRP pointed out its error, *Black's Law Dictionary* promptly promised to correct it in its next edition.⁸⁶

The second source that the tenth edition of *Black's Law Dictionary* relied upon was John Chipman Gray's *The Nature and Sources of the Law*,⁸⁷ which the Third Department quoted as stating that "the legal meaning of a 'person' is 'a subject of rights and duties."⁸⁸ But Gray makes clear that "[o]ne who has rights but not duties, or has duties but no rights is . . . a person."⁸⁹ In his discussion of legal personhood, Gray notes that "supernatural beings have been recognized as legal persons" in

^{81.} N.Y. ESTATES, POWERS & TRUSTS LAW § 7-8.1(a) (McKinney 2010).

^{82.} People ex rel. Nonhuman Rights Project, Inc. v. Lavery, 998 N.Y.S.2d 248, 250–51 (N.Y. 2014) (emphasis added).

^{83.} Person, BLACK'S LAW DICTIONARY (10th ed. 2014) (quoting Person, BLACK'S LAW DICTIONARY (7th ed. 1999)).

^{84.} Person, BLACK'S LAW DICTIONARY (7th ed. 1999) (quoting JOHN SALMOND, JURISPRUDENCE 318 (10th ed. 1947)).

^{85.} JOHN SALMOND, JURISPRUDENCE OR THE THEORY OF THE LAW 334 (1st ed. 1902) (emphasis added); JOHN SALMOND, JURISPRUDENCE OR THE THEORY OF THE LAW 277 (2d ed. 1907) (emphasis added); JOHN SALMOND, JURISPRUDENCE 272 (4th ed. 1913) (emphasis added); JOHN SALMOND, JURISPRUDENCE 272 (5th ed. 1916) (emphasis added); JOHN SALMOND, JURISPRUDENCE 272 (Sweet & Maxwell, Ltd., 6th ed. 1920) (emphasis added); JOHN SALMOND, JURISPRUDENCE 329 (Sweet & Maxwell, Ltd., 7th ed. 1924) (emphasis added); JOHN SALMOND, JURISPRUDENCE 329 (C.A.W. Manning ed., Sweet & Maxwell, Ltd., 8th ed. 1930) (emphasis added); JOHN SALMOND, JURISPRUDENCE 329 (C.A.W. Manning ed., Sweet & Maxwell, Ltd., 8th ed. 1930) (emphasis added); JOHN SALMOND, SALMOND, SALMOND ON JURISPRUDENCE 350 (Glanville Williams ed., Sweet & Maxwell, Ltd., 10th ed. 1947) (emphasis added); JOHN SALMOND, SALMOND ON JURISPRUDENCE 350 (Glanville Williams ed., Sweet & Maxwell, Ltd., 11th ed. 1957) (emphasis added); JOHN SALMOND, SALMOND ON JURISPRUDENCE 299 (P.J. Fitzgerald ed., Sweet & Maxwell, Ltd., 12th ed. 1966) (emphasis added).

^{86.} James Trimarco, *Chimps Could Soon Win Legal Personhood*, YES! MAG. (Apr. 27, 2017), http://www.yesmagazine.org/peace-justice/chimps-could-soon-win-legal-personhood-20170428.

^{87.} JOHN CHIPMAN GRAY, THE NATURE AND SOURCES OF THE LAW 27 (2d ed. 1921).

^{88.} Lavery, 998 N.Y.S 2d, at 251.

^{89.} GRAY, supra note 87, at 27.

several legal systems, such as in ancient Rome⁹⁰ and the Middle Ages of Germany,⁹¹ and that

animals may conceivably be legal persons . . . [There may be] systems of Law in which animals have legal rights When, if ever, this is the case, the wills of human beings must be attributed to the animals. There seems no essential difference between the fiction in such cases and in those where, to a human being wanting in legal will, the will of another is attributed.⁹²

The *Lavery* court also failed to recognize that whether a chimpanzee is a person for the purpose of demanding a common law writ of habeas corpus is a matter of policy, not biology. The court avoided the issue by sua sponte creating the novel and unsupported personhood requirement for any purpose of reciprocal rights and duties.⁹³

V. LAVERY IMPROPERLY TOOK JUDICIAL NOTICE OF THE ALLEGED SCIENTIFIC FACT THAT CHIMPANZEES CANNOT BEAR DUTIES AND RESPONSIBILITIES

The capacity of chimpanzees to bear duties and responsibilities is not an adjudicative fact, but a scientific fact that requires proof through expert testimony and therefore is not appropriate for judicial notice. In the absence of expert testimony, a court may only take judicial notice of facts "which everyone knows,"⁹⁴ that is facts that are indisputable.⁹⁵ To be appropriate for judicial notice, the source of the underlying information must be of "indisputable accuracy,"⁹⁶ and so "patently trustworthy as to be self-authenticating."⁹⁷ "The test is whether sufficient notoriety attaches to the fact to make it proper to assume its existence without proof."⁹⁸ Judicial notice is particularly inappropriate in "scientifically

96. Crater Club, Inc. v. Adirondack Park Agency, 446 N.Y.S.2d 565, 567 (N.Y. App. Div. 1982).

97. People v. Kennedy, 503 N.E.2d 501, 507 n.4 (N.Y. 1986).

98. Dollas v. W.R. Grace & Co., 639 N.Y.S.2d 323, 324 (N.Y. App. Div. 1996) (quoting Ecco High Frequency Corp. v. Amtorg Trading Corp., 81 N.Y.S.2d 610, 617 (N.Y. Sup. Ct. 1948)). Judicial notice of a fact is only proper when adjudicative facts are commonly known to exist. *Id.* "Adjudicative facts" are "propositions of general knowledge which are capable of immediate and accurate determination by resort to easily accessible sources of indisputable accuracy." JACK B. WEINSTEIN, HAROLD KORN & ARTHUR R. MILLER, NEW YORK CIVIL PRACTICE, § 4511.02 (2d ed. 2005). *See* People v. Jones, 539 N.E.2d 96, 98 (N.Y. 1989) (explaining that "a court may take judicial notice of facts 'which are capable of immediate and accurate determination by resort to easily accessible sources of indisputable accuracy").

^{90.} Id. at 40.

^{91.} Id. at 41–42.

^{92.} Id. at 42–43.

^{93.} See Lavery, 998 N.Y.S.2d at 250-51.

^{94.} States v. Lourdes Hosp., 100 N.Y.2d 208, 212–13 (N.Y. 2003) (quoting RESTATEMENT (SECOND) OF TORTS § 328D cmt. d (1965)).

^{95.} See TOA Constr. Co. v. Tsitsires, 861 N.Y.S.2d 335, 339 (N.Y. App. Div. 2008); see also People v. Darby, 701 N.Y.S.2d 395, 397 (N.Y. App. Div. 2000); People v. Jovanovic, 700 N.Y.S.2d 156, 172 (N.Y. App. Div. 1999).

complex cases."⁹⁹ The only scientific facts appropriate for judicial notice are "notorious facts" that cannot be disputed and are supported by reference to "sources of indisputable reliability."¹⁰⁰ Judicial notice was further inappropriate "because of the novelty of the issue"¹⁰¹ that the Tommy Petition raised.

The *Lavery* court improperly took judicial notice of the complex scientific fact that chimpanzees cannot bear duties and responsibilities despite the fact that the issue had not been noted, briefed, or argued by either party before either the lower or appellate court.¹⁰² The *Lavery* court further failed to refer to any scientific authority supporting this fact and gave no notice to the NhRP that it intended to take judicial notice thereof. Had the NhRP been so apprised by the court, it could have presented expert evidence on the issue.¹⁰³

In December 2015, the NhRP filed its second petition for a common law writ of habeas corpus and order to show cause in the New York State Supreme Court, New York County on behalf of Tommy and attached about sixty pages of expert affidavits directed solely to demonstrating that chimpanzees have the capacity to bear duties and responsibilities both in chimpanzee societies and in human/chimpanzee societies.¹⁰⁴ These make clear that the Third Department's decision to take judicial notice was both inappropriate and incorrect.

VI. THE LAVERY COURT ERRED IN DECLARING THAT HUMANS WHO ARE UNABLE TO BEAR DUTIES AND RESPONSIBILITIES ARE "PERSONS" BECAUSE HUMANS "COLLECTIVELY" HAVE THAT CAPACITY

An obvious problem with the *Lavery* court's holding that a person must have the capacity to bear duties and responsibilities is that millions of New Yorkers lack that capacity. In an attempt to avoid condemning them to thinghood, the court stated the following in footnote three:

To be sure, some humans are less able to bear legal duties or responsibilities than others. These differences do not alter our analysis, as it is undeniable that, *collectively*, human beings possess the unique ability to bear legal responsibility. Accordingly, nothing in this deci-

^{99.} Hamilton v. Miller, 15 N.E.3d 1199, 1204 (N.Y. 2014).

^{100.} In re Perra, 827 N.Y.S.2d 587, 592 (N.Y. Sup. Ct. 2006) (citing PRINCE, RICHARDSON ON EVIDENCE, § 2-204 et seq. (Farrell 11th ed.)) (court took judicial notice that smoking was harmful to the fetus based upon the much-discussed and much-respected "2006 Surgeon General's Report On The Health Consequences of Involuntary Exposure to Tobacco Smoke . . . , [a] document created by the Office of the Surgeon General and the U.S. Department of Health and Human Services.").

^{101.} Brown v. Muniz, 878 N.Y.S.2d 683, 685 (N.Y. App. Div. 2009).

^{102.} See People ex rel. Nonhuman Rights Project, Inc. v. Lavery, 998 N.Y.S.2d 248, 251 (N.Y. App. Div. 2014), leave to appeal den., 38 N.E.3d 828 (N.Y. 2015); see generally Tommy, supra note 1.

^{103.} See Lavery, 998 N.Y.S.2d at 249-51.

^{104.} All affidavits are available on Tommy's Litigation page: https://www.nonhumanrights.org/client-tommy.

sion should be read as limiting the rights of human beings in the context of habeas corpus proceedings or otherwise.¹⁰⁵

The *Lavery* court cited nothing in support of this remarkable statement nor did it hint at what it intended "collectively" to mean. To be sure, millions of human beings can bear duties and responsibilities at a high level. Millions of human beings can bear duties and responsibilities at some level. And millions of human beings cannot bear duties and responsibilities at any level. Yet the court concluded that *all* human beings are legal persons not because they are human beings, which is indefensible, but because *some* human beings can bear duties and responsibilities.

The court's choice of species as the relevant touchstone was arbitrary and likely meant merely to reinforce the status quo. Other touchstones it could have chosen also contain all the human beings the court claimed are able to bear duties and responsibilities, but these are broader than the category of human being, such as vertebrates, primates, and mammals. Still other categories contain all human beings able to bear duties and responsibilities that are narrower than human being, such as sane humans and humans with an IQ above 60.

The philosopher, James Rachels, pointed out that any choice of category-as opposed to individual characteristics-as a condition for rights "assumes that we should determine how an individual should be treated, not on the basis of its own qualities but on the basis of other individual's qualities."¹⁰⁶ Something like Lavery's unusual notion of group benefits has been occasionally employed to correct the effects of prior discrimination, such as affirmative action, not to invent new ways to discriminate.¹⁰⁷ But this does not mean that racial or gender affirmative action is, or should be, illegal. Harvard Law School Professor Laurence H. Tribe, who supports racial and sexual affirmative action, acknowledged the "tenaciously-held principle . . . with undeniable constitutional roots ... that each person should be treated as an individual rather than as a statistic or as a member of a group-particularly of a group the individual did not knowingly choose to join."¹⁰⁸ Yet even those judges may exhibit what Professor Tribe called "considerable unease" in their discussions and rulings.¹⁰⁹

That unease has not quieted. The Supreme Court has long required race-based admissions to meet strict scrutiny.¹¹⁰ In 2003, the U.S. Supreme Court in *Gratz v. Bollinger*,¹¹¹ struck down a system of under-

^{105.} Lavery, 998 N.Y.S.2d at 251 n.3 (emphasis added).

^{106.} JAMES RACHELS, CREATED FROM ANIMALS 157 (1990).

^{107.} See, e.g., Grutter v. Bollinger, 539 U.S. 306, 326, 328 (2003).

^{108.} LAURENCE H. TRIBE, AMERICAN CONSTITUTIONAL LAW 1589 (2d ed. 1988); see id. at 1526-29.

^{109.} See id. at 1523.

^{110.} See City of Richmond v. J.A. Croson Co., 488 U.S. 469, 504-06 (1989).

^{111. 539} U.S. 244, 244 (2003).

graduate admissions that allocated predetermined points to racial minority candidates.¹¹² That day, the Supreme Court also upheld a system of preferences that treated race as a relevant feature in a law school admission process with a holistic review.¹¹³ Thirteen years later, the Supreme Court in *Fisher v. University of Texas*,¹¹⁴ would note "the enduring challenge... to reconcile the pursuit of diversity with the constitutional promise of equal treatment and dignity."¹¹⁵

There exists a common law promise of equality, as well, that belies the argument that persons must be able to bear duties and responsibilities. Equality has always been a vital New York value, embraced by constitutional law, statutes, and common law.¹¹⁶ Article 1, § 11 of the New York Constitution contains both an Equal Protection Clause, modeled on the Fourteenth Amendment, and an anti-discrimination clause.¹¹⁷ New York equality values are embedded into New York common law. There has long been a "two-way street between common law decision-making and constitutional decision-making" that had resulted in a "common law decisionmaking infused with constitutional values."¹¹⁸ At common law, such private entities as common carriers, victuallers, and innkeepers may not discriminate unreasonably or unjustly.¹¹⁹

In harmony with common law equality principles that forbid private discrimination, the common law of equality embraces, at a minimum, its sister fundamental constitutional equality value—embedded within the

117. N.Y. CONST. art. I, § 11 ("No person shall be denied the equal protection of the laws of this state or any subdivision thereof. No person shall, because of race, color, creed or religion, be subjected to any discrimination in his or her civil rights by any other person or by any firm, corporation, or institution, or by the state or any agency or subdivision of the state.").

118. Brief for Petitioner-Appellant at 38, Nonhuman Rights Project, Inc. v. Presti, 124 A.D.3d 1334 (N.Y. App. Div. 2014) (No. 14-00357); Judith S. Kaye, Forward: The Common Law and State Constitutional Law as Full Partners in the Protection of Individual Rights, 23 RUTGERS L.J. 727, 746–47 (1992).

119. See, e.g., Hewitt v. New York, 29 N.E.2d 641, 643–44 (N.Y. 1940); New York Tel. Co. v. Siegel-Cooper Co., 96 N.E. 109, 111 (N.Y. 1911); Lough v. Outerbridge, 38 N.E. 292, 294–95 (N.Y. 1894); People v. King, 18 N.E. 245, 248–49 (N.Y. 1888).

^{112.} *Id.* at 244, 246–47.

^{113.} Grutter v. Bollinger, 539 U.S. 306, 306-10 (2003).

^{114. 136} S. Ct. 2198 (2016).

^{115.} Id. at 2214.

^{116.} Equality is an important value throughout Western jurisprudence. See Vriend v. Alberta, [1998] 1 S.C.R. 493, 536 (S.C.C.) ("The concept and principle of equality is almost intuitively understood and cherished by all."); HCJ 4541/94 Miller v. Minister of Defence 49(4) PD 94, ¶6 (1995) (Isr.) ("It is difficult to exaggerate the importance and stature of the principle of equality in any free, democratic and enlightened society."); HCJ 453/94 Israel Women's Network v. Government 48(5) PD 501, ¶ 22 (1994) (Isr.) ("The principle of equality, which... 'is merely the opposite of discrimination'... has long been recognized in our law as one of the principles of justice and fairness which every public authority is commanded to uphold."); Mabo v Queensland (No. 2) (1992) 175 CLR 1, ¶ 29 (Aust.) ("equality before the law ... [is an] aspiration[] of the contemporary Australian legal system"); see also ALEXIS DE TOCQUEVILLE, DEMOCRACY IN AMERICA, Book II, 65 (Henry Reeve trans., 2007) ("Democratic nations are at all times fond of equality ... for equality their passion is ardent, insatiable, incessant, invincible; they call for equality in freedom; and if they cannot obtain that, they still call for equality in slavery."); THE DECLARATION OF INDEPENDENCE para. 2 (U.S. 1776) ("[A]II men are created equal").

constitutions of New York, most other states, and the Constitution of the United States—that prohibits discrimination based on irrational means or illegitimate ends.¹²⁰

A chimpanzee's common law classification as a "thing," unable to possess any legal rights, rests upon the illegitimate end of enslaving an autonomous being.¹²¹

Without such a requirement of legitimate public purpose it would seem useless to demand even the most perfect congruence between means and ends, for each law would supply its own indisputable—and indeed tautological—fit: if the means chosen burdens one group and benefits another, then the means perfectly fits the end of burdening just those whom the law disadvantages and benefitting just those whom it assists.¹²²

In *Romer*, the Supreme Court struck down "Amendment 2" because its purpose of repealing all existing anti-discrimination positive law based upon sexual orientation was illegitimate.¹²³ It violated equal protection because "[i]t is at once too narrow and too broad. It identifies persons by a single trait and then denies them protection across the board."¹²⁴

The test is whether persons are similarly situated for purposes of the law challenged.¹²⁵ "[S]imilarly situated' cannot mean simply 'similar in the possession of the classifying trait.' All members of any class are similarly situated in this respect and consequently, any classification whatsoever would be reasonable by this test."¹²⁶ "The equal protection guarantee requires that laws treat all those who are similarly situated *with respect to the purposes of law* alike."¹²⁷ In *Goodridge*, the court swept aside the argument that the legislature could refuse same-sex couples the right to marry because the purpose of marriage is procreation, which they could not accomplish.¹²⁸ This argument "singles out the one unbridgeable

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^{120.} See Romer v. Evans, 517 U.S. 620, 633-34 (1996) ("Equal protection of the laws is not achieved through indiscriminate imposition of inequalities.").

^{121.} See Affronti v. Crosson, 746 N.E.2d 1049, 1052 (N.Y. 2001) (discussing the permissibility of suspect purposes for creating classifications); see, e.g., Goodridge v. Dep't of Pub. Health, 798 N.E.2d 941, 959-60 (Mass. 2003); see also City of Cleburne v. Cleburne Living Ctr., 473 U.S. 432, 451-52 (1985) (Stevens, J., concurring).

^{122.} TRIBE, supra note 108, at 1440.

^{123. 517} U.S. at 623-26.

^{124.} Id. at 633; see also Goodridge, 798 N.E.2d at 962 (noting that same-sex marriage ban impermissibly "identifies persons by a single trait and then denies them protection across the board").

^{125.} Kerrigan v. Comm'r of Pub. Health, 957 A.2d 407, 421-22 (Conn. 2008).

^{126.} Varnum v. Brien, 763 N.W.2d 862, 882 (Iowa 2009).

^{127.} Id. at 883.

^{128. 798} N.E.2d at 961-62.

difference between same-sex and opposite-sex couples, and transforms that difference into the essence of legal marriage."¹²⁹

Tommy is imprisoned for one reason: he is a chimpanzee. Possessing that "single trait," he was "denie[d]... protection across the board,"¹³⁰ to which his autonomy and ability to self-determine entitle him. Denying him his common law right to bodily liberty solely because he is a chimpanzee is therefore a tautology.

Even those who will never be competent, who have always lacked the ability and always will lack the ability, to choose, understand, or make a reasoned decision about medical treatment possess common law autonomy and dignity equal to the competent.¹³¹ But if humans bereft even of sentience are entitled to personhood, courts must either recognize a chimpanzee's just equality claim to bodily liberty or reject the principle of equality. The court in *Lavery* opted, mistakenly, for the latter.¹³²

Nor is there any rational connection between the right to bodily liberty sought and the *Lavery* court's novel "duties and responsibilities" requirement. The NhRP claimed that chimpanzees have a common law right to bodily liberty protected by the common law of habeas corpus.¹³³ To satisfy equality, the classification (*viz.*, the ability to bear duties and responsibilities) must be rationally related to the goal or purpose of the classification.¹³⁴ If, for instance, the right sought was a right to vote, right to drive, or a right to bear arms, then perhaps a logical connection would exist for *Lavery*'s classification. By way of example, the Supreme Court held that imposing a mandatory retirement age for judges was rationally connected to the state's interest in "maintaining a judiciary fully capable of performing the demanding tasks that judges must perform," because it is "an unfortunate fact of life that physical and mental capacity sometimes diminish with age."¹³⁵

But no such connection exists between the ability to bear duties and responsibilities and the denial of an autonomous being's right to bodily liberty. The "object of the writ of *habeas corpus* is to set at large those

^{129.} Id. at 962.

^{130.} See Romer v. Evans, 517 U.S. 620, 633 (1996).

^{131.} See, e.g., In re M.B., 6 N.Y.2d 394, 440, 443–44 (N.Y. 2006); Rivers v. Katz, 495 N.E.2d 337, 341 (N.Y. 1986) (citing Superintendent of Belchertown State Sch. v. Saikewicz, 370 N.E.2d 417, 425 (Mass. 1977)); In re Storar, 420 N.E.2d 64, 72–73 (N.Y. 1981). See discussion supra Parts II, IV.

^{132.} People ex rel. Nonhuman Rights Project, Inc. v. Lavery, 998 N.Y.S.2d 248, 249–50 (N.Y. App. Div. 2014), leave to appeal den., 38 N.E.3d 828 (N.Y. 2015). Abraham Lincoln understood that the act of extending equality protects everyone: "[i]n giving freedom to the slave, we assure freedom to the *free*—honorable alike in what we give, and what we preserve." ABRAHAM LINCOLN, Annual Message to Congress, December 1, 1862, in 5 COLLECTED WORKS OF ABRAHAM LINCOLN 537 (Roy P. Basler ed., 1953).

^{133.} *Lavery*, 998 N.Y.S.2d at 249–50; Brief for Petitioner at 46, Nonhuman Rights Project, Inc. *ex rel.* Tommy v. Lavery, 998 N.Y.S.2d 248 (N.Y. App. Div. 2014) (No. 2013-02051).

^{134.} See Minnesota v. Clover Leaf Creamery Co., 449 U.S. 456, 462-63 (1981).

^{135.} Gregory v. Ashcroft, 501 U.S. 452, 471-72 (1991).

who are illegally restrained of their liberty, and this applies equally whether the person restrained be an infant or of full age."¹³⁶ Even the never-competent—the severely mentally retarded, the severely mentally ill, and the permanently comatose—who will never be competent, lack the ability, have always lacked the ability, and always will lack the ability, to choose, understand, or make a reasoned decision about medical treatment possess the right to bodily liberty equal to that of the competent.¹³⁷ Such mentally incapable adults are entitled to habeas corpus despite lacking the ability to bear duties and responsibilities, not because they are human but because equality so demands.¹³⁸

CONCLUSION

The determination of who is a person, for any reason, has never been predicated upon an entity's ability to bear duties and responsibilities. The New York Court of Appeals correctly held forty years ago that" the question of who may be a person must be answered by reference to public policy, not biology.¹³⁹

Recognizing that its decision would strip millions of humans who lack this capacity from having legal rights, the *Lavery* court erroneously opined at footnote three that all humans would continue to be eligible for personhood because they are "collectively" human, without relying upon anything.¹⁴⁰ The court further erred by taking judicial notice of the alleged scientific fact that chimpanzees do not have the capacity to bear duties and responsibilities.¹⁴¹ In subsequent habeas corpus cases involving the *Lavery* chimpanzee, Tommy, the NhRP attached numerous affidavits that demonstrated that chimpanzees actually possess this capacity.¹⁴²

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^{136.} In re Kottman, 2 Hill Eq. 363, 364 (S.C. Eq. 1834).

^{137.} E.g., In re M.B., 846 N.E.2d 794, 795 (N.Y. 2006); Rivers v. Katz, 495 N.E.2d 337, 341 (N.Y. 1986) (citing Superintendent of Belchertown State Sch. v. Saikewicz, 370 N.E.2d 417, 423 (Mass. 1977)); In re Storar, 420 N.E.2d 64, 73 (N.Y. 1981), superseded by statute, SURR. CT. PROC. ACT § 1750 (2016), as recognized in In re M.B., 846 N.E.2d at 796–97; Delio v. Westchester Cty. Med. Ctr., 516 N.Y.S.2d 677, 685–86 (N.Y. App. Div. 1987); In re Mark C.H., 906 N.Y.S.2d 419, 426 n.25 (N.Y. Sur. Ct. 2010) (quoting Saikewicz, 370 N.E.2d 428); In re New York Presbyterian Hosp., 693 N.Y.S.2d 405, 411 n.5 (N.Y. Sup. Ct. 1999) (quoting In re Beth Israel Med. Ctr., 519 N.Y.S.2d 511, 513–14 (N.Y. Sup. Ct. 1987)); In re Guardianship of L.W., 482 N.W.2d 60, 65, 67 (Wis. 1992) (An "individual's right to refuse unwanted medical treatment emanates from the common law right of self-determination and informed consent," as well as "the personal liberties protected by the Fourteenth Amendment.").

^{138.} See, e.g., People ex rel. Brown v. Johnston, 174 N.E.2d 725, 725–26 (N.Y. 1961); People ex rel. Jesse F. v. Bennett, 661 N.Y.S.2d 657, 658 (N.Y. App. Div. 1997); Brevorka ex rel. Wittle v. Schuse, 643 N.Y.S.2d 861, 862 (N.Y. App. Div. 1996); In re Cindy R., 970 N.Y.S.2d 853, 855 (N.Y. Sup. Ct. 2012).

^{139.} Byrn v. New York City Health & Hosps. Corp., 286 N.E.2d 887, 889 (N.Y. 1972).

^{140.} People ex rel. Nonhuman Rights Project, Inc. v Lavery, 998 N.Y.S.2d 248, 251 n.3 (N.Y. App. Div. 2014), leave to appeal den., 38 N.E.3d 828 (N.Y. 2015).

^{141.} See id. at 251.

^{142.} Brief for Petitioner at 5, 60, Nonhuman Rights Project, Inc. *ex rel*. Tommy v. Lavery, No. 162358/2015 (N.Y. Sup. Ct. filed Dec. 2, 2015).

The NhRP recently challenged the *Lavery* decision in the New York Supreme Court's First Judicial Department. But when the NhRP asked the First Department, by motion, to consider *Black's Law Dictionary*'s concession that it had erred in stating that a "person" was required to have the capacity for rights *and* duties, rather than rights *or* duties, an error the *Lavery* court had adopted, the First Department denied the NhRP's motion, then perpetuated *Lavery*'s and *Black's Law Dictionary*'s error, as if *Black's Law Dictionary* had never recanted.¹⁴³

Appearing to recognize the frailty of *Lavery*'s personhood reasoning in footnote three, the First Department noted that "Petitioner argues that the ability to acknowledge a legal duty or legal responsibility should not be determinative of entitlement to habeas relief, since, for example, infants cannot comprehend that they owe duties or responsibilities and a comatose person lacks sentience, yet both have legal rights."¹⁴⁴ The First Department's entire response was that the NhRP "ignores the fact that these are still human beings, members of the human community."¹⁴⁵

That very young humans and comatose humans are "persons" with the capacity to possess legal rights, despite their inability to bear duties and responsibilities, explodes the claim that the capacity to bear duties and responsibilities has any relevance to personhood and the capacity for legal rights.

Instead of entering into the required mature weighing of public policy and moral principle that determines, and ought to determine, personhood in New York and elsewhere,¹⁴⁶ the First Department merely announced that only humans can have legal rights, without providing any justification. We have seen such naked biases in other contexts.

Before the Supreme Court in 1857, Dred Scott's lawyers "ignored the fact" that he was not white.¹⁴⁷ The lawyers for the Native American, Chief Standing Bear, "ignored the fact" that Standing Bear was not white when, in 1879, the U.S. Attorney, in the Circuit Court for the District of Nebraska, argued that a Native American could not be a "person" for the purpose of habeas corpus after Standing Bear was jailed for returning to his ancestral lands.¹⁴⁸ The California Attorney General "ignored the fact" that a Chinese person was not white when he insisted in 1854, without success before the California Supreme Court, that a Chinese witness could testify against a white man charged with murder in a California

^{143.} Matter of Nonhuman Rights Project, Inc. v. Lavery, 152 A.3d 73, 76 (N.Y. App. Div. 2017).

^{144.} Id. at 78.

^{145.} *Id.*

^{146.} Byrn v. N.Y.C. Health & Hosps. Corp., 286 N.E.2d 887, 889 (N.Y. 1972).

^{147.} See generally Dred Scott v. Sandford, 60 U.S. (19 How.) 393 (1857), superseded by constitutional amendment, U.S. CONST. amend. XIV.

^{148.} See generally United States ex rel. Standing Bear v. Crook, 25 F. Cas. 695 (C.C.D. Neb. 1879) (No. 14891).

court.¹⁴⁹ The lawyer for Ms. Lavinia Goodell "ignored the fact" that she was not a man before the Wisconsin Supreme Court that, in 1876, denied her the right to practice law solely because she was a woman.¹⁵⁰

Chimpanzees are autonomous beings who can choose how to live their rich lives. Habeas corpus protects autonomy. Rational arguments are required to support the proposition that an autonomous being's species should be relevant in determining whether she possesses the fundamental right to the bodily liberty—the autonomy—that habeas corpus protects. None have been provided.

^{149.} See generally People v. Hall, 4 Cal. 399 (1854).

^{150.} See generally In re Goodell, 39 Wis. 232 (Wis. 1875).