
VOLUME 15, ISSUE 1

**NORTHEASTERN UNIVERSITY SCHOOL OF LAW**
416 Huntington Avenue
Boston, Massachusetts 02115

Cite as 15 NE. U. L. REV. ____ (2023).

NON-DISCRIMINATION POLICY

Northeastern University does not condone discrimination on the basis of race, color, religion, religious creed, genetics, sex, gender identity, sexual orientation, age, national origin, ancestry, veteran, or disability status.

# Table of Contents

## Articles



## Notes

## ASSOCIATE EDITORS

Sevara Akhmadalieva
Jessica Vaz Andrade
Ari Appel
Alejandra Bandler
Sarah Basile
Max Bloodgood
Jacqueline E. Bohatch
Jesse Broad-Cavanagh
Anna Bruno
Langie Cadesca
Jacqueline Cassano
Karola Castañeda-García
Nicholas Chaves
Hui Chen
Justin Cheng
Grier A. Conville
Meghan Coughlin
Allyson Crays
Theodora Danias
Sara Dardis
Christopher Darling
Steven Erario Dilsizian
Callie Dydo
Summer Elbardissy
Emmalyn Espinosa
Tiba Fatli
Phoenix D. Forester
Michelle Fujii
Elizabeth Coy Gallatin
Andrea Goodman
Rachel A. Grant
Maureen M. Greason
Lea Halberstein
Jonathon Hastings
Ted Hattemer-Maier
Rebecca Heller
Abygail Hoey
Erin Hudgins
Katherine Isbell
Marina Jerry
Sara Kniaz
Catherine B. Kuchel
Kayla Larkin
Maria Guadalupe Lemus
George LePage
Celeste Lim
Raissa Lima
Anna Litvak
Angelica Lopez Pollard
Runeko Lovell
Lily Malloy
Maria Martinez
Joseph Mayotte
Minahil Mian
Ivy Miller
Trevor Mills
Taylor Nadherny
Anna Olsson
Valerie Orellana
Vincent Palladino
Ashka Patel
Alida Pitcher-Murray
Caitlin Rams
Kathryn Rubin
Hannah Rushton
Jill Ryan
Jenna L. Scott
Tara Severyn
Timothy Shea
Leo J. Sheehan III
Abigail Silsby
Cameron Smith
Rebecca Sparks
Shaun Spinney
Julia Tempesta
Nina Thacker
Javion (JT) Tinsley
Joseph Tobin
Jacqueline Vieira
Madison Walsh
Joy Wang
Charlotte Jane Weiss
Isabel Wilker
Larissa Witte
Owen Woo
Matthew Zancewicz
Olivia Zinzi

## Faculty

James R. Hackney
*Dean and Professor of Law*

Quisquella Addison
*Assistant Teaching Professor*

Libby S. Adler
*Professor of Law and Women's, Gender and Sexuality Studies*

Brook K. Baker
*Professor of Law*

Shalanda H. Baker
*Professor of Law, Public Policy and Urban Affairs*

Leo Beletsky
*Professor of Law and Health Sciences and Faculty Director, The Action Lab at the Center for Health Policy and Law*

Elizabeth M. Bloom
*Teaching Professor and Program Administrator, Legal Skills in Social Context*

Margaret A. Burnham
*University Distinguished Professor of Law; Director, Civil Rights and Restorative Justice Project; Faculty Co-Director, Center for Law, Equity and Race (CLEAR)*

Antoinette Coakley
*Associate Teaching Professor and Assistant Dean of the Bar Success Program*

Dan Danielsen
*Professor of Law and Faculty Director, Program on the Corporation, Law and Global Society*

Martha F. Davis
*University Distinguished Professor of Law; Co-Director, Program on Human Rights and the Global Economy; Faculty Director, NuLawLab*

Richard A. Daynard
*University Distinguished Professor of Law and President, Public Health Advocacy Institute*

Victoria McCoy Dunkley†*
*Assistant Teaching Professor*

Rashmi Dyal-Chand
*Professor of Law and Associate Dean for Academic Affairs; Affiliate Professor of Public Policy and Urban Affairs, Northeastern University College of Social Sciences and Humanities*

Julian M. Fray
*Associate Teaching Professor and Associate Dean for Digital Strategy*

Irina Gott
*Teaching Professor*

Hemanth C. Gundavaram
*Clinical Professor and Associate Dean for Experiential Education; Director, Immigrant Justice Clinic; Director, Clinical Programs*

Margaret Hahn-DuPont
*Teaching Professor*

Andrew J. Haile
*Assistant Teaching Professor*

Claudia E. Haupt
*Associate Professor of Law and Political Science*

Wallace E. Holohan
*Senior Clinical Specialist and Director, Prisoners' Rights Clinic*

Nicholas D. Horan
*Associate Teaching Professor and Assistant Dean, Academic Success Program*

† Master of Legal Studies Faculty

*Online Master of Laws Faculty

## FACULTY

Bruce Jacoby
*Associate Clinical Professor; Director, Intellectual Property Law Clinic*

Jonathan D. Kahn
*Professor of Law and Biology*

Melvin J. Kelley
*Associate Professor of Law and Business*

Karl E. Klare
*George J. and Kathleen Waters Matthews Distinguished University Professor and Professor of Law*

Elizabeth Knowles
*Associate Teaching Professor*

Stevie Leahy
*Assistant Teaching Professor and Resident Fellow, Center for Public Interest Advocacy and Collaboration*

Margo K. Lindauer
*Clinical Professor of Law and Director, Domestic Violence Institute*

Kristin M. Madison
*Professor of Law and Health Sciences*

Carol R. Mallory
*Teaching Professor*

Daniel S. Medwed
*University Distinguished Professor of Law and Criminal Justice*

Alexandra (Xander) A.K. Meise
*Associate Teaching Professor*

Michael Meltsner
*George J. and Kathleen Waters Matthews Distinguished University Professor of Law*

Zinaida Miller
*Professor of Law and International Affairs*

Beth Simone Noveck
*Professor and Director, The Burnes Center for Social Change*

Wendy E. Parmet
*Matthews Distinguished University Professor of Law and Faculty Director, Center for Health Policy and Law; Professor of Public Policy and Urban Affairs, Northeastern University School of Public Policy and Urban Affairs*

Jeremy R. Paul
*Professor of Law*

Sharon Persons
*Associate Teaching Professor and Director, Law Library*

David M. Phillips
*Professor of Law*

Deborah A. Ramirez
*Professor of Law; Chair, Criminal Justice Task Force; Faculty Co-Director, Center for Law, Equity and Race (CLEAR)*

Rashida Richardson
*Assistant Professor of Law and Political Science*

Ana M. Rivera
*Associate Clinical Professor and Director, Housing Rights Advocacy Clinic*

Alexandra Jane Roberts
*Professor of Law and Media*

H.C. Robinson
*Associate Professor of Law and Sociology*

Sonia Elise E. Rolland
*Professor of Law*

Rachel E. Rosenbloom
*Professor of Law*

† Master of Legal Studies Faculty

*Online Master of Laws Faculty

## Faculty

Blaine G. Saito
*Assistant Professor of Law*

Emily A. Spieler
*Hadley Professor of Law*

Kara W. Swanson
*Professor of Law and Affiliate Professor of History; Associate Dean for Research and Interdisciplinary Education*

Ari E. Waldman
*Professor of Law and Computer Science and Faculty Director, Center for Law, Information and Creativity (CLIC)*

Evan Darryl Walton
*Associate Clinical Professor and Director, Community Business Clinic*

Lucy A. Williams
*Professor of Law and Faculty Director, Center for Public Interest Advocacy and Collaboration*

Patricia J. Williams
*University Distinguished Professor of Law and Humanities*

Margaret Y. K. Woo
*Professor of Law*

Lua Kamál Yuille
*Professor of Law and Business*

Rose Zoltek-Jick
*Associate Teaching Professor and Associate Director, Civil Rights and Restorative Justice Project*

## Adjunct and Visiting Faculty

Joshua Abrams†
Scott Akehurst-Moore
Michel Bamani
Saptarishi Bandopadhyay†
Mark Berman
Jeffrey Blank†*
Jay Blitzman
Isaac Borenstein
Peter Campia
Edward S. Cheng
Eric Christofferson
Chrissi Cicchitto†
Sara Colket
Gary Cooper
Kyle Courtney
Matt Cregor
Tyler Crosby†
Josh Davis
Vincent DePalo†*
Andrew DeVoogd
Craig Eastland
Dawn Effron
Elizabeth Fahey
Ellen Farwell
Rebecca Feinberg†
Richard Flaggert
Eric Forni*
Robert Foster
Renay Frankel
Rachel Freed
Mike Furst†
Patricia Garin

† Master of Legal Studies Faculty

*Online Master of Laws Faculty

## ADJUNCT AND VISITING FACULTY

Jay Gonzalez
Mark Gottlieb
Heather Govern
Ilana Greenstein
Colleen Dunham Henschke
David Herlihy
Eve Hogan†
Briana Hyde†
Marc Kantrowitz
Michael Keating
Stephen Kohn
Lori Kornblum†
Mary E. Landergan
Neil Leifer
Dmitry Lev
Sofia Lingos
Liliana Mangiafico*
Ross Martin
Nicole Mastrangelo†
Peter McLaughlin†*
Jonathan Miller†
Steven Mosenson†*
William Mostyn
Siri Nelson
Stephen Novak
David O'Brien
Roger Pao†*
Mark A. Pedulla
Arnold Rosenfeld
Stuart Rossman
James V. Rowan†
Staci Rubin
Robert Russell
Amy Scott
Matthew Segal
James Shaw
David A. Simon
Michael Sinha
Carol Steinberg
Michael Tumposky
Dan Urman†*
Kevin Wall
Mark Worthington

† Master of Legal Studies Faculty *Online Master of Laws Faculty

## Editors' Introduction

Three years since a global pandemic transformed our world, our society has emerged from unprecedented times. One of the many difficulties of living *within* the history textbook is that our world feels so unknown. This uneasy era is a breeding ground for hatred and misinformation meant to divide us. The need for accurate and informed legal scholarship is important now more than ever: knowledge is power. Since our founding, 15 volumes ago, *Northeastern University Law Review* has been dedicated to publishing legal scholarship with the focus of the public interest. In partnership with our community, this Issue welcomes discussions of diverse, cutting-edge topics: mobilizing the power of local government to address health issues precipitated by climate change; strategies the Attorney General can use in consumer protection litigation to protect our youth from harmful markets; protecting water rights in Indigenous communities; exploring legal opportunities to prevent the extinction of the vaquita, a species of porpoise; and using of clemency as a step towards abolition.

As we mark our 15th year as a publication, we remain firm in our commitment to amplify important conversations and ensure legal scholarship is accessible to all. We continue to develop our online platforms to further that goal. *The Forum* publishes op-ed style legal commentary, and *Extra Legal* publishes shorter, academic articles. During this publication cycle, each platform published content on landmark current events that impacted the legal field. Following the *Dobbs v. Jackson Women's Health Organization* decision, our key leadership published a reflection piece on the *The Forum* expressing their reactions to the controversial decision. NULR also donated to a student-led reproductive rights organization. *Extra Legal* published a resource guide for scholars, advocates, and activists who are furthering the work of recognizing the human right to a clean, healthy, and sustainable environment, which the United Nations General Assembly adopted as a resolution in July 2022. This historic resolution will be the topic of a collection of essays that will be published in Issue 2.

To that end, we could not have published this issue without our authors and staff. Thank you to our authors for entrusting us with your knowledge and bearing through the editing process. Thank you to our staff, Editorial Board, and Executive Board for your continued diligence in ensuring our articles are accurate and accessible. Thank you to Dean James Hackney for your continued support of the publication. Finally, thank you to our advisors, Director Sharon Persons and Dr. Hilary Robinson, for providing your guidance and wisdom. In this time of global turbulence, we are incredibly proud to continue advancing innovation, interdisciplinary scholarship, and practical application of the law through the successful publication of Volume 15.

Editorial Board
Northeastern University Law Review

# The Prospect and Perils of Climate Preemption for Public Health

*By Sarah Fox*[*]

* Associate Professor, Northern Illinois University College of Law. Many thanks to my fellow participants in the Northeastern Center for Health Policy and Law's conference on "Climate Change: The Challenges for Health, Equity and the Law," for which this Article was prepared. Thanks as well to members of the *Northeastern University Law Review* staff for your hard work in preparing this Article for publication.

Table of Contents

## Abstract

*Climate change is disrupting many communities in the United States and around the world. Climate events like heat waves, hurricanes, drought, fire, and flooding will become much more frequent, and with them will come the need for robust health care responses. Given the widespread and boundary-crossing nature of the problem, an ideal response would possibly originate at the federal or state level. As illustrated by the COVID-19 pandemic, however, there is little guarantee that such a response will be forthcoming. Recent foreclosures of federal options for handling climate change make such a response even less likely. Instead, it seems likely that local governments in many states will be left on their own to manage the necessary responses to the changing health needs and crises of their populations. Those local responses will be necessarily varied, challenging, and imperfect—even if local governments are allowed free rein in handling climate impacts.*

*However, as the pandemic response also demonstrated, in many cases, local governments have good reason to fear being barred by the state from implementing needed responses and resiliency efforts. In general, state legislatures have broad authority to preempt local action. In the same way that many states exercised that authority during the pandemic to block local measures such as mask mandates, states may also preempt local authority over climate response. Such preemption will overwhelmingly impact the populations already experiencing disparities in care and access that are going to be most reliant on a robust local response to changing health needs. An equitable public health response to climate change, therefore, likely depends on protecting local authority to act in the best interest of their citizens—and on a realistic assessment of when and whether local authority will be allowed.*

## Introduction

It is harder to avoid news of climate change than to encounter it. The past several years have brought new assessments of rapidly warming temperatures, expected environmental and health consequences of that warming, and the insufficiency of current efforts to curb these changes. The impacts of climate change are now and will continue to be widespread and varied, including heat waves, natural disasters, rising sea levels, and population displacement.[1] Many of those impacts will affect human health in both direct and attenuated ways. Of immediate concerns to health are worsening air quality and particulate matter pollution, extreme heat, reduced access to water, and impacts from flooding.[2] More attenuated disruptions include those to health care and community from those same events, as well as possible loss of home or community.[3] Those impacts are likely to be concentrated in the Global South[4] and will certainly exacerbate existing differentials in access to healthcare, quality of life, and expected lifespan.[5] Within the United States, health impacts from climate change are expected to be felt unevenly and to be most severe for those communities already experiencing health differentials in terms of access to care, exposure to environmental pollutants, location outside the urban canopy, and other conditions correlated with poorer health outcomes.[6]

1 *Climate Change Impacts*, Nat'l Oceanic & Atmospheric Admin., https://www.noaa.gov/education/resource-collections/climate/climate-change-impacts (last visited Jan. 28, 2023); *Climate Change and Disaster Displacement*, UNHCR, https://www.unhcr.org/en-us/climate-change-and-disasters.html (last visited Jan. 28, 2023).

2 *What You Need to Know About Climate Change and Air Pollution*, World Bank (Sept. 1, 2022), https://www.worldbank.org/en/news/feature/2022/09/01/what-you-need-to-know-about-climate-change-and-air-pollution; *Heat and Health*, World Health Org. (June 1, 2018), https://www.who.int/news-room/fact-sheets/detail/climate-change-heat-and-health; *How Climate Change Impacts Water Access*, Nat'l Geographic, https://education.nationalgeographic.org/resource/how-climate-change-impacts-water-access (last visited Jan. 28, 2023).

3 *See, e.g.*, Laura Millan Lombraña & Sam Dodge, *Whatever Climate Change Does to the World, Cities Will Be Hit Hardest*, Bloomberg (Apr. 18, 2021), https://www.bloomberg.com/graphics/2021-cities-climate-victims/.

4 Paul Hockenos, *The Global South Is Done Playing Mr. Nice Guy*, Foreign Pol'y (Oct. 24, 2022), https://foreignpolicy.com/2022/10/24/global-south-climate-summit-cop-egypt-reparations/.

5 Kristie L. Ebi & Jeremy J. Hess, *Health Risks Due to Climate Change: Inequity in Causes and Consequences*, 39 Health Affs. 2056 (2020) (discussing the ways in which climate change will have disparate impacts on the already vulnerable).

6 *See, e.g.*, *Climate Change and Social Vulnerability in the United States: A Focus on Six*

If climate impacts are not surprising at this point, neither are expected differences in how climate impacts will be experienced. Not only do these differences mirror many existing discrepancies in how social burdens are distributed, but the COVID-19 pandemic also offered a recent and harsh lens into how health crises disproportionately impact communities of color, elderly populations, and other under-resourced groups.[7] As seen in the nearly three years since the pandemic began, communities previously experiencing disproportionate negative health impacts also experienced the highest rates of serious illness and death throughout the pandemic.[8] Health impacts from climate change are expected to only heighten these impacts.[9]

Given the expected negative consequences of climate change for the environment and for public health, it would make sense to mount a robust national and international response to reduce greenhouse gas emissions and to respond to the climate impacts already occurring. For a multitude of reasons, however, that response has been severely lacking.[10] No amount of discussion at the international level has resulted in an enforceable global framework for reduction of greenhouse gas emissions. In the United States, the federal government has failed over the past several decades to develop a comprehensive climate plan of any kind. The Obama Administration's attempt to address greenhouse gas emissions from stationary sources through the Clean Air Act, known as the Clean Power Plan, was struck down by the Supreme Court in 2022, even though the plan had never gone into effect.[11] And discussions in

*Impacts*, U.S. ENV'T PROT. AGENCY at 4–5 (2021), https://www.epa.gov/system/files/documents/2021-09/climate-vulnerability_september-2021_508.pdf.

7 *See, e.g.*, *Risk of Severe Death or Illness from COVID-19: Racial and Ethnic Health Disparities*, CTR. FOR DISEASE CONTROL AND PREVENTION, https://www.cdc.gov/coronavirus/2019-ncov/community/health-equity/racial-ethnic-disparities/disparities-illness.html (last updated July 1, 2022).

8 *See, e.g.*, CLAIRE LAURIER DECOTEAU ET AL., DEADLY DISPARITIES IN THE DAYS OF COVID-19: HOW PUBLIC POLICY FAILS BLACK AND LATINX CHICAGOANS 1 (2021), https://news.wttw.com/sites/default/files/article/file-attachments/IRRPP_DeadlyDisparitiesReport_ScreenResolution_0.pdf.

9 *See* James D. Ford, et al., *Interactions Between Climate and COVID-19*, 6 THE LANCET e825 (2022) (describing ways in which climate change can increase vulnerabilities to COVID-19).

10 *See, e.g.*, Thomas Frank, *Federal Government Is Failing on Climate Readiness, Watchdog Says*, SCI. AM. (Nov. 27, 2019), https://www.scientificamerican.com/article/federal-government-is-failing-on-climate-readiness-watchdog-says/; Elaine Kamarck, *The Challenging Politics of Climate Change*, BROOKINGS INST. (Sept. 23, 2019), https://www.brookings.edu/research/the-challenging-politics-of-climate-change/.

11 *See generally* West Virginia v. EPA, 142 S.Ct. 2587 (2022).

Congress to address climate change have seen limited success as well.[12] In 2022, Congress passed the Inflation Reduction Act,[13] which provides billions of dollars for renewable energy sources and retrofitting existing buildings.[14] That piece of legislation is the largest federal action on climate change to date.[15] It does not, however, directly regulate greenhouse gas emissions, and the success of its incentive programs remain to be seen.[16]

In the absence of a robust international or national response, some states have stepped in to create climate action plans.[17] And in the absence of state action in many places, local governments—used broadly here to mean any general purpose sub-state entity—have taken up the mantle of both climate mitigation and adaptation.[18] The same kind of story can be told about the COVID-19 pandemic, where a fractured national response led states and many local governments to set their own policies for how to best protect their populations.[19] In both contexts, local governments have attempted to fill policy gaps

12 *See, e.g.*, Jim Tankersley et al., *How Inflation Upended Biden's Climate Agenda*, N.Y. Times (July 15, 2022), https://www.nytimes.com/2022/07/15/climate/biden-inflation-climate-manchin.html.

13 *See* Jim Tankersley, *Biden Signs Climate, Health Bill into Law as Other Economic Goals Remain*, N.Y. Times (Aug. 16, 2022), https://www.nytimes.com/2022/08/16/us/politics/biden-climate-health-bill.html.

14 Matt Simon, *How the Huge New US Climate Bill Will Save You Money*, WIRED (Aug. 16, 2022), https://www.wired.com/story/how-inflation-reduction-act-climate-bill-save-you-money/.

15 Melissa Barbanell, *A Brief Summary of the Climate and Energy Provisions of the Inflation Reduction Act of 2022*, World Res. Inst. (Oct. 28, 2022), https://www.wri.org/update/brief-summary-climate-and-energy-provisions-inflation-reduction-act-2022#:~:text=The%20Inflation%20Reduction%20Act%20(IRA,taken%20to%20address%20climate%20change.

16 *See* Alejandro de la Garza, *The Inflation Reduction Act Includes a Bonanza for the Carbon Capture Industry*, Time (Aug. 11, 2022), https://time.com/6205570/inflation-reduction-act-carbon-capture/.

17 Sarah Fox, *Localizing Environmental Federalism*, 54 U.C. Davis L. Rev. 133, 147 (2020) (offering examples of state climate action).

18 *See, e.g.*, All. for a Sustainable Future, Mayors Leading the Way on Climate: How Cities Large and Small Are Taking Action (2018), http://www.usmayors.org/wp-content/uploads/2018/09/uscm-2018-alliance-building-report-baldwin-small-7.pdf.

19 *See Local Government Responses to the Coronavirus (COVID-19) Pandemic, 2020*, Ballotpedia, https://ballotpedia.org/Local_government_responses_to_the_coronavirus_(COVID-19)_pandemic,_2020 (last visited Jan. 28, 2023) (cataloguing local responses); *State Action on Coronavirus*, Nat'l Conf. of State Legislators (Dec. 1, 2022), https://www.ncsl.org/health/state-action-on-coronavirus-covid-19 (offering searchable database of state actions).

left by actors at other levels of government. It cannot be said that local governments have enacted uniformly desirable policies in response to either the pandemic or climate change; there are copious examples of local inaction or obstruction for both issues. But the presence of local actors in both the COVID-19 pandemic and climate arenas has still played an important role within the U.S. federal system. When other governmental efforts have stalled or reversed, local governments have offered an arena for creative forward progress in policymaking.

In many states, however, that gap-filling role has been thwarted, both on the environmental front and in the public health realm. For over a decade now, legislatures in many states have engaged in concerted efforts to restrict local authority.[20] Through aggressive use of preemption, states have reduced local ability to enact policies on issues marked by inaction at the federal and state levels.[21] This trend cuts across a variety of issue areas but has tended to take the form of conservative state legislatures targeting progressive local policies.[22] Any discussion of the potential for local response to climate change, and the public health needs that will accompany it, must account for the reality of these preemption trends. What that means in practice is that the most fruitful conversations about public health in a climate-changed world will be localized, paying attention to the particularities of local authority in each place, rather than generalized discussion of local potential. And given the disparate realities for different parts of the country, climate equity and public health work will require an expansive toolkit that includes not only calls for local action but also a deep knowledge of state law regarding local authority, creativity regarding use of federal authority, reliance on private service providers, and many other policy tools.

## I. THE POTENTIAL FOR LOCAL ACTION

Local governments in the United States are not an explicit part of the federal constitutional structure. The Constitution dictates the relationship between the federal government and states but has no

20 *See, e.g.*, Rich Schragger, *The Attack on American Cities*, 96 TEX. L. REV. 1163, 1164–67 (2018) (discussing the antagonistic preemptive actions taken by states against municipal governments).

21 *Id.*

22 RICHARD BRIFFAULT ET AL., CASES AND MATERIALS ON STATE AND LOCAL GOVERNMENT LAW 524 (9th ed. 2021).

explicit textual commitment to local governments.[23] In consequence, the existence and scope of local authority in the United States has been fluid since the country's founding. Rather than looking to one federal constitution, analyses of local authority must consider 50 state constitutions. And without a controlling constitutional mandate, state judges played a large role in shaping state law on local governments in the early years of the United States.[24] Debates among such judges over the course of the 19th century culminated in widespread adoption of a doctrine known as Dillon's Rule—named for its originator, Judge John Dillon—in most of the country.[25] Under a Dillon's Rule framework, local governments have only the power delegated to them by the state.[26] Beyond that, Dillon's Rule narrowly construes any grant of local authority and incorporates a presumption that resolves any doubts about the existence of local authority in favor of the state.[27] Given those strictures, it is very difficult for local governments in a Dillon's Rule regime to exercise any kind of agency. These limits on local governance were intentional: "The purpose of Dillon's Rule was to ensure that the state maintained a tight leash on municipal activities."[28]

The broad adoption of a Dillon's Rule-style model of local government meant that, going into the 20th century, the authority of most local governments was quite limited. With the growth of industry and the expansion of cities starting in the early part of the century, Dillon's Rule began to feel unworkable as a governance structure.[29] Cities had many needs that called for local action.[30] Beyond that, concerns about municipal corruption and special legislation at the state level led to many calls for reform.[31]

Campaigns began in several states calling for broader authority to be delegated to local governments.[32] This idea of a more expansive

23 *See, e.g.*, David J. Barron, *The Promise of Cooley's City: Traces of Local Constitutionalism*, 147 U. Pa. L. Rev. 487, 487 (1999) ("The text of the Constitution does not mention local governments.").

24 Hannah J. Wiseman, *Rethinking Municipal Corporate Rights*, 61 B.C. L. Rev. 591, 626 (2020).

25 Sharon L. Eiseman & Peter M. Friedman, *Five Things Every Lawyer Should Know About Representing a Local Government*, CBA Rec., Apr. 2004, at 49, 49.

26 Rick Su, *Have Cities Abandoned Home Rule?*, 44 Fordham Urb. L.J. 181, 190 (2017).

27 Daniel B. Rodriguez, *Localism and Lawmaking*, 32 Rutgers L.J. 627, 640 (2001).

28 Su, *supra* note 26, at 190.

29 *Id.*

30 *Id.*

31 *See, e.g.*, David J. Barron, *Reclaiming Home Rule*, 116 Harv. L. Rev. 2255, 2286 (2003).

32 Su, *supra* note 26, at 191.

local authority is known as "home rule."[33] In its earlier forms, home rule tended to involve a limited grant of authority to local governments over matters of a local nature, coupled with immunity from preemption within that local sphere.[34] These kinds of grants of home rule gave local governments some degree of authority to act on their own initiative.[35] However, because that grant was limited to matters of local concern, it became readily apparent that ultimately it was going to fall to judges to determine "local" matters from "state" matters.[36] Those decisions were highly variable, with courts often deferring to the state.[37]

In response to the perceived deficiencies of this early form of home rule, in the 1950s the National League of Cities introduced and advocated for a different form of home rule grant.[38] This new version of home rule aimed both to broaden local authority and give local authorities more confidence in exercising that authority.[39] In its purest form, it would do so by moving away from the requirement that local governments act only in areas of "local" concern by granting local governments much fuller powers of initiative, provided that local laws did not conflict with state laws.[40] By eliminating the need to decide for each particular action whether the issue was local or state in nature, local governments could act with a greater degree of confidence. This expanded local authority was, however, paired with a lack of immunity from state interference.[41] Where the judiciary had previously controlled the outcome of power disputes, in terms of deciding the state versus local question, now the state legislature had the ability to prevent local governments from taking actions with which they disagreed.[42]

Many states adopted this new form of home rule—often referred to as "legislative" because of the shift in power it occasioned to the state legislature in deciding outcomes of state and local conflicts—or a blend of the legislative and imperio home rule forms.[43] With those adoptions

33 *See, e.g.*, *Cities 101–Delegation of Power*, NAT'L LEAGUE OF CITIES, https://www.nlc.org/resource/cities-101-delegation-of-power/.

34 Paul Diller, *Intrastate Preemption*, 87 B.U. L. REV. 1113, 1124 (2007).

35 *Id.*

36 *See, e.g.*, Barron, *supra* note 23, at 2326.

37 *See, e.g.*, BRIFFAULT ET AL., *supra* note 22, at 410; Su, *supra* note 26, at 193.

38 *See, e.g.*, Kenneth Vanlandingham, *Constitutional Municipal Home Rule Since the AMA (NLC) Model*, 17 WM. & MARY L. REV. 1, 5 (1975).

39 *See, e.g.*, *id.* at 6–7.

40 *See, e.g.*, *id.* at 7.

41 *See, e.g.*, *id.*

42 *See, e.g.*, *id.*

43 This form is often referred to as "hybrid" home rule. *See, e.g.*, Kellen Zale, *Compensating City Councils*, 70 STAN. L. REV. 839, 863 n.106 (2018).

came a much greater scope of local authority and potential for local governments to take on a wide range of policy initiatives. Though Dillon's Rule persists in a small number of jurisdictions, home rule is now the dominant doctrine governing the state and local relationship.[44] While the current state and scope of home rule authority in the United States defies any easy summary, it is accurate to say that in a vast majority of the states, at least some of the local governments within the state have a fair degree of initiative authority.[45]

Another possible source of authority for local governments is the police power—a separate, though often related, concept to home rule.[46] The police power, an amorphous concept that refers broadly to governmental powers exercised to support health, safety, and general welfare, can be delegated to local governments even without a grant of home rule authority.[47] For instance, many states delegate the authority to exercise police power authority in the form of zoning, separate from any grant of home rule authority.[48] Thus, at present, all states in the United States have some degree of authority that they can exercise, though the scope of that authority varies widely. Local authority is also nearly universally susceptible to interference by the state, as will be discussed in detail below. But in the absence of that kind of interference, local governments may undertake policy responses on a wide variety of issues. Most importantly for this Article, local governments may often exercise

44 *See, e.g.*, Brian W. Ohm, *Some Modern Day Musings on the Police Power*, 47 Urb. L. 625, 636 (2015) ("Today, all but five states have some type of municipal home rule—though the type of home rule varies considerably from state to state.").

45 *See* Diller, *supra* note 34, at 1127 n.65 (2007) ("Just as it is difficult to provide a precise count of Dillon's Rule states, so is it difficult to count accurately home-rule states."). *Compare* Richard Briffault et al., State and Local Government Law 268 (6th ed. 2004) (finding that as of 1990, 48 states had some form of home rule for at least some cities and 37 states had some form of county home rule), *with* Dale Krane et al., Home Rule in America: A Fifty State Handbook 14 (2001) (finding that 45 states have home rule regimes) (citing Timothy D. Mead, *Federalism and State Law: Legal Factors Constraining and Facilitating Local Initiatives*, *in* Handbook of Local Government Administration 31, 36 (John J. Gargan ed., 1997)). It is even more difficult to offer a precise head count of imperio versus legislative states. Professor Timothy Mead counts 26 legislative states and 19 imperio states, Mead, *supra* note 46, while David Barron has observed that "very few state[s]" have imperio regimes. David J. Barron, *A Localist Critique of the New Federalism*, 51 Duke L.J. 377, 392 (2001)).

46 *Id.* ("While local government's ability to exercise the police power is often related to home rule, it is important to remember that they are separate concepts.").

47 *See, e.g.*, Lynn A. Baker & Daniel B. Rodriguez, *Constitutional Home Rule and Judicial Scrutiny*, 86 Denv. U. L. Rev. 1337, 1354–55 (2009).

48 Ohm, *supra* note 44, at 636.

their authority to address both climate and public health questions.

### *A. Local Climate Action*

Climate change is, in many ways, the opposite of a local issue. It is the epitome of a complex, global problem with both causes and solutions that lie far beyond local boundaries.[49] Even so, local governments have a substantial role to play in addressing climate change, both in terms of mitigating the worst impacts of climate change and responding to its impacts on the community. And while this local role would be important regardless of actions at other levels of government, the need for local action is elevated by the absence of federal and state government policy described above.[50]

For many years, local governments have been helping to close the gap in climate action left at the state and federal levels.[51] As described, local authority to act on climate change in any given state depends on the law of that state as written and interpreted. Broadly speaking, however, local climate action can be said to encompass several main categories: land use-based climate adaptation responses; local climate advocacy and legal instruments; exercise of local proprietary capacity; and mitigation-oriented regulatory responses.[52]

Land use-based climate adaptation responses might include actions like creating urban growth areas that limit development in areas sensitive to climate impacts,[53] protecting and improving local

49 Richard J. Lazarus, *Super Wicked Problems and Climate Change: Restraining the Present to Liberate the Future*, 94 CORNELL L. REV. 1153, 1159 (2009) (describing elements that make climate change a "super wicked" problem).

50 *See, e.g.*, Sarah J. Fox, *Why Localizing Climate Federalism Matters (Even) During A Biden Administration*, 99 TEX. L. REV. ONLINE 122, 124 (2021), https://texaslawreview.org/why-localizing-climate-federalism-matters-even-during-a-biden-administration/.

51 Cynthia R. Harris, *Best Practices in Local Climate Action Planning*, Part I, ENV. L. INST. (Jan. 10, 2022), https://www.eli.org/vibrant-environment-blog/best-practices-local-climate-action-planning-part-i-introduction (describing local governments as "well-positioned to assess local climate hazards and risks, identify opportunities to reduce GHG emissions, and engage the community in identifying priorities").

52 *Id.*

53 Alec LeSher, *Urban Growth Area*, SUSTAINABLE DEV. CODE, https://sustainablecitycode.org/brief/create-urban-growth-area-2/ (last visited Sept. 24, 2022) ("Urban Growth Areas are designated areas in which development is permitted. Ordinances creating Urban Growth Areas often set legal boundaries separating urban, developable land from rural, conservation, preservation, non-developable land.").

tree canopy cover,[54] encouraging infill development,[55] incorporating expected climate impacts into local comprehensive plans,[56] and many others. These kinds of actions rely on local land use authority, which is generally well within local control because of home rule power and/or delegated police power or zoning authority.[57]

Local climate litigation is another avenue by which local governments may be able to address the impacts that climate change is having on their citizens. In recent years, several local governments have initiated or joined lawsuits against oil companies in an effort to hold companies accountable for losses from climate change.[58] While federal courts have routinely declined to hear these kinds of actions, many are currently pending in state court, with the results on the merits yet to be decided at the time of writing.[59]

54 Alec LaSher, *Tree Canopy Cover*, Sustainable Dev. Code, https://sustainablecitycode.org/brief/expand-tree-canopy-cover-2/ (last visited Sept. 24, 2022) ("A local government's tree canopy is the jurisdiction's area that is shaded by trees. Typically, as land is developed, the tree canopy is reduced because trees are removed to clear space for development. One study estimates that urban areas across the United States lost 36 million trees per year from 2009 to 2014. Tree canopies provide numerous public and private benefits, including reduced air pollution, reduced heating and cooling demands, increased property values, improved physical and mental health, and reduced storm water runoff.").

55 Tyler Adams, *Encourage Infill Development*, Sustainable Dev. Code, https://sustainablecitycode.org/brief/encourage-infill-development-2/ (last visited Sept. 24, 2022) ("Infill development is the process of developing vacant or underdeveloped parcels within areas that are already largely developed. As populations fluctuate and the needs of a community transform, vacant land becomes increasingly common place. Instead of directing development outward, infill development helps replace existing vacant lots and promotes land conservation through the reduction of greenfield development. Successful infill development programs often focus on improving neighborhoods, creating more efficient mixes of jobs and housing, reducing blight, and reinvesting in the community. Infill can return cultural, social, and recreational vitality to dilapidated areas within a community.").

56 *See, e.g.*, Fox, *supra* note 50, at 127–28 (2021) (citing examples of climate responses in local comprehensive plans).

57 *See, e.g.*, John R. Nolon & Emma Alvarez Campbell, *Broad Local Powers to Deal with the Pandemic and Climate Change: The Death of Dillon's Rule*, 44 No. 2 Zoning and Planning L. Reports NL 1, Feb. 2021.

58 Sarah L. Swan, *Plaintiff Cities*, 71 Vand. L. Rev. 1227, 1238 (2018); John Schwartz, *Climate Lawsuits, Once Limited to the Coasts, Jump Inland*, N.Y. Times (Apr. 18, 2018), https://www.nytimes.com/2018/04/18/climate/exxon-climate-lawsuit-colorado.html.

59 *See, e.g.*, Nate Raymond, *Chevron, Other Energy Giants Must Face California Climate Change Cases in State Court,* Reuters (Apr. 19, 2022), https://www.reuters.com/legal/government/chevron-other-energy-giants-must-face-california-climate-

Local governments can also act on climate change in their proprietary capacities.[60] For instance, local governments can exercise proprietary authority over local public procurement policies,[61] municipal provision of power and waste management,[62] retrofitting municipal lighting,[63] and modifying other municipal operations.[64] Exercising this kind of proprietary authority allows local governments to make their own operations responsive to climate change in ways generally removed from state control.

Finally, local governments can take mitigation-oriented regulatory actions. This type of local action might include emissions reductions and net zero emissions targets;[65] taxes to fund greenhouse gas reduction initiatives;[66] and many others.[67] These kinds of regulatory actions are different from the prior categories. "Unlike

change-cases-state-2022-04-19/.

60 *See, e.g.*, Katherine A. Trisolini, *All Hands on Deck: Local Governments and the Potential for Bidirectional Climate Change Regulation*, 62 STAN. L. REV. 669, 723 (2010) ("Local governments' most direct (and likely least politically challenging) route to reducing downstream energy consumption is through targeting their own resources and operations. Potential reductions from proprietary activities alone may be substantial given the sheer number of local governments, the size of their operations, and the types of things that they own and operate."); Fox, *supra* note 50, at 130.

61 *See, e.g.*, Jason J. Czarnezki, Green Public Procurement: Legal Instruments for Promoting Environmental Interests in the United States and European Union (Dec. 12, 2009) (Ph.D. dissertation, Pace University School of Law), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3504676.

62 Katherine A. Trisolini, *What Local Climate Change Plans Can Teach Us About City Power*, 36 FORDHAM URB. L.J. 863, 886 (2009); *see also, e.g.*, Shelley Welton, *Public Energy*, 92 N.Y.U. L. REV. 267, 271 (2017); Shelley Welton, *Grasping for Energy Democracy*, 116 MICH. L. REV. 581, 586 (2018); Alexandra B. Klass & Rebecca Wilton, *Local Power*, 75 VAND. L. REV. 93, 101, 135–36, 138 (2022).

63 Trisolini, *supra* note 60, at 876.

64 *Id.* at 877.

65 *See, e.g.*, CLIMATE MAYORS, CITIES CLIMATE ACTION COMPENDIUM, https://climatemayors.org/wp-content/uploads/2020/11/Cities_Climate_Action_Compendium_180105-1.pdf (listing numerous examples of cities adopting emissions reductions and net zero targets); Jonathan Mingle, *To Cut Carbon Emissions, a Movement Grows to 'Electrify Everything,'* YALE ENV'T 360 (Apr. 14, 2020), https://e360.yale.edu/features/to-cut-carbon-emissions-a-movement-grows-to-electrify-everything (noting that cities like Takoma Park, Maryland, and Ann Arbor, Michigan, have recently adopted net zero policies).

66 *See, e.g.*, CLIMATE MAYORS, *supra* note 65, *at 6* (citing the example of Boulder, Colorado Climate Action Plan tax).

67 For a resource compiling many best practices for local action on climate change, *see* SUSTAINABLE DEVELOPMENT CODE, https://sustainablecitycode.org/ (last visited Feb. 3, 2023).

adaptation efforts, they are not focused on the particular impact of climate change in the community; unlike litigation efforts, they often incentivize or require action on the part of the local population; and unlike proprietary functions, they are outside the realm of core service delivery or functions."[68] The point of local regulatory actions is to reduce contributions to climate change at the local level. While this kind of local action is, of course, not sufficient to address global climate change, local contributions can play an incremental but important role where broader climate responses at the state and federal level are lacking. As an example, in 2022, the City of Chicago released an updated Climate Action Plan that includes many initiatives to reduce municipal emissions: improvement of transit networks, diversion of commercial and residential waste, building retrofits, and others.[69] The City estimates that its efforts will reduce its greenhouse gas emissions by at least 62 percent by 2040.[70] In a more aggressive approach, in November 2021, the citizens of the City of Ithaca, New York voted to decarbonize the City's buildings by 2030.[71] The City plans to decarbonize primarily by moving entirely away from natural gas and propane as sources of energy and instead relying on electricity derived from renewable sources.[72]

That typology of local climate action is not comprehensive but provides examples of some actions that local governments have taken and may continue to take to combat climate change. To be sure, local climate actions cannot and should not be seen as a "substitute for a coordinated national strategy."[73] Many local governments have chosen not to act at all on climate change or have acted in counterproductive ways. For instance, zoning laws in many local jurisdictions contribute to climate change by promoting low-density housing patterns and heavy reliance on automobiles, thereby contributing to high greenhouse gas emissions.[74] And some local governments that have responded to the

68 Fox, *supra* note 50, at 132.

69 *See* Mayor Lori E. Lightfoot, Chicago Climate Action Plan (2022), https://www.chicago.gov/content/dam/city/sites/climate-action-plan/documents/CHICAGO_CAP_20220429.pdf.

70 *Id.* at 34.

71 Deepa Shivaram, *To Fight Climate Change, Ithaca Votes to Decarbonize its Buildings by 2030*, NPR (Nov. 6, 2021), https://www.npr.org/2021/11/06/1052472759/to-fight-climate-change-ithaca-votes-to-decarbonize-its-buildings-by-2030.

72 *Id.*

73 Maggie Astor, *As Federal Climate-Fighting Tools Are Taken Away, Cities and States Step Up*, N.Y. Times (July 1, 2022), https://www.nytimes.com/2022/07/01/climate/climate-policies-cities-states-local.html.

74 *See, e.g.*, *State Preemption of Local Zoning Laws as Intersectional Climate Policy*, 135 Harv. L. Rev. 1592, 1595, 1598 (2022), https://harvardlawreview.org/2022/04/

felt effects of the changing environment in their communities have done so in parochial ways. Building sea walls, for example, is a climate adaptive effort that can have long-term negative consequences for the environment and surrounding areas.[75] Finally, and perhaps most significantly, local climate responses rely on both adequate authority and financial resources, both of which may be lacking at times.[76] There are, therefore, many reasons to be clear-eyed about the limitations of local climate action, as well as the importance of and potential for local climate response.

### *B. Local Public Health Action*

Local governments have long been on the forefront of public health action.[77] The exact parameters of local authority over public health depends on whether local governments within a particular jurisdiction rely on home rule, Dillon's Rule, or the police power for the source of their authority.[78] For all jurisdictions, local power over public health is often more clearly defined and heightened in times of emergency or

state-preemption-of-local-zoning-laws-as-intersectional-climate-policy/.

75 Rachel K. Gittman et al., *Ecological Consequences of Shoreline Hardening: A Meta-Analysis*, 66 BIOSCIENCE 763, 768–771 (2016).

76 *See, e.g.*, Sarah Fox, *What Does it Take for a City to Decarbonize its Buildings?*, STATE & LOC. GOV'T L. BLOG (Nov. 22, 2021), https://www.sloglaw.org/post/what-does-it-take-for-a-city-to-decarbonize-its-buildings ("[W]hat does it take for a local government to decarbonize its building supply? Authority, implementation will and resources, and, likely, lots of money.").

77 *Untapped Potential: Public Health Department Authority to Address the Fallout from the Pandemic, Structural Racism, and Other Public Health Crises*, LOC. SOL. SUPPORT CTR. (Oct. 22, 2020), https://www.supportdemocracy.org/the-latest/untapped-potential-public-health-department-authority-to-address-the-fallout-from-the-pandemic-structural-racism-and-other-public-health-crises ("Local public health agencies and officials have long had a critical place in protecting communities. Traditionally, their role has largely encompassed several core functions, such as tracking vital statistics, ensuring food safety and sanitation, overseeing certain laboratory services, and engaging in public health education."); *see also, e.g.*, James G. Hodge, Jr., *Implementing Modern Public Health Goals Through Government: An Examination of New Federalism and Public Health Law*, 14 J. CONTEMP. HEALTH L. & POL'Y 93, 103 (1997) (describing history of local public health boards in the United States dating back to the late 1700s).

78 *Dillon's Rule, Home Rule, and Preemption*, PUB. HEALTH LAW CTR. AT MITCHELL HAMLINE SCH. OF LAW 3–6 (Nov. 2020), https://publichealthlawcenter.org/sites/default/files/resources/Dillons-Rule-Home-Rule-Preemption.pdf.

public health crisis.[79] For example, local governments have been on the front lines of health crises from yellow fever and cholera outbreaks to the more recent opioid epidemic.[80] They are also generally responsible for public health emergency responses in the case of terrorist attacks or natural disasters.[81] And as in the climate context, local governments have been plaintiffs in the public health context.[82]

Writing in 2022, the obvious and recent example of widespread exercise of local public health authority is the COVID-19 pandemic. As the pandemic unfolded in 2020, local governments took many measures to protect the health and safety of their residents, including mandating the use of masks,[83] providing vaccines against the disease once available, offering creative incentives to get people vaccinated,[84] imposing social distancing requirements in public spaces,[85] developing contact tracing

79 *See, e.g.*, Nikki C. Day et al., *Governing Through the "New Normal": Covid-19 Lessons Learned on Local Government Law, the Constitution, and Balancing Rights in Times of Crises*, 50 Stetson L. Rev. 547, 548 (2021).

80 Elizabeth Pérez-Chiqués et al., *What Do Local Governments Need to Address Public Health Crises?*, Rockefeller Inst. of Gov't (Apr. 16, 2020), https://rockinst.org/blog/what-do-local-governments-need-to-address-public-health-crises/.

81 *See, e.g.*, David L. Feinberg, *Hurricane Katrina and the Public Health-Based Argument for Greater Federal Involvement in Disaster Preparedness and Response*, 13 Va. J. Soc. Pol'y & L. 596, 607 (2006) (describing local governments as the "first line of defense" against natural disasters"); Richard Briffault, *Home Rule for the Twenty-First Century*, 36 Urb. L. 253, 257 (2004) (describing local role in responding to the September 11 terrorist attacks and the October 2001 anthrax scare).

82 In response to the ongoing opioid crisis in the United States, a number of local governments have sued the makers of these drugs on a theory that the cost of managing the public health crisis of opioid addiction entitles them to damages. *See, e.g.*, Lance Gable, *Preemption and Privatization in the Opioid Litigation*, 13 Ne. U. L. Rev. 297, 308 (2021).

83 *See, e.g.*, COVID-19 Joint Information Center, *Chicago Department of Public Health Announces New Indoor Mask Mandate with Continued Increase in New COVID-19 Cases in Chicago*, City of Chi. (Aug. 17, 2021), https://www.chicago.gov/city/en/depts/cdph/provdrs/health_protection_and_response/news/2021/august/CDPH-announces-new-mask-mandate.html.

84 The U.S. Conf. of Mayors, Bloomberg Philanthropies, Mayors Challenge to Increase COVID-19 Vaccinations 7 (2021), https://bloombergcities.jhu.edu/sites/default/files/2021-02/Vaccine%20Toolkit%20Role%20of%20Mayors_0.pdf.

85 *See, e.g.*, Maura Calsyn et al., *Social Distancing to Fight Coronavirus: A Strategy that is Working and Must Continue*, Ctr. for Am. Progress (Mar. 25, 2020), https://www.americanprogress.org/article/social-distancing-fight-coronavirus-strategy-working-must-continue/.

systems,[86] and many others.[87] These actions likely strengthened not only local public health but also the overall health of surrounding communities and the state at large.

Like local work on climate change, local public health action has the potential to respond to problems on the ground unique to the community, as well as to fill in gaps in policy responses at the state and federal levels. Both roles can be seen in local responses to COVID-19, as well as in, for instance, the local role in addressing nutrition policy, paid leave, e-cigarettes and tobacco, minimum wage laws, and other health-related issues.[88] Additionally, as with local action on climate change, local ability to respond to public health problems does not mean that governments will do so in uniformly desirable ways. For instance, while many local governments worked to implement the kinds of COVID-19 prevention measures described above, some actors at the local level did not do so or even actively opposed state public health interventions.[89] Acknowledging the role that local governments can and do play in public health does not guarantee any particular use of those powers. Beyond that, without adequate funding, local public health authorities are hamstrung in what they can accomplish on any issue.[90] For better and for worse, however, local governments are an important actor for public health in the United States.[91]

### *C. Local Public Health Actions in Response to Climate Change*

Climate change is a crisis for both the environment and for

86 *See, e.g.*, Mo. Dep't. of Health and Senior Servs., *Local Government COVID-19 Contact Tracing Guidance*, https://health.mo.gov/living/healthcondiseases/communicable/novel-coronavirus/pdf/contact-tracing-guidance-local-governments.pdf (last visited Sept. 30, 2022).

87 *See Local Government Responses to the Coronavirus (COVID-19) Pandemic, 2020*, *supra* note 19.

88 PAUL DILLER & LORI FRESINA, PUBLIC HEALTH, LOCAL POWER & POLITICS REVIEW 7 (2020), https://acrobat.adobe.com/link/review?uri=urn%3Aaaid%3Ascds%3AUS%3A09faf178-f59e-43f4-b5e5-f2fa60e3c372#pageNum=7.

89 *See, e.g.*, Melissa Chan, *'It's Unenforceable.' The Problem with Trying to Police COVID-19 Restrictions*, TIME (Dec. 21, 2020), https://time.com/5921863/police-enforce-covid-restrictions/ (describing local police opposition to enforcement of state public health mandates).

90 *See, e.g.*, Noam N. Levey, *It's Not Just Coronavirus: America Repeatedly Fails at Public Health*, L.A. TIMES (July 2, 2020), https://www.latimes.com/politics/story/2020-07-02/not-just-coronavirus-america-fails-public-health.

91 *See, e.g.*, Jay Varma, *How Public Health Failed America*, ATLANTIC (May 15, 2022), https://www.theatlantic.com/ideas/archive/2022/05/how-public-health-failed-america/629869/.

public health. Environmental change on the scale expected in any realistic climate scenario carries with it a variety of negative health consequences. For example, air pollution is expected to increase and worsen with climate change. "Changes in climate, including temperature, humidity, precipitation, and other meteorological factors, can change concentrations of [particulate matter] and ozone, broadening the distribution of human exposures to these pollutants."[92] More warm days and climate-impacted natural phenomena, like wildfires, are also expected to increase the number of days with poor air quality.[93] The exacerbation of air pollution is expected to increase premature deaths among older populations and increase instances of asthma among children.[94] Higher temperatures associated with climate change are also expected to negatively impact mortality rates in some parts of the country.[95] Flooding will likely cause or exacerbate mold in buildings, contributing to worsened indoor air quality;[96] such flooding may also contribute to contaminated water and corresponding gastrointestinal infections.[97] The variations in temperature and rainfall associated with climate change are increasing the range of disease-carrying ticks, and correspondingly, the instances of Lyme disease.[98] Beyond those physical impacts, the mental toll of climate change-triggered disruptions and climate anxiety[99] is widespread. These and many other health impacts will occur alongside environmental harms, property destruction, and other impacts of climate change.

These impacts and others will be disproportionately experienced based on both geography and social vulnerability. Climate change has highly localized impacts, with great regional variation.[100] Beyond that, a

92 *Climate Change and Social Vulnerability in the United States: A Focus on Six Impacts*, *supra* note 6, at 20.

93 *Id.*

94 *Id.* at 21.

95 *Id.* at 34.

96 *Dampness and Mold from Severe Storms and Sea Level Rise*, Indoor Air Quality Sci. Findings Res. Bank, https://iaqscience.lbl.gov/dampness-and-mold-severe-storms-and-sea-level-rise (last visited Nov. 3, 2022).

97 *Understanding the Connections Between Climate Change and Human Health* fig. 2, U.S. Env't Prot. Agency, https://www.epa.gov/climate-indicators/understanding-connections-between-climate-change-and-human-health (last updated Nov. 11, 2022).

98 *Id.*

99 *See, e.g.*, Tosin Thompson, *Young People's Climate Anxiety Revealed in Landmark Survey*, Nature (Sept. 22, 2021), https://www.nature.com/articles/d41586-021-02582-8.

100 *Climate Change: Regional Impacts*, UCAR Ctr. for Sci. Educ., https://scied.ucar.

recent study by the Environmental Protection Agency (EPA) highlights that even within regions, many climate impacts will be disproportionately felt by historically marginalized groups.[101] For instance:

> In nearly all regions of the U.S., children in low income households are more likely than those in higher income households to currently live in areas with the highest projected increases in childhood asthma diagnoses due to climate-driven changes in [particulate matter]. In the Southern Great Plains, minority children are 77% more likely than non-minority children to currently live in high-impact areas.[102]

The unequal distribution of climate impacts based on geography and demographics makes clear that while climate change is a global problem, responding to the health impacts of climate change is a highly local issue. In each state, the citizens of different localities will have varying needs when it comes to responding to climate change. Local flexibility will be key in responding to health needs brought on by climate change. Flexibility alone, of course, cannot guarantee that local governments will meet the needs of those most negatively impacted by climate change —uneven distribution of local resources has been well-documented with regard to COVID-19 and other issues.[103] But guaranteeing local governments the capacity to try to address these imbalances is still an important element of an overall strategy to address the disproportionate impacts of climate change.[104]

Because of this, the aforementioned local actions aimed at mitigation of or adaptation to a changing climate are also, in key ways, public health actions. The differing impacts of climate change mean that new and varied health measures will be required at the local level. Depending on where they are located, local governments will have to do all or some of the following: grapple with increased health needs and corresponding strains on existing health resources; navigate access to cooling centers in areas likely to experience extreme heat; implement measures to improve air quality; respond to flooding; ensure access to

edu/learning-zone/climate-change-impacts/regional (last visited Jan. 28, 2023).

101 *Climate Change and Social Vulnerability in the United States: A Focus on Six Impacts*, *supra* note 6, at 59 (studying climate impacts on four socially vulnerable groups: low income, minority, no high school diploma, and over 65).

102 *Id.* at 29.

103 *See, e.g.*, *Reducing the Disproportionate Impact of COVID-19 Among Communities of Color*, NAT'L GOVERNORS ASS'N (June 25, 2020), https://www.nga.org/publications/impact-covid-19-communities-of-color/.

104 Pérez-Chiqués, *supra* note 80 (describing local public health crises as crises of capacity).

water in times of increased drought; put in place water conservation measures; and many others.[105] Climate change will also mean population influxes for some cities and exoduses from others.[106] Such population changes will necessarily impact local resources in different ways. For example, local governments may need to increase public health services for a growing number of people or respond to extreme weather events with a declining budget.[107] For these reasons, climate change also means a change in public health responses and priorities.

## II. State Preemption of Local Action

The above discussion supports a high degree of flexibility when it comes to local authority over both climate and public health. Particularly where the federal and state governments fail to act on an issue, local governments can step in to protect their communities.[108] Given the unique ways in which the climate crisis will affect local governments, the kinds of responses that will work across the country vary widely. What's more, local governments have long served an innovation function within the federal system in the United States, experimenting with new ways of implementing policy responses.[109] If states can function as laboratories of democracy,[110] then local governments can provide an even larger, and

105 *See, e.g.*, *Climate Change and Health*, Climate Cent. (Oct. 20, 2021), https://www.climatecentral.org/climate-matters/climate-change-and-health (describing range of possible local health impacts of climate change).

106 *See, e.g.*, Erol Yayboke et al., *A New Framework for U.S. Leadership on Climate Migration*, Ctr. for Strategic & Int'l Stud., (Oct. 2020), https://csis-website-prod.s3.amazonaws.com/s3fs-public/publication/201022_Yayboke_ClimateMigration_Brief_0.pdf.

107 *See, e.g.*, Sarah Fox, *The 4° City*, Env't L. Prof Blog (Oct. 12, 2021), https://lawprofessors.typepad.com/environmental_law/2021/10/the-4-city.html.

108 Fox, *supra* note 17, at 151 (describing local gap-filling function in the context of environmental law).

109 *See* Annie Decker, *Preemption Conflation: Dividing the Local from the State in Congressional Decision Making*, 30 Yale L. & Pol'y Rev. 322, 362 ("Perhaps no feature of subfederal governance is lauded more frequently than its association with innovation. Local regulation often is considered more innovative than state regulation . . . whether because the sheer number of local governments increases the chances of a good idea emerging or because it is relatively easier to get a local law enacted and tested out in practice."); *see also* Shannon M. Roesler, *Federalism and Local Environmental Regulation*, 48 U.C. Davis L. Rev. 1111, 1149 (2015) (likening "jurisdictional plurality to 'ecological niches in a forest . . . [j]ust as selection pressures . . . allow diversity to survive, the myriad horizontal and vertical interconnections between jurisdictions allow innovations to spread"').

110 *See* New State Ice Co. v. Liebmann, 285 U.S. 262, 387 (1932).

more tailored environment for experimentation. As Professor Heather Gerken has noted, "It is hard to jumpstart a national movement. That is why virtually every national movement began as a local one."[111] Local flexibility to enact policy solutions "allows policymakers to respond as needed to changing conditions, and to learn from other jurisdictions."[112] In a time of rapid change, experimentation with a variety of policy responses may be helpful in finding successful climate and public health measures.

Nonetheless, while local governments are confronting unprecedented environmental and public health crises, many of them are losing authority at a rapid clip.[113] As discussed, the home rule framework that exists in most states provides a great deal of initiative authority. Local governments operating in those states can act on many different issues, subject to conflicting state law. Historically, local governments had to worry primarily about their actions conflicting with state law already in existence and consequently being disallowed pursuant to implied preemption doctrine.[114] Over the past decade, however, it has become commonplace in many parts of the United States for the state legislature to remove local authority in an express fashion, whether or not the state has acted on the issue.[115] This style of preemption tends to be partisan, deregulatory in nature, and often punitive toward local governments.[116] As a result of these preemption trends, local governments in many states

111 Heather K. Gerken, *Federalism 3.0*, 105 CALIF. L. REV. 1695, 1713 (2017).

112 Fox, *supra* note 17, at 185.

113 *See, e.g.* KIM HADDOW, 2021: A SESSION LIKE NO OTHER, LOC. SOLS. SUPPORT CTR. 4, https://static1.squarespace.com/static/5ce4377caeb1ce00013a02fd/t/61008bd090218d765c305c9a/1627425746934/ASessionLikeNoOther%E2%80%932021-LocalSolutionsSupportCenter.pdf (detailing the "torrent of legislation blocking, removing, or penalizing local authority from being introduced and passed primarily in Republican-controlled states," and noting that the Local Solutions Support Center (LSSC) had "tracked over 400 such state preemption bills [in the 2021 legislative session], more than twice the number of bills LSSC tracked in 2019, the last full state legislative session").

114 *See, e.g.*, Diller, *supra* note 34, at 1140 (2007) (explaining implied preemption doctrine as applied to state and local conflicts).

115 *See, e.g.*, Richard Briffault, *The Challenge of the New Preemption*, 70 Stan. L. Rev. 1995, 1997-98 (2018) (explaining dynamics of new forms of preemption).

116 *See, e.g.*, *id.*; *see generally* Richard C. Schragger, *The Attack on American Cities*, 96 TEX. L. REV. 1163, 1163 (2018) (providing comprehensive overview of weakening of city authority via preemption); RICHARD BRIFFAULT ET AL., THE NEW PREEMPTION READER: LEGISLATION, CASES, AND COMMENTARY ON THE LEADING CHALLENGE IN TODAY'S STATE AND LOCAL GOVERNMENT LAW 11–14 (2019); Erin Adele Scharff, *Hyper Preemption: A Reordering of the State and Local Relationship?*, 106 GEO. L.J. 1469, 1473–74 (2018) (providing comprehensive look at new, punitive forms of preemption).

no longer have the ability to act on a panoply of issues.[117]

Instead of relying on implied preemption doctrines, state legislators using these new forms of preemption expressly prohibit specific local actions. The goal of such measures is both to curtail or modify specific local responses and to discourage local governments from exercising policy authority altogether.[118] As noted, they tend to take the form of conservative state politicians limiting specific progressive actions at the local level. For example, in the 2021 legislative session, state lawmakers engaged in actions such as banning "the discussion, training, and/or orientation that the United States is inherently racist, as well as any discussions about conscious and unconscious bias, privilege, discrimination, and oppression"; proposing legislation "that would ban transgender athletes from competing in school sports that match their gender identity"; and "enacting local budget control bills to prohibit, hamper, or punish localities that attempt to reallocate and reduce police budgets."[119] These are just some examples from more than 400 state preemption bills that were passed in 2021, more than double the number of bills from 2019.[120] With some exceptions, such moves by the state are difficult to combat.[121] In consequence, local authority taking on a variety of policy challenges has become severely circumscribed.

These new forms of preemption can be seen frequently in both the climate and the public health context. As described above, there are

117 *See The Threat of State Preemption*, Loc. Sols. Support Ctr., https://www.supportdemocracy.org/preemption (last visited Sept. 30, 2022) (cataloguing loss of local authority, which includes: "25 states preempt local minimum wage laws . . . [;] 23 states ban local paid sick days laws . . . [;] 44 states ban local regulation of ride sharing networks[;] 43 states limit local authority to regulate guns or ammunition[;] 20 states block or ban municipal broadband networks[;] 23 states have banned local control over 5G technology[;] 15 states ban local plastic bag bans . . . [;] 31 states bar local rent control[;] at least 11 states preempt local sanctuary policies . . . [;] at least ten states preempt local regulation of e-cigarettes . . . [;] at least nine states preempt local fair, predictable scheduling laws[;] five states have preempted local fair hiring, 'Ban the Box' laws . . . [;] four states now ban soda taxes . . . .").

118 Scharff, *supra* note 116, at 1473 (explaining that "hyper preemption" seeks "not just to curtail local government policy authority over a specific subject, but to broadly discourage local governments from exercising policy authority in the first place").

119 *See* Haddow, *supra* note 113, at 4, 8, 14, 20 (detailing state legislative efforts to preempt and otherwise restrain local authority and noting that "the 2021 session was characterized by a sharp turn to the right").

120 *Id.*

121 *See, e.g.*, Briffault, *supra* note 115, at 2008 (noting that "[e]xisting legal doctrines provide local governments with few protections against state preemption").

different categories of local action on climate—land use, proprietary action, litigation, and mitigation-based regulatory responses. Of those, the last is most vulnerable to preemption by the state. Climate mitigation actions—such as restrictions or bans on natural gas hookups in buildings—have been the target of a wave of recent preemptive action in many states.[122] At least 20 states have passed state prohibitions on local limits on natural gas, with several more states considering similar actions.[123] Similar preemption of climate actions have occurred with respect to local fracking restrictions, bans on single use plastics, and other environmental measures.[124]

While the other categories of local climate action noted above—exercise of proprietary functions, litigation, and land use—have historically been less subject to preemption, there are signs that some local governments may face removal of their authority with regard to those kinds of actions as well. For instance, to date, local proprietary activity has been rarely subject to preemption.[125] But the most recent legislative session in Virginia saw a bill introduced that would "prohibit any 'public entity that provides natural gas utility service' from discontinuing service 'generally or to any commercial or industrial customers' without providing three years of notice, undertaking certain negotiations and in some circumstances offering the system up for auction to the highest bidder."[126] If similar restrictions begin to take hold in other states, local ability to exercise control over their own utilities to accomplish their climate goals will be considerably weakened.

While local litigation over climate has not yet been preempted,

122 *See* Ella Nilsen, *Cities Tried to Cut Natural Gas from New Homes. The GOP and Gas Lobby Preemptively Quashed Their Effort*, CNN (Feb. 17, 2022), https://www.cnn.com/2022/02/17/politics/natural-gas-ban-preemptive-laws-gop-climate/index.html.

123 *Id.*

124 *See* Tyler Wells Lynch, *All Politics Is Not Local: Conservative State Legislatures Are Acting Aggressively to Preempt Local Ordinances*, SIERRA (Mar. 10, 2020), https://www.sierraclub.org/sierra/all-politics-not-local (outlining fight over preemption of fracking in Denton, Texas); Samantha Maldonado et al., *Plastic Bags Have Lobbyists. They're Winning.*, POLITICO (Jan. 20, 2020), https://www.politico.com/news/2020/01/20/plastic-bags-have-lobbyists-winning-100587 (detailing efforts to preempt local bans on plastics).

125 Fox, *supra* note 50, at 130–31 (2021) (citing Alexandra B. Klass & Rebecca Wilton, *Local Power*, 75 VAND. L. REV. 93 (2022), for the proposition that, as of the time of writing, no preemption of local proprietary functions had occurred).

126 *See* Sarah Vogelsong, *Proposal to Forbid Local Gas Bans Dropped in Senate*, VA. MERCURY (Mar. 2, 2022), https://www.virginiamercury.com/2022/03/02/proposal-to-forbid-local-gas-bans-dropped-in-senate/.

local public health litigation has seen some attempted preemption by the state.[127] In at least two states—Tennessee and Arkansas—the state has intervened in lawsuits brought by local governments to argue that the local government did not have authority to bring a lawsuit on behalf of the state.[128] Given the aforementioned willingness of many states to impose preemption across many categories of local action, it may be unwise to assume that state legislatures will never attempt to restrict local participation in climate lawsuits. Finally, land use regulation has been historically left to local control.[129] However, a Florida law passed in 2021 requires every local government to "include in its comprehensive plan a property rights element to ensure that private property rights are considered in local decision[-]making."[130] The law goes on to list several rights to be considered.[131] None of the rights explicitly limit local authority to enact climate-responsive measures, and the law specifically states that private rights to "use, maintain, develop, and improve" property are subject to state law and local ordinances.[132] However, the intrusion upon local land use functions and the focus on private property interests may signal greater involvement by Florida and other states in local land use decisions.

Preemption occurs often in the public health realm as well.[133] For decades, states have preempted local authority over tobacco products,[134] nutrition,[135] paid sick leave,[136] and other areas. This trend was heightened during the COVID-19 pandemic, when many power disputes occurred between states and local governments over mask mandates, school closures, vaccine requirements, and other aspects of

127 Gable, *supra* note 82, at 329–31.

128 *Id.*

129 John R. Nolon, *Introduction: Considering the Trend Toward Local Environmental Law*, 20 Pace Env't L. Rev. 3, 5 (2002) ("Under state zoning and planning enabling acts, local governments have been given a key, if not the principal, role in land use regulation.").

130 Fla. Stat. § 163.3177 (2021).

131 *Id.*

132 *Id.*

133 *See, e.g.*, Courtnee Melton-Fant, et al., *Addressing Health Equity in the New Preemption Era*, Health Affs. Forefront (Dec. 21, 2021), https://www.healthaffairs.org/do/10.1377/forefront.20211216.309941/full/.

134 *Dillon's Rule, Home Rule, and Preemption*, *supra* note 78.

135 Rob Waters, *Soda and Fast Food Lobbyists Push State Preemption Laws to Prevent Local Regulation*, Forbes (June 21, 2017), https://www.forbes.com/sites/robwaters/2017/06/21/soda-and-fast-food-lobbyists-push-state-preemption-laws-to-prevent-local-regulation/?sh=71faa39c745d.

136 Dilini Lankachandra, *Enacting Local Workplace Regulations in an Era of Preemption*, 122 W. Va. L. Rev. 941, 944 (2020).

the pandemic response.[137] According to a recent survey:

> [Twenty-four] states have or will consider bills that limit public health powers, some at both the state and local levels . . . These bills . . . seek to limit the emergency powers of the executive branch, strip public health officials of power, and defund local health departments or even dissolve them.[138]

In all of these ways, express forms of preemption have become the new norm in many state and local relationships. Preemptive actions by the state halt local action on specific issues and can also be expected to chill the kinds of local innovation needed to respond to the climate crisis.[139] These forms of preemption also indicate that when discussing what local governments can do about the myriad public health needs created by a changing climate, the question of local authority is never far from the surface. And given the varied grants of local authority detailed above, the answer to that question varies widely, depending on the politics of the state and the realities of local authority within that state.

## III. LOCALIZING THE CLIMATE, HEALTH, AND JUSTICE CONVERSATION

Climate change will introduce a new set of variables into local public health needs and exacerbate those already in place. The physical impacts from climate change will vary widely across the country. Local public health needs due to climate change will continue to diverge based on two key variables of the population: physical location and

137 *See, e.g.*, Jenny Rough & Andy Markowitz, *List of Coronavirus-Related Restrictions in Every State*, AARP, https://www.aarp.org/politics-society/government-elections/info-2020/coronavirus-state-restrictions.html (Sept. 21, 2022) (detailing each state's vaccine, testing, and mask requirements—including many restrictions on local governments).

138 KIM HADDOW, UNDER THE COVER OF COVID: A SURVEY OF 2020-2021 STATE PREEMPTION TRENDS, LOC. SOLS. SUPPORT CTR. 14 (2021), https://static1.squarespace.com/static/5ce4377caeb1ce00013a02fd/t/604faee2e641222b084316ff/1615834855353/LSSC-UndertheCoverofCovid-March2021.pdf.

139 Briffault, *supra* note 115, at 1997 ("[P]reemption measures frequently displace local action without replacing it with substantive state requirements."); Sarah E. Light, *Precautionary Federalism and the Sharing Economy*, 66 EMORY L.J. 333, 381 (2017) ("A vision of precautionary federalism should motivate both legislators and courts to narrow the scope of preemption at the federal and state levels to permit experimentation and learning at this time of uncertainty."); Katrina M. Wyman & Danielle Spiegel-Feld, *The Urban Environmental Renaissance*, 108 CAL. L. REV. 305, 349 (2020) ("In thinking about how the scope for municipal innovation could be enhanced under the existing federal and state legal framework, it is important to keep in view . . . the thicket of legal constraints on cities . . . . ").

socioeconomic characteristics. And, interacting with all those variables, each local government will have to navigate these climate and health needs within the particular confines of its own authority.

All those simultaneous yet independent factors mean that when talking about local public health responses to climate change, sweeping generalizations about what local governments should or should not do, or could or could not do, are not particularly useful. Instead, conversations about local responses to climate change and public health should be localized by "explicitly acknowledg[ing] and account[ing] for local actors, and for the vulnerabilities in authority that they may confront."[140] The localized standpoint is not local*ist*—it does not subscribe to or promote any particular allocation of power between the levels of government. But it frames the conversation about local authority in a way that is more reflective of reality. That framing is a necessary step in arriving at an accurate understanding of the ways that local governments will—and will not—be able to take action on the public health needs that may arise from climate change.

### *A. Varied Climate and Health Impacts*

Environmental impacts from climate change in the United States are and will continue to be widespread[141] but not experienced equally.[142] Just as the United States currently experiences different weather patterns in different parts of the country, climate change will impact regions in non-uniform ways. For instance, some areas will face massive flooding, while others will be subject to prolonged drought; in some areas warmer temperatures will degrade air quality, while in other areas, wildfire risk exacerbated by excessive heat may be the biggest threat to person and property; sea level rise will affect coastal regions and changes in

140 *See, e.g.*, Fox, *supra* note 17, at 178 (explaining concept of localizing in the context of local government analyses).

141 Climate Change Impacts in the United States: The Third National Climate Assessment, U.S. Glob. Change Rsch. Program 1 (2014), https://www.nrc.gov/docs/ML1412/ML14129A233.pdf ("Corn producers in Iowa, oyster growers in Washington State, and maple syrup producers in Vermont are all observing climate-related changes that are outside of recent experience. So, too, are coastal planners in Florida, water managers in the arid Southwest, city dwellers from Phoenix to New York, and Native Peoples on tribal lands from Louisiana to Alaska.").

142 *See, e.g.*, *Climate Change Impacts by Region*, U.S. Env't Prot. Agency (Jan. 19, 2017), https://19january2017snapshot.epa.gov/climate-impacts/climate-change-impacts-region_.html (highlighting the specific climate impacts expected for eight different parts of the United States).

growing seasons will affect agricultural regions.[143] These effects vary by population density, community type (e.g., rural, suburban, urban), and geographic location.[144]

Unsurprisingly, as with other environmental impacts and their associated public health consequences, these impacts are also not expected to be evenly distributed across the population. Systemic legacies of oppression, discrimination, siting of polluting industries, and the negative health impacts of all of these and other interrelated factors mean that communities of color will be disproportionately harmed by climate impacts.[145] The United States Department of Health and Human Services (HHS) has developed a list of factors that "can affect someone's ability to prepare for, respond to, and cope with the impacts of climate change on health" that include:

1. living in areas particularly vulnerable to climate change (like communities along the coast or extreme weather);
2. coping with higher levels of existing health risks when compared to other groups;
3. living in low-income communities with limited access to healthcare services;
4. limited access to quality healthcare;
5. limited availability of information and resources in a person's native language; [and]
6. limited ability to relocate or rebuild after a disaster.[146]

Those falling into one or more of those categories may be particularly vulnerable to climate impacts.[147] These factors highlight the core

143 *See generally* U.S. GLOB. CHANGE RSCH. PROGRAM, *supra* note 141.

144 *See, e.g.*, *Climate Change Impacts and Emerging Population Trends: A Recipe for Disaster?*, POPULATION REFERENCE BUREAU (Oct. 1, 2001), https://www.prb.org/resources/climate-change-impacts-emerging-population-trends-disaster/; *Climate Change: Regional Impacts*, *supra* note 100 (explaining geographic differences in climate impacts).

145 *See, e.g.*, Beth Gardiner, *Unequal Impact: The Deep Links Between Racism and Climate Change*, YALE ENV'T 360 (June 9, 2020), https://e360.yale.edu/features/unequal-impact-the-deep-links-between-inequality-and-climate-change.

146 *Climate Change and Health Equity*, U.S. DEP'T OF HEALTH & HUM. SERVS., https://www.hhs.gov/climate-change-health-equity-environmental-justice/climate-change-health-equity/index.html (last visited Sept. 27, 2022).

147 *See, e.g.*, Clifford J. Villa, *Letting Go of 2° C, Letting Go of Race?: What Does Climate Justice Mean at 4° C?*, ENV'T L. PROF BLOG (Oct. 21, 2021), https://lawprofessors.typepad.com/environmental_law/2021/10/letting-go-og-2c-letting-go-of-2c-letting-go-of-race-what-does-climate-justice-mean-at-4c.html (introducing idea of vulnerability theory to think about which populations are likely to be most impacted by climate change).

reality that "impacts of climate change are largely determined by the population's vulnerability and resilience," and are therefore "more likely to be felt disproportionately by those who suffer socioeconomic inequalities."[148]

Given the history of racial violence and discrimination in the United States, "people of color are found to be particularly more vulnerable to heatwaves, extreme weather events, environmental degradation, and subsequent labor market dislocations."[149] Thus, regional variability in climate impacts and variability in impacts from the associated public health risks create a highly fragmented set of experiences of climate change across the United States. For local governments, then, a key aspect of responding to climate change is understanding the particular needs of their jurisdiction and then acting upon those needs.

### *B. Varied Local Authority*

Further complicating the story is the reality described above: not every local government in every state will have the ability to take similar actions with climate change and public health. Because there is no federally recognized right to local self-government,[150] the difference in abilities between communities in states where many climate and health actions are preempted (e.g., Texas)[151] versus communities where such preemption is not widespread (e.g., California)[152] is marked. And the amount of policy action among those states is varied as well. Indeed, "it is local governments in states that are disinclined to take action on climate change that are most vulnerable to preemption of their climate efforts," leading to "certain regions where very little climate action is taking place at any level of government."[153] This patchwork of possibility for local climate health equity is the current reality in the United States.

148 Aneesh Patnaik et al., *Racial Disparities and Climate Change*, Princeton Student Climate Initiative (Aug. 15, 2020), https://psci.princeton.edu/tips/2020/8/15/racial-disparities-and-climate-change.

149 *Id.*

150 *See* Hunter v. City of Pittsburgh, 207 U.S. 161, 179 (1907).

151 *See* Joan Fitzgerald, *Preemption of Green Cities in Red States*, Planetizen (Sept. 7, 2021), https://www.planetizen.com/blogs/114584-preemption-green-cities-red-states (noting that Texas has preempted cities from banning or limiting fossil fuel hookups and from banning fracking).

152 *See, e.g.*, Nilsen, *supra* note 122 (noting the city of Berkeley's success in banning natural gas hookups in new buildings).

153 Fox, *supra* note 50, at 138.

For that reason, effective advocacy surrounding health equity should be aided by the development of a deep understanding of local authority in any particular area, including the particulars of grants of home rule authority, police powers, and political status in each state.

For all the reasons outlined above, and as the COVID-19 pandemic demonstrated, state-level preemption means that local governments may be unable to respond to climate change, and the public health needs it creates, in the ways they would like or need to. That lack of authority is important to acknowledge. For while it may be tempting to place local actors at the center of calls for responses to the climate crisis and corresponding public health needs, that placement is hollow in jurisdictions where local governments either currently lack needed authority or have reason to think that their authority could be taken away by the state. For those jurisdictions, a continued focus on the need for local action may offer cover to crippling action or inaction at the state or federal level. Thus, public health responses to climate change should be expected to differ based on the varying degrees of authority and functionality that local governments have and on the willingness of state and federal actors to play a role in climate response.

### *C. Climate Preemption and Health Justice*

Environmental impacts from a changing climate will be coupled with unevenly distributed public health impacts. Local governments may be able to "minimize[e] health disparities and ensur[e] equitable distribution of health outcomes,"[154] whether in the climate context or not. As the level of government nearest to those experiencing climate impacts, local governments can prioritize getting needed services to their most under-resourced populations. Seen in that way, local power is an important piece of environmental and public health justice.[155] But the varied nature of local authority's ability to respond to disparities in health needs also means that access to appropriate health care and resources will depend in large part on jurisdiction. For those located in jurisdictions with either strong local authority or that benefit from a strong state or federal response, focusing on local authority to act in response to climate change makes sense. For those not located in such a jurisdiction, focusing on local authority as the primary form of needed action hides the reality that the federalist system has been used to make

154 *Dillon's Rule, Home Rule, and Preemption*, *supra* note 78.

155 *See, e.g.*, Fox, *supra* note 17, at 187.

it impossible for local governments to respond to these disparities.

In some states, populations most vulnerable to climate change will be located in jurisdictions that lack authority or are most reluctant to take needed actions.[156] And there is reason to believe that "state willingness to preempt tends to limit rapid-response policymaking at both the local and state level."[157] Thus, preemption seems likely to result in little or no action on climate and health for many parts of the country that may need it most. When viewed through that lens, the struggle for health equity has much in common with many other issues over which both local authority and state willingness to address them are greatly varied. While these variations have always been a hallmark of the federalist system in the United States, that system has also long relied on the availability of gap-filling by one actor or another.[158] Much new scholarship on federalism tends to focus on the importance of that kind of dynamism in ways that are "both descriptive and normative," with the general elements of theories of dynamic federalism including "plurality, dialogue, and redundancy."[159] These theories make clear the importance of interplay between and among the federal and state levels of government—and, perhaps, local governments as well.[160]

State efforts to eliminate that interplay through preemption, removing the ability of a local government to act without any

156 *See, e.g.*, Reid Wilson, *Climate Change Likely to Hit Red States Hardest*, Hill (Jan. 29, 2019), https://thehill.com/policy/energy-environment/427479-climate-change-likely-to-hit-red-states-hardest/; *see also* Hunter Blair et al., *Preempting Progress: State Interference in Local Policymaking Prevents People of Color, Women, and Low-Income Workers from Making Ends Meet in the South*, Econ. Pol'y Inst. (Sept. 30, 2020), https://www.epi.org/publication/preemption-in-the-south/ (explaining that "Southern states are more likely than states in other regions to use preemption to stop local governments" from taking a variety of actions).

157 Mark Treskon & Benjamin Docter, Preemption and its Impact on Policy Responses to COVID-19: Local Autonomy During the Pandemic, Urb. Inst. 1 (Sept. 2020), https://www.urban.org/sites/default/files/publication/102879/preemption-and-its-impact-on-policy-responses-to-covid-19.pdf.

158 *See* Fox, *supra* note 17, at 137 (describing gap-filling in context of environmental law).

159 *Id.* at 160–61; *see also* Gerken, *supra* note 111, at 1700, 1707; R A. Schapiro, Polyphonic Federalism: Toward the Protection of Fundamental Rights 95 (2009); Daniel J. Elazar, *Cooperative Federalism*, *in* Competition Among States and Local Governments: Efficiency and Equity in American Federalism 65, 77 (Daphne A. Kenyon & John Kincaid eds., 1991) ("Any proper theory of cooperative federalism must have a dynamic dimension; in other words, it must be able to track the sources of change in the system.").

160 *See, e.g.*, Fox, *supra* note 17, at 165–66 (offering a theory for incorporating local governments into the federalism conversation).

corresponding action by the state to fill the policy space, constitute an attack on the functionality of that federal system. In such places, public health advocacy in a climate-changed world may need to include not only substantive support for the relevant health needs but also a broader focus on strengthening home rule for local governments. Coalitions of actors working on a broad spectrum of issues have formed to advocate for changes to home rule grants of authority.[161] While it may be an uphill battle in states that do not wish to see local governments exercising greater authority, that kind of advocacy is sorely needed to advance health equity goals.

Depending on the federal administration that is in office, climate health equity advocates may also be able to keep the federal government in the mix of possible allies. The federal government may have an important role to play in the face of state intransigence. The federal government's ability to support local climate and health actions over the objections of the state has not yet been fully decided.[162] There is some case law that might leave an opening for federal statutory and regulatory support of local governments even in the face of state preemption action.[163] Given the current make-up of the Supreme Court and its focus on shrinking federal power,[164] it seems questionable, at best, whether a case testing these theories would result in a win for local governments at this time.

Instead, climate health advocates might be wise to focus on the more modest yet important question of how to get important federal funding support. It is generally accepted—though again, not fully tested—that the federal government can attach conditions to the funds that it disperses, and that those conditions will be enforced even in the face of state objection.[165] Thus, federal funding may provide an important source of local empowerment. The Biden Administration has already taken certain steps to channel federal aid to climate health equity efforts. For instance, soon after taking office, President Biden signed Executive Order 14,008, which, among other things, established the Administration's Justice40 Initiative.[166] The Justice40 Initiative "sets

161 *See, e.g.*, Melton-Fant, *supra* note 133.

162 *See* Sarah J. Fox, *Why Localizing Climate Federalism Matters (Even) During a Biden Administration*, 99 TEX. L. REV. ONLINE 122, 137–38 (2021).

163 Fox, *supra* note 50, at 137 (2021) (summarizing the state of the law).

164 *See, e.g.*, Nina Totenberg, *The Supreme Court Is the Most Conservative in 90 Years*, NPR (July 5, 2022), https://www.npr.org/2022/07/05/1109444617/the-supreme-court-conservative.

165 *Cf.* Lawrence Cty. v. Lead-Deadwood Sch. Dist., 469 U.S. 256, 269–70 (1985).

166 Exec. Order No. 14,008, 86 Fed. Reg. 7619, 7631 (Feb. 1, 2021), https://www.

a goal for disadvantaged communities most impacted by climate change and pollution to receive at least 40 percent of overall benefits from federal investments in climate and clean energy."[167] In July 2021, the Biden Administration published its Interim Implementation Guidance[168] regarding Justice40. While the factors for implementing Justice40 are not entirely straightforward,[169] the Initiative has the potential to provide an important mechanism for funneling federal climate money to communities that need it most. And, as noted, because it comes in the form of federal money, it also carries with it the potential to provide assistance, even to communities that might otherwise have their climate health work stymied by state preemption.

Moreover, in the same week that Justice40 was announced, President Biden signed another Executive Order creating the Office of Climate Change and Health Equity (OCCHE) within the United States Department of Health and Human Services.[170] The OCCHE creates a new focus on climate health within HHS, with an explicit mission to "protect the health of people throughout the US in the face of climate change, especially those experiencing a higher share of exposures and impacts."[171] In particular, OCCHE resources identify communities of color, older adults, children, and low income communities "among the most exposed, most sensitive, and [having] the least individual and community resources to prepare for and respond to health threats."[172] The HHS Office of Environmental Justice was created at the same time.[173]

---

whitehouse.gov/briefing-room/presidential-actions/2021/01/27/executive-order-on-tackling-the-climate-crisis-at-home-and-abroad/.

167 Alina Gonzalez, *How Big of a Deal is Biden's Justice40 Initiative?*, Ctr. for Progressive Reform (Aug. 9, 2021), https://progressivereform.org/cpr-blog/biden-justice40-initiative-big-deal/.

168 Memorandum for the Heads of Departments and Agencies from The Exec. Office of the President, Office of Mgmt. and Budget (July 20, 2021), https://www.whitehouse.gov/wp-content/uploads/2021/07/M-21-28.pdf.

169 *See* Gonzalez, supra note 167.

170 Press Release, U.S. Dep't of Health and Hum. Servs., Biden-Harris Administration Establishes HHS Office of Environmental Justice (May 31, 2022), https://www.hhs.gov/about/news/2022/05/31/biden-harris-administration-establishes-hhs-office-of-environmental-justice.html

171 U.S. Dep't of Health and Hum. Servs, *About the Office of Climate Change and Health Equity (OCCHE)*, Office of the Assistant Sec'y for Health, https://www.hhs.gov/ash/ocche/about/index.html.

172 *See Fourth National Climate Assessment, Chapter 14: Human Health*, U.S. Glob. Change Rsch. Program, https://nca2018.globalchange.gov/chapter/14/ (last updated Mar. 2021).

173 U.S. Dep't of Health and Hum. Servs, *The Office of Environmental Justice*, Office of the Assistant Sec'y for Health, https://www.hhs.gov/ash/oej/index.html.

Together, these two new HHS Offices suggest a greater federal focus on health equity in the face of climate change. They are both very new, and it remains to be seen how they will implement their mission and how courts will respond to any challenges to the ability of federal agencies to empower local action. But having a dedicated federal focus on climate health equity may be an important step towards ensuring that federal responses acknowledge the public health impacts of climate change and the uneven distribution of those impacts. And, at the very least, it may offer an important additional source of pressure on states that seek to quash climate action at the local level.

## Conclusion

Neither targeted advocacy nor federal funding offers a total solution to the problem of unequal distribution of climate effects and corresponding health impacts. What this discussion aims to do is not solve or simplify that problem. Instead, it aims to point out another level of complication in addressing climate health impacts and working toward equity in the face of those impacts. The varied authorities that local governments have to address climate health issues—and the varied appetites that state governments have either for engaging with that question or for allowing local governments within their borders to address it—mean that climate change looks radically different in terms of physical effects, felt impacts, and political power depending on where in the country a person is located. Acknowledging the reality of those disparate impacts, and of the likelihood of additional attacks on local ability to address them, is a necessary part of any climate health response.

# IS META THE NEXT BIG TOBACCO? HOW STATE ATTORNEYS GENERAL CAN USE CONSUMER PROTECTION LITIGATION TO ENFORCE CORPORATE ACCOUNTABILITY

*By Mia Lin**

* J.D., Northeastern University School of Law (2022); B.A., Harvard University Extension School (2019). I want to thank Sharon Persons for her guidance in the early phases of this Article. I am grateful to Julie Aaron for her hard work and diligent and thoughtful edits. I am thankful to Samantha Shusterman and Stuart Rossman for their mentorship and for piquing my interest in Chapter 93A and consumer protection law. I also thank the editors of the *Northeastern University Law Review* for their work in the editorial phase. Finally, I thank my husband Biko for his endless support.

## TABLE OF CONTENTS

## ABSTRACT

*Outrage spread throughout Congress after Facebook whistleblower Frances Haugen revealed that the social media company—now controlled by a parent company, Meta, Inc. ("Meta")—possessed internal studies showing the harm its platform, Instagram, poses to young users' mental health. Despite this outrage, federal lawmakers failed to pass any legislation that would address the problem. On the other hand, a group of 10 bipartisan state attorneys general ("AGs") quickly opened a joint investigation into the company, which could ultimately lead to the states bringing suit against Meta. It is unclear at this point what claims the state AGs may advance against Meta in court. They could, however, follow the examples of past state lawsuits against corporate defendants, which brought claims under state consumer protection laws.*

*State consumer protection statutes ("UDAP laws") generally prohibit unfair and deceptive acts and practices in commerce. This Article examines how AGs can use consumer protection litigation to effectively regulate corporations in emerging contexts, such as social media, the electronic tobacco product market, and climate change—areas where other forms of regulation have failed. Using the 1990s Big Tobacco litigation and former Massachusetts' AG Maura Healey's ("AG Healey") lawsuits as case studies, this Article distills a blueprint that state AGs could follow in a potential consumer protection litigation against Meta. How AG Healey utilized one of the strongest UDAP statutes in the nation—Massachusetts' UDAP law—can serve as a model for other states.*

## INTRODUCTION[1]

When Facebook whistleblower Frances Haugen revealed that the company's internal studies found Instagram usage toxic to teen mental health, government regulators scrambled to implement some semblance of accountability on the social media platform.[2] On the federal level, Congress held legislative committee hearings, where senators questioned Haugen and other company executives.[3] At these hearings, Haugen argued that Facebook needs more regulation and transparency to end its practice of intentionally targeting teenagers through its addictive business model in apps like Instagram.[4] While senators seemingly agreed, comparing Facebook to Big Tobacco companies and promising regulation of the platform,[5] Congress failed to pass any legislation that would address the problem.[6] In contrast, at the state level, 10 attorneys general ("AGs") opened a joint investigation of the company—a tactic that will likely serve as a precursor to multistate enforcement of Meta Platforms, Inc. ("Meta," formerly Facebook, Inc.) through consumer protection litigation.[7]

Consumer protection litigation presents a unique opportunity for state AGs to address corporate malfeasance in emerging contexts

1 This Article addresses the rapidly changing enforcement environment against corporate practices of social media platforms. As such, some references may be outdated by the time of publication.

2 *See* Cat Zakrzewski et al., *Facebook Whistleblower Frances Haugen Tells Lawmakers that Meaningful Reform Is Necessary 'for Our Common Good'*, WASH. POST (Oct. 5, 2021), https://www.washingtonpost.com/technology/2021/10/05/facebook-senate-hearing-frances-haugen/.

3 Vanessa Romo, *4 Takeaways from Senators' Grilling of Instagram's CEO About Kids and Safety*, NPR (Dec. 8, 2021), https://www.npr.org/2021/12/08/1062576576/instagrams-ceo-adam-mosseri-hears-senators-brush-aside-his-promises-to-self-poli.

4 Kari Paul, *Facebook Whistleblower Hearings: Frances Haugen Calls for More Regulation of Tech Giant – as It Happened*, GUARDIAN (Oct. 5, 2021, 11:18 AM) (last updated 2:05 PM), https://www.theguardian.com/technology/live/2021/oct/05/facebook-hearing-whistleblower-frances-haugen-testifies-us-senate-latest-news.

5 *Id.* (quoting Massachusetts Senator Ed Markey, "Congress will be taking action. We will not allow your company to harm our children and our families and our democracy, any longer").

6 Vera Bergengruen, *Congress Can't Agree on How to Reform Big Tech. Frances Haugen Says That's What Facebook Wants*, TIME (Dec. 1, 2021), https://time.com/6125089/frances-haugen-congress-tech-reform/.

7 Clare Duffy, *State Attorneys General Launch Investigation into Meta-Owned Instagram's Impact on Kids*, CNN (Nov. 18, 2021), https://www.cnn.com/2021/11/18/tech/meta-instagram-kids-attorneys-general-investigation/index.html.

where other forms of regulation have failed. Through case studies of the 1990s multistate Big Tobacco litigation and of former Massachusetts AG Maura Healey's ("AG Healey") actions against e-cigarette companies and fossil fuel titan ExxonMobil ("Exxon"), this Article distills a common strategy for state AGs to employ in consumer protection litigation. This Article then hypothesizes how such a strategy can and should be applied to an enforcement action against Meta to hold the company accountable for the harms its product, Instagram, poses to the mental health of young users. Although several state AGs have begun investigating Meta, only one state, Ohio, has sued Meta directly.[8] A consumer protection lawsuit would be a powerful escalation to compel Meta to change its practices, as such a lawsuit presents greater risk for Meta than potential Congressional regulation.[9]

Consumer protection statutes, commonly referred to as Unfair and Deceptive Acts and Practices ("UDAP") laws, generally prohibit unfair and deceptive conduct in trade or commerce to prevent consumer abuse in the marketplace.[10] In emerging areas with little regulation, like social media, UDAP laws can be an effective tool for policymakers to rein in abuses by large corporations.[11] Specifically, since corporations predominantly interact with the public transactionally, nearly all of their conduct can be characterized as a consumer issue.[12] State AGs have capitalized on this fact. By using the consumer "transaction" as merely the vehicle through which enforcement occurs, AGs have employed consumer protection laws to address broad issues of public concern.[13]

8 Katie Canales, *Facebook, Now Meta, Just Got Hit with Its First Major Lawsuit Since a Whistleblower Exposed a Trove of Internal Documents*, INSIDER (Nov. 15, 2021), https://www.businessinsider.com/facebook-papers-whistleblower-lawsuit-ohio-pension-system-seurities-fraud-2021-11. Ohio's lawsuit against Meta is not under consumer protection law but rather alleges that the company violated federal securities law by failing to disclose internal research about its platforms' harmful effects on children to investors. *Id.*

9 *Id.*

10 CAROLYN CARTER ET AL., *What is "UDAP"?*, *in* UNFAIR AND DECEPTIVE ACTS AND PRACTICES (10th ed. 2021), https://library.nclc.org/book/unfair-and-deceptive-acts-and-practices.

11 *See e.g.*, Joelle M. Lester & Kerry Cork, *A Complex Achievement: The Tobacco Master Settlement Agreement*, *in* LOOKING BACK TO MOVE FORWARD: RESOLVING HEALTH & ENVIRONMENTAL CRISES 41, 43 (Hampden T. Macbeth ed., 2020); Exxon Mobil Corp. v. Att'y Gen., 479 Mass. 312, 316 (2018) (quoting Nei v. Burley, 388 Mass. 307, 316 (1983)).

12 *See* David A. Rice, *New Private Remedies for Consumers: The Amendment of Chapter 93A*, 54 MASS. L. Q. 307, 311–12 (1969).

13 *See* Prentiss Cox et al., *Strategies of Public UDAP Enforcement*, 55 HARV. J. LEGIS. 37, 44 (2018). *See also* Cary Silverman & Jonathan L. Wilson, *State Attorney General*

For example, the Massachusetts AG's Office has used the state's consumer protection statute, Chapter 93A, to regulate a wide range of contexts—from gun sales[14] to the opioid crisis.[15]

Consumer protection enforcement actions by state AGs became particularly important during the Trump presidency due to the administration's open hostility to federal regulation.[16] With key federal agencies like the Consumer Financial Protection Bureau surrendering their enforcement duties, state AGs stepped in to protect the public.[17] Even under Democratic presidential administrations that have signaled a greater inclination for government intervention,[18] federal regulation has not kept pace with corporate harm.[19]

There are several causes for the federal regulatory gaps in the consumer context. For one, many corporations, such as oil and gas companies, provide financial rewards in the form of donations to politicians who protect their industries.[20] Additionally, some emerging industries, like social media, are so new that regulation has not been feasible given the gridlock in Washington.[21] In other cases, such as

*Enforcement of Unfair or Deceptive Acts and Practices Laws: Emerging Concerns and Solutions*, 65 KAN. L. REV. 209, 236 (2016) (noting how Pennsylvania's AG utilized the state's UDAP law to regulate staffing levels at skilled nursing facilities in 2015); *id.* at 252 (noting how California's AG utilized the state's UDAP law to regulate vehicle safety in 2013).

14 940 C.M.R. § 16.

15 *See* Press Release, Off. of Att'y Gen. Maura Healey, AG's Office Secures $573 Million Settlement with McKinsey for 'Turbocharging' Opioid Sales and Profiting from the Epidemic (Feb. 4, 2021), https://www.mass.gov/news/ags-office-secures-573-million-settlement-with-mckinsey-for-turbocharging-opioid-sales-and-profiting-from-the-epidemic; Complaint at 9, Commonwealth v. McKinsey & Co., Inc. U.S., No. 2184-CV-00258 (Mass. Super. Ct. Feb. 4, 2021) (alleging defendant consulting company violated Chapter 93A § 2 by working with opioid manufacturers to aggressively promote and sell more opioids to more patients for longer periods of time).

16 Amy Widman, *Protecting Consumer Protection: Filling the Federal Enforcement Gap*, 69 BUFF. L. REV. 1157, 1157–58, 1160 (2021).

17 *Id.* at 1161, 1182–83.

18 *See id.* at 1174 n.87, 1192.

19 *See Report: Corporate Prosecutions Reach Record Low Under Biden*, PUBLIC CITIZEN (Apr. 25, 2022), https://www.citizen.org/news/report-corporate-prosecutions-reach-record-low-under-biden/.

20 *See* Matthew H. Goldberg et al., *Oil and Gas Companies Invest in Legislators that Vote Against the Environment*, 117 PNAS 5111, 5112 (Mar. 10, 2020), https://www.pnas.org/doi/epdf/10.1073/pnas.1922175117.

21 Cecilia Kang, *Congress, Far from 'a Series of Tubes,' Is Still Nowhere Near Reining in Tech*, N.Y. TIMES (Dec. 11, 2021), https://www.nytimes.com/2021/12/11/business/congress-tech-regulation.html.

climate change, while the issue itself is not new, public appetite for regulatory action is a more recent development.[22] In addressing these needs, consumer protection statutes can be an effective means of enforcement by state AGs where federal regulations have fallen short.[23] As executive officers on the state level, AGs face less gridlock and have more flexibility to respond to crises in real time.[24]

Every state in the country has its own consumer protection statute, with each statute's strength varying by state.[25] Most state UDAP laws, however, were enacted between 1965 and 1985.[26] These older UDAP laws never envisioned—nor could they have envisioned—the technological advances that propel the world today.[27] As a result, some UDAP laws may be ill-equipped to apply to modern, unanticipated industries involving e-commerce, electronic communication, social media, and climate change.[28]

Even so, some states, such as Massachusetts, have UDAP laws that are broad enough to apply to an ever-changing landscape.[29] Massachusetts' Chapter 93A is one of the strongest UDAP laws[30] because of its broad and undefined prohibition of unfair or deceptive acts.[31] Such broadness has two advantages. First, because the statute does not define "unfair or deceptive acts," the AG is permitted to apply the statute to emerging industries as they develop, without having to wait for the

22 Alec Tyson & Brian Kennedy, *Two-Thirds of Americans Think Government Should Do More on Climate*, PEW RSCH. CTR. (June 23, 2020), https://www.pewresearch.org/science/2020/06/23/two-thirds-of-americans-think-government-should-do-more-on-climate/.

23 *See* Katie Canales, *Facebooks Bad Few Weeks Could Leave It Facing 2 Threats Even Bigger than New Laws, Analyst Says*, INSIDER (Oct. 12 2021), https://www.businessinsider.com/facebook-whistleblower-hearing-threats-lawsuits-ag-investigations-congress-analyst-2021-10 (finding that state AG-led litigation poses a greater threat to Facebook (now Meta) than federal regulation).

24 Widman, *supra* note 16, at 1182–87.

25 Carolyn Carter, *Consumer Protection in the States: A 50-State Evaluation of Unfair and Deceptive Practices Laws*, NAT'L CONSUMER L. CTR. 1 (Mar. 2018), https://www.nclc.org/images/pdf/udap/udap-report.pdf.

26 Interview with Stuart Rossman, Dir. Litig., Nat'l Consumer L. Ctr., in Boston, Mass. (Feb. 7, 2022).

27 *Id.*

28 *Id.*

29 Cox et al., *supra* note 13, at 45.

30 *See* Carter, *supra* note 25, at 2.

31 *Id.* at 66; *Appendix C: State-by-State Summaries of State UDAP Statutes*, NAT'L CONSUMER L. CTR. 42 (Mar. 2018), https://www.nclc.org/wp-content/uploads/2022/08/udap-appC-1.pdf.

legislature to act.[32] Second, the absence of a concrete definition enables the UDAP statute to be applied to a wide range of contexts because there is no constraint on what constitutes prohibited conduct, so long as plaintiffs can meet the elements of their claim.[33] Such flexibility ensures that the statutory protections remain fresh and relevant.[34]

From 2014 to 2022, AG Healey creatively used Chapter 93A to express a core value that corporations should be held accountable for their misconduct, even when their harm seems distant from whatever transaction tethers the case to consumer law.[35] Because of the litigation that AG Healey initiated, Massachusetts is holding e-cigarette companies accountable for the youth nicotine addiction epidemic, seeking abatement relief to meaningfully address the public health crisis.[36] Moreover, in its case against Exxon, the Commonwealth is fighting for corporate accountability for the climate crisis, which not only affects Massachusetts consumers, but all of humankind.[37]

The newly-elected Massachusetts AG, Andrea Campbell, could continue AG Healey's initiatives by pursuing a consumer protection action against Meta, thereby forcing the most dominant social media company in the United States to face responsibility for the serious risks its products and business model pose to its users' mental health. Such an action could lead to industry-wide changes.

This Article explores the Big Tobacco litigation of the 1990s and the recent actions by AG Healey to establish a common strategy for state AGs to use when pursuing consumer protection litigation to advance corporate accountability in emerging contexts with little regulation—principally, social media.[38] Using Massachusetts as an example, this Article first illustrates the advantages of UDAP laws, particularly in actions brought by state AGs. The Article then analyzes the development of consumer protection litigation by examining the multistate Big Tobacco litigation, a landmark use of UDAP laws to address social harm. Next, by exploring AG Healey's e-cigarette and Exxon litigation, this Article reveals how the UDAP model used against Big Tobacco companies has advanced in light of widespread access to the internet and the rise of social media.

32 Carter, *supra* note 25, at 12; Interview with Stuart Rossman, *supra* note 26; *see also* Cox et al., *supra* note 13, at 45.
33 Rice, *supra* note 12, at 317.
34 Widman, *supra* note 16, at 1163.
35 *See infra* Section IV.
36 *See infra* Section IV.A.
37 *See infra* Section IV.B.
38 *See* Kang, *supra* note 21.

By analyzing the theories of liability in these cases, this Article identifies five primary components to a consumer protection litigation strategy: (1) the AG analogizes the defendants' conduct to that of the Big Tobacco companies; (2) the AG uses science to prove the defendants' knowledge of the harms their products pose; (3) the AG argues that the defendants' knowledge, combined with their efforts to downplay the information to the public, constitutes unfair or deceptive conduct; (4) the AG unites with other state AGs in joint investigations and litigation against the defendants; and (5) the AG seeks damages in the form of abatement for the broad harms the defendants inflicted on the public, using science to plead the scope of relief demanded.

To close, the Article provides a blueprint for how state AGs can apply this strategy to a future enforcement action against Meta for the harm that Instagram poses to young users' mental health.

## I. CONSUMER PROTECTION LAWS ACROSS THE NATION

Every state in the nation has a consumer protection law, statutes that are commonly referred to as UDAP laws.[39] Prior to the adoption of these laws, the Federal Trade Commission Act ("FTC Act") was the main legal mechanism that prohibited unfair or deceptive acts and practices.[40] However, the FTC Act was of limited utility;[41] the FTC Act did not allow private plaintiffs (i.e., individuals and businesses) to pursue relief on their own.[42] Recognizing the need for stronger consumer protections, states utilized various model laws with features of the FTC Act in enacting their own UDAP statutes.[43] Today, state UDAP laws exceed the power of the FTC Act because, in addition to providing a state agency with the power to enforce the law, they provide individual consumers with a private right of action and the ability to collect remedies.[44] As such, UDAP laws have primarily replaced the FTC Act in consumer protection actions today.[45]

Because they are based on the same model laws, state UDAP

39 Carter, *supra* note 25, at 9.

40 *Id.* at 10; *see* 15 U.S.C. § 41 *et seq.*

41 Carter, *supra* note 25, at 10; Interview with Stuart Rossman, *supra* note 26.

42 *The Enforcers,* FED. TRADE COMM'N, https://www.ftc.gov/advice-guidance/competition-guidance/guide-antitrust-laws/enforcers (last visited Feb. 8, 2023).

43 Carter, *supra* note 25, at 10.

44 *Id.* at 10–11.

45 *See id.* at 11 (finding "no federal statute includes a broadly-applicable prohibition of unfair or deceptive practices that is enforceable by consumers" and "many of the federal consumer protection laws that exist are currently under attack").

statutes across the nation share many commonalities.[46] In addition to providing private plaintiffs with a cause of action, typical UDAP statutes empower a state enforcement agency (most commonly the state AG's office) to prohibit an actor from engaging in unfair or deceptive practices.[47] While criminal penalties may be available in some states for egregious violations, UDAP laws are primarily civil statutes.[48] Accordingly, nearly all enforcement of UDAP laws occurs in the civil courts.[49]

Although similar, UDAP laws vary across states in their strength and enforcement. Beyond having broad definitions of "unfair" and "deceptive,"[50] the strongest UDAP statutes provide the AG with rulemaking authority to issue regulations designating particular practices as unfair or deceptive conduct.[51] Despite the regulatory potential that this power brings, only 28 states and the District of Columbia provide their AGs with such rulemaking powers.[52] Massachusetts' UDAP law, Chapter 93A, is one of the statutes that allows the AG to issue regulations.[53] For that reason, Massachusetts' statute exemplifies the power to regulate through consumer protection law.

## II. The Power of Chapter 93A in the Hands of the Massachusetts Attorney General

### *A. Overview: Massachusetts General Laws Chapter 93A*

Since its enactment in 1967, Chapter 93A has served as an indispensable tool for prohibiting unfair or deceptive business practices in the Commonwealth.[54] Similar to other states' UDAP laws, the statute declares unlawful any "[u]nfair methods of competition and unfair or deceptive acts or practices in the conduct of any trade or commerce."[55] As stated above, Chapter 93A authorizes the AG to promulgate regulations that establish which conduct constitutes an unfair or deceptive practice.[56]

46 *See* Widman, *supra* note 16, at 1165–66.
47 Carter, *supra* note 25, at 11.
48 *Id.*
49 *Id.*
50 *Id.* at 12.
51 *Id.* at 16.
52 *Id.*
53 Mass. Gen. Laws ch. 93A, § 2(c).
54 Rice, *supra* note 12, at 307.
55 Mass. Gen. Laws ch. 93A, § 2(a).
56 *Id.* § 2(c).

When originally enacted, Chapter 93A vested the enforcement power to sue solely in the Massachusetts AG.[57] The legislature, however, soon realized that the statute must be amended to include a private right of action.[58] The legislature twice amended Chapter 93A to extend a private right of action to individuals under Section 9 and businesses under Section 11.[59]

Instituting a private right of action under Chapter 93A allowed the AG to focus on cases that involved the public interest, as opposed to private complaints.[60] Under the original statute, the Consumer Protection Division within the AG's office received an increasingly unmanageable volume of consumer complaints, diverting the office's resources away from addressing issues of true public concern.[61] Permitting private entities to litigate their own claims therefore released the Division from "the burden of handling the settlement of all complaints, including those involving primarily private grievances."[62] With greater capacity, the AG's Office has been able to focus on enforcement actions against powerful actors whose unfair or deceptive conduct affects large numbers of Massachusetts consumers in a variety of contexts.[63]

While many Chapter 93A claims arise in consumer-related transactional contexts (e.g., mortgages, predatory lending, and debt settlement), the AG has also used the statute to address broader social harms, such as climate change and issues of public health.[64] Although not obviously transactional in nature, much of the social harm litigation concerns claims of deceptive advertising or unfair marketing practices, which are inherently consumer-related issues.[65] Critics may argue that the AG is improperly stretching Chapter 93A into contexts too far removed from consumer issues. Indeed, during her tenure, AG Healey was accused of "weaponiz[ing] her attorney general's office" to advance a political agenda.[66] However, Section 4 of the statute specifically allows

57 Rice, *supra* note 12, at 308–09.
58 *Id.* at 311.
59 *See* St. 1969, c. 690, § 9 (codified as amended at MASS. GEN. LAWS ch. 93A, § 9); St. 1972, c. 614, § 11 (codified as amended at MASS. GEN. LAWS ch. 93A, § 11).
60 Rice, *supra* note 12, at 311.
61 *Id.* at 309, 311.
62 *Id.*
63 *Id.* at 313 ("The range of transactions covered is, in essence, virtually limitless.").
64 *See id.* at 309, 311.
65 *See id.* at 313 ("The provisions of the section create for them private relief from injuries caused by false advertising, bait-and-switch advertising . . . .").
66 Anthony Brooks, *Healey Leads, Diehl Trails – and Trump Looms Large in Mass. Governor*

the AG to act in the interest of the public.[67] Addressing social harms like youth nicotine addiction and fossil fuel companies' contributions to the climate crisis falls squarely within the public interest.[68]

### *B. The AG's Chapter 93A Regulatory Advantages*

The National Consumer Law Center has ranked Chapter 93A one of the top consumer protection statutes in the country, particularly due to the far-reaching powers it provides the AG.[69] The statute authorizes the AG to bring suit,[70] investigate defendants pre-litigation by issuing a Civil Investigative Demand ("CID"),[71] resolve cases with an Assurance of Discontinuance,[72] and seek broad relief for Massachusetts consumers.[73] The power to investigate prior to litigation allows the AG to strengthen any Chapter 93A complaints through evidence beyond mere information and belief.[74] This often leads to the parties filing a Consent Decree—a settlement-like resolution—without having to engage in further litigation.[75] In addition, Section 4 of Chapter 93A automatically provides the AG with standing to pursue actions against unfair or deceptive conduct on behalf of the public interest.[76] Private plaintiffs, on the other hand, may face issues of standing due to difficulties in alleging

*Race*, WBUR (Sept. 28, 2022), https://www.wbur.org/news/2022/09/28/massachusetts-governor-race-healey-diehl-trump-influence.

67 MASS. GEN. LAWS ch. 93A, § 4.

68 Brooks, *supra* note 66 (quoting former AG Scott Harshbarger, "'Those lawsuits were about consumer protection, environmental protection, civil rights . . . [a]nd the attorney general . . . was representing the broader, public interest of Massachusetts."').

69 *These Are the Most Important Consumer Rights Laws in the U.S.*, FAIRSHAKE (Aug. 24, 2020), https://fairshake.com/consumer-guides/best-consumer-rights-laws-by-state/.

70 MASS. GEN. LAWS ch. 93A, § 4.

71 *Id.* § 6. Most states' UDAP laws empower the state AG to use CIDs for pre-complaint discovery. Even if the actual UDAP law does not provide this right, a state AG may have investigatory powers authorized by another state statute or common law. Cox et al., *supra* note 13, at 45.

72 MASS. GEN. LAWS ch. 93A, § 5. An Assurance of Discontinuance is an administrative agreement between a state and a party under investigation or subject to litigation, where the party stipulates to ceasing their conduct at issue and adopting the measures outlined in the agreement. *See id.*

73 *Id.* § 4.

74 *See* Cox et al., *supra* note 13, at 45–46.

75 Interview with Stuart Rossman, *supra* note 26; *see* Cox et al., *supra* note 13, at 45–46.

76 MASS. GEN. LAWS ch. 93A, § 4.

actual injury, particularly in class actions. For these reasons, Chapter 93A is one of the strongest UDAP laws in the nation[77] and exemplifies the potential of a UDAP litigation strategy.

The Massachusetts AG's Office is both an enforcement and administrative agency, meaning the regulations the AG promulgates under Chapter 93A are enforceable like any other substantive law.[78] Regulations cover a wide range of contexts (e.g., handgun sales,[79] cigarette sales,[80] debt collection,[81] mortgages,[82] and retail marketing[83]), illustrating the diverse areas of public concern that the consumer protection context encompasses. Furthermore, some AG regulations in Massachusetts include a clause stipulating that it is a violation of Chapter 93A when a party fails to comply with any other existing local, state, or federal statute intended to protect consumers from unfair or deceptive practices.[84] Such clauses can therefore provide litigants with a cause of action under Chapter 93A, even where the underlying statute may not.[85]

The AG is an elected constitutional officer who must remain responsible to their constituency.[86] Their main constraints therefore come from the legislature, which determines the AG Office's budget and can overrule AG-promulgated regulations through legislation.[87] Additionally, as a representative of the Executive Branch in Massachusetts, the AG may socially or politically restrain their own actions to avoid conflict and maintain a working relationship with the governor.[88]

77 *See* Carter, *supra* note 25, at 6.

78 Purity Supreme, Inc. v. Att'y Gen., 380 Mass. 762, 775 (1980) ("[W]e hold that the Legislature has, by G.L. c. 93A, Section 2 (c), delegated to the Attorney General the power to promulgate rules and regulations defining with specificity acts and practices which violate G. L. c. 93A, s 2 (a). These rules and regulations have the same force of law as those of any 'agency' as defined in G. L. c. 30A, s 1 (2)."); *see* MASS. GEN. LAWS ch. 93A, § 2(c).

79 940 C.M.R. § 16.

80 *Id.* § 21.

81 *Id.* § 7.

82 *Id.* § 8.

83 *Id.* § 6.

84 *See, e.g.*, *id.* § 16.02(1); *id.* §§ 3.16(3)–(4).

85 Interview with Stuart Rossman, *supra* note 26.

86 MASS. CONST. art. LXIV.

87 Interview with Stuart Rossman, *supra* note 26.

88 *See Massachusetts Government Structure*, MASS.GOV, https://budget.digital.mass.gov/bb/h1/fy10h1/prnt10/exec10/pbuddevstructure.htm (last visited Feb. 17, 2022) (describing the Massachusetts government structure); Richard C. Ausness, *Public Tort Litigation: Public Benefit or Public Nuisance?*, 77 TEMPLE L. REV. 825, 833 (2004) (noting that the attorney general in West Virginia is not authorized to bring a common law claim without the permission of the governor).

Despite these constraints, the AG can capitalize on their status as a public official to effectuate their goals. While private plaintiffs may face barriers to the courtroom due to financial constraints associated with bringing a claim,[89] the AG can rely on the resources of the state, including a large staff of attorneys, to support their actions.[90] Although state funding of the AG's Office is not infinite, it can exceed the funding an individual or class action plaintiff may have. Furthermore, because the AG can bring actions in the public interest, the harm alleged can be less individualized, making it easier to bring a large-scale action.[91] Additionally, Chapter 93A empowers the AG to obtain meaningful relief for Massachusetts consumers.[92] Not only can the AG obtain restitution from defendants, they can also obtain civil penalties and other money to fund abatement and address the harms created by a defendant's unlawful conduct.[93] For example, in AG Healey's actions against e-cigarette companies, the Commonwealth sought damages to fund abatement for the costs of treating youth nicotine addiction.[94]

Those are not the only advantages to being a state official. As a state official, the AG has a powerful platform to strategically address the public and the media in furtherance of their enforcement goals.[95] When the AG announces they are investigating or suing a company, the company faces pressure from negative press, which can make the company more likely to settle or comply with the AG's demands.[96] Finally, the AG's role as a state representative enables them to unite with other state AGs in investigations, litigation, and nationwide settlements.[97] For example, in the Big Tobacco litigation of the 1990s, state AGs joined forces in an effort akin to a class action, bringing claims under each

89 Rice, *supra* note 12, at 317.

90 Interview with Stuart Rossman, *supra* note 26.

91 *Id.*; *see* MASS. GEN. LAWS ch. 93A, § 4.

92 Cox et al., *supra* note 13, at 46.

93 Commonwealth v. Purdue Pharma, L.P., No. 1884-CV-01808BLS2, 2019 WL 5495866, at *5 (Mass. Super. Ct. Sept. 17, 2019) (interpreting the remedies under MASS. GEN. LAWS ch. 93A, § 4).

94 Complaint at 65–66, Commonwealth v. JUUL Labs, Inc., No. 2084-CV-00402 (Mass. Super. Ct. Feb. 12, 2020) [hereinafter *Juul Compl.*].

95 *See* Matthew Lewis, *The Role of the Attorney General in Reforming Social Media for Children*, N.Y.U J. LEGIS. & PUB. POL'Y QUORUM (2022), https://nyujlpp.org/quorum/lewis-how-state-attorneys-general-can/ (noting powers of state AGs include investigation and litigation, direct advocacy to social media firms and legislatures, and public education through press releases and other informational campaigns).

96 *See id.*

97 *See* Cox et al., *supra* note 13, at 52.

of their states' respective laws in a combined legal action.[98] The case concluded in a massive nationwide settlement.[99] When combining their powers, state AGs can share costs of investigation and litigation, and subsequently obtain meaningful relief in one settlement rather than having to pursue each state's claims individually.[100] All of these factors uniquely position the Massachusetts AG to use Chapter 93A to address broad social harms.

### *C. The AG's Strategic Advantages in Chapter 93A Litigation*

Chapter 93A not only provides the AG with regulatory powers, it also affords the AG strategic advantages in litigation. Since the requirements for a Chapter 93A claim differ based on the identity of the plaintiff, the Massachusetts AG enjoys several strategic advantages in litigation that private individuals and businesses do not. Individuals and businesses filing suit under Sections 9 or 11, respectively, must plead all four elements of Chapter 93A: (1) conduct in trade or commerce; (2) unfair or deceptive conduct; (3) actual loss or harm; (4) and causation.[101] Conversely, the AG faces a lower burden of proof to make their claim: they need not allege actual harm[102] and Massachusetts courts are unsettled as to whether they must allege causation.[103]

The AG need not show actual harm because Section 4 authorizes the AG to pursue injunctive relief or civil penalties for harm that has not yet occurred, so long as the AG can show that they "ha[ve] reason to believe that any person is using or *is about to use* any method, act, or practice declared by section two to be unlawful."[104] Massachusetts courts have affirmed this reading of the statute. In *Commonwealth v. Equifax*, the trial court noted:

98 Ausness, *supra* note 88, at 826–27.

99 Lester & Cork, *supra* note 11, at 41.

100 *See id.* at 48–49.

101 *See* MASS. GEN. LAWS ch. 93A, §§ 2, 9, 11; Hershenow v. Enter. Rent-A-Car Co. Bos., Inc., 445 Mass. 790, 798 (2006); Auto Flat Car Crushers, Inc. v. Hanover Ins. Co., 469 Mass. 813, 820 (2014).

102 MASS. GEN. LAWS ch. 93A, § 4.

103 *Compare* Commonwealth v. Equifax, Inc., No. 1784-CV-03009BLS2, 2018 WL 3013918, at *5 (Mass. Super. Ct. Apr. 3, 2018) (holding that the Commonwealth need not allege causation), *with* Commonwealth v. Purdue Pharma, L.P., No. 1884-CV-01808BLS2, 2019 WL 5495866, at *5 (Mass. Super. Ct. Sept. 17, 2019) (finding that the court "assumes that some causation between the conduct at issue and some quantifiable harm must be established").

104 MASS. GEN. LAWS ch. 93A, §4 (emphasis added).

> [T]he Attorney General, unlike a private litigant who sues under § 9 or § 11 of c. 93A, is only required to prove that unfair or deceptive acts or practice took place in trade or commerce . . . [the AG] is not required to allege or prove that any individual consumer was actually harmed by the allegedly unfair or deceptive act or practice.[105]

Whether the AG must show causation, however, remains unclear. Massachusetts Superior Court cases have differed in their holdings, and the highest state court has not yet addressed the issue. In 2018, in evaluating a motion to dismiss, the court in *Equifax* held that since the AG was not required to allege an individualized harm, the AG need not allege causation.[106] In contrast, in 2019—only a year later—the court in *Commonwealth v. Purdue Pharma, L.P.* required that the AG allege causation to withstand a motion to dismiss.[107] In that case, AG Healey relied on *Equifax* to argue that because the Commonwealth "need not prove that any consumer actually was harmed," it also did not need to prove causation.[108] Still, despite stating that "questions of causation generally should not be decided on a motion to dismiss, given their fact-intensive nature," the court reasoned that "[f]or purposes of this Motion [to Dismiss] . . . this Court assumes that some causation between the conduct at issue and some quantifiable harm must be established."[109] In ultimately finding AG Healey to have met her burden, the court elaborated that, to show causation, the AG must prove the defendant's actions were the "cause in fact" and the proximate cause of the harm.[110] Both *Equifax* and *Purdue Pharma* were decided in Massachusetts Superior Court. Notably, the Massachusetts Supreme Judicial Court ("SJC") has yet to weigh in on the issue of whether the AG must plead causation for a Chapter 93A claim. Given the uncertainty, an AG can strengthen their complaint by alleging causation.

The AG's use of Chapter 93A to address changing, contemporary social harms falls squarely within the application of the statute as contemplated by the legislature. Chapter 93A does not define what constitutes an unfair or deceptive act or practice.[111] As such, the AG can promulgate regulations declaring a wide range of practices unfair

105 *Equifax, Inc.*, 2018 WL 3013918, at *5 (citing Commonwealth v. Fall River Motor Sales, Inc., 409 Mass. 302, 312 (1991)).

106 *Id.*

107 *Purdue Pharma, L.P.*, 2019 WL 5495866, at *5.

108 *Id.*

109 *Id.*

110 *Id.*

111 *See* MASS. GEN. LAWS ch. 93A, § 2(a).

or deceptive.[112] If there is no regulation prohibiting such conduct, the AG may bring a court action arguing that a practice is unfair or deceptive under Chapter 93A.[113] Because the SJC has held that "[i]t is not the definition of an unfair act which controls, but the context—the circumstances to which that single definition is applied," the courts engage in a case-by-case analysis of each claim.[114] The SJC found that this adaptability was an intentional virtue of the statute, where "[the] flexible set of guidelines as to what should be considered lawful or unlawful under c. 93A suggests that the Legislature intended the terms 'unfair and deceptive' to grow and change with the times."[115]

To determine what constitutes "unfair" conduct, Massachusetts courts apply a multifactor test. Specifically, courts look to three factors: "(1) whether the practice . . . is within at least the penumbra of some common-law, statutory, or other established concept of unfairness; (2) whether it is immoral, unethical, oppressive, or unscrupulous; [and] (3) whether it causes substantial injury to consumers (or competitors or other businessmen)."[116] The AG has used these factors to regulate areas of public interest, including building safety,[117] mortgage lending,[118] and food safety.[119] More recently, AG Healey argued that e-cigarette companies engage in unfair conduct by targeting young people in their advertising, despite the harms that their products pose in creating youth nicotine addiction.[120] The flexibility of the multifactor test to determine

112 *Id.* § 2(c).

113 *Id.* § 4.

114 Kattar v. Demoulas, 433 Mass. 1, 14 (2000) (quoting Kerlinsky v. Fidelity & Deposit Co., 690 F. Supp. 1112, 1119 (D. Mass. 1987), *aff'd*, 843 F.2d 1383 (1st Cir. 1988)) .

115 Exxon Mobil Corp. v. Att'y Gen., 479 Mass. 312, 316 (2018) (quoting Nei v. Burley, 388 Mass. 307, 313 (1983)).

116 PMP Assocs., Inc. v. Globe Newspaper Co., 366 Mass. 593, 596 (1975) (quoting Federal Trade Commn. v. R. F. Keppel & Bro. Inc. 291 U.S. 304, 309-313 (1934)) (alteration in original).

117 *See* Klairmont v. Gainsboro Rest., Inc., 465 Mass. 165, 175–77 (2013) (finding a violation of building codes was unfair where defendants consciously flouted building code regulations despite knowing about the danger their actions posed).

118 *See* Commonwealth v. Fremont Inv. & Loan, 452 Mass. 733, 743 (2008) (finding a mortgage lender's practice of issuing subprime loans was unfair conduct, as it knew or should have known that the borrower would not be able to make necessary payments).

119 *See* Newly Wed Foods, Inc. v. Superior Nut Co., No. 05-0454E, 2010 Mass. Super. LEXIS 57, at *11–12, *15 (Mass. Super. Ct. Feb. 18, 2010) (finding wholesale food seller's knowing failure to disclose its product contained peanuts was unfair because failure to disclose food allergens was a "well-established concept of unfairness within the food industry").

120 *See* Complaint at 1, Commonwealth v. Eonsmoke, LLC, No. 1984-CV-01728 (Mass.

"unfairness" thus provides the AG with considerable discretion to use Chapter 93A to address emerging social harms.[121]

The test for proving "deceptive" conduct is similarly flexible. An act or practice is deceptive "if it could reasonably be found to have caused a person to act differently from the way he otherwise would have acted."[122] While the word "caused" in the definition seemingly requires plaintiffs to allege that actual consequences have occurred as a result of the defendant's conduct, the word is preceded by the conditional phrase "could reasonably be found."[123] As such, plaintiffs need only allege that the deceptive conduct has "a tendency to deceive" consumers and influence their decisions, not that it actually caused consumers to act differently than they otherwise would have.[124] To illustrate, "[A]n advertisement is deceptive when it *has the capacity* to mislead [reasonable] consumers . . . [and] entice a reasonable consumer to purchase a product."[125] An advertisement does not need to be completely false in order to be deceptive under the statute: "The criticized advertising may consist of a half truth, or even may be true as a literal matter, but still create an over-all misleading impression through failure to disclose material information."[126] Accordingly, courts tend to liberally construe what constitutes deceptive advertising.[127] In an early example of state

Super. Ct. May 29, 2019) [hereinafter *Eonsmoke Compl.*]; *Juul Compl.*, *supra* note 94, at 2.

121 *See* Kattar v. Demoulas, 433 Mass. 1, 13 (2000) ("Chapter 93A does not define what constitutes an 'unfair or deceptive act or practice.' Such a definition would be impossible, because, as the Appeals Court aptly noted, '[t]here is no limit to human inventiveness in this field.'") (quoting Levings v. Forbes & Wallace, Inc., 8 Mass. App. Ct. 498 503 (1979)); *see also* Exxon Mobil Corp. v. Att'y Gen., 479 Mass. 312, 316 (2018) (describing an AG investigation concerning climate change as "a distinctly modern threat that grows more serious with time").

122 Lowell Gas Co. v. Att'y Gen., 377 Mass. 37, 51 (1979).

123 *Id.*

124 Aspinall v. Philip Morris Cos., 442 Mass. 381, 394 (2004) (quoting Leardi v. Brown, 394 Mass. 151, 156 (1985)) (internal citations omitted). Although the AG need not allege harm due to the provisions of Section 4, discussed above, individuals and businesses must allege more than mere deceptive advertising; deceptive advertising cannot on its own constitute a per se injury to consumers who purchase the product. Instead, the SJC has held that "a plaintiff bringing an action . . . under [Chapter 93A] must allege and ultimately prove that she has, as a result [of the statutory violation], suffered a distinct injury or harm that arises from the claimed unfair or deceptive act." Shaulis v. Nordstrom, Inc., 865 F.3d 1, 8 (1st Cir. 2017) (quoting Tyler v. Michaels Stores, Inc., 464 Mass. 492, 503 (2013)) (alterations in original).

125 Aspinall v. Philip Morris Cos., 442 Mass. at 396 (emphasis added).

126 *Id.* at 394–95.

127 *See* Kattar v. Demoulas, 433 Mass. 1, 13–14 (2000).

AGs using consumer protection law and derivative regulations to tackle social harm, states capitalized on the flexibility of "deceptive" conduct during the Big Tobacco litigation.

## III. BIG TOBACCO: THE ORIGINAL MODEL

The Big Tobacco litigation of the 1990s and the regulations that followed stand as one of the most well-known instances of consumer protection laws being used to address broad social harms—in this instance, public health and the well-being of children.[128] Originally, private individuals and private classes of individuals sued the Big Tobacco companies, but they had limited success.[129] It was not until state AGs united in a concerted front of litigation that the Big Tobacco companies bowed to the regulators' demands in an unprecedented nationwide settlement.[130]

### *A. Building a Strategy: History of the Big Tobacco Litigation*

The notorious misconduct of the tobacco industry positions the Big Tobacco litigation as a powerful example of how a consumer protection action can regulate an entire industry.[131] The Big Tobacco companies became the ultimate corporate villains, and contemporary plaintiffs continue to analogize the defendants in their cases to those in Big Tobacco to emphasize the egregiousness of the conduct at issue.[132] Additionally, Big Tobacco companies essentially wrote the playbook on unlawful business strategies that future corporations continue to misguidedly follow.[133] Specifically, while Big Tobacco companies had information that cigarettes were harmful to human health, they deceived the public about these dangers by denying cigarettes' addictiveness and smoking's connection to cancer.[134] For decades, Big Tobacco companies like Phillip Morris Incorporated, R.J. Reynolds Tobacco Company, Brown & Williamson Tobacco Corporation, and Lorillard Tobacco Company knew about the serious health dangers

128 PATRICIA A. DAVIDSON, WHAT'S OLD IS NEW AGAIN: MASSACHUSETTS' 1999 TOBACCO ADVERTISING REGULATIONS 6–7 (2010), https://www.phaionline.org/wp-content/uploads/2010/03/MA_AG_ADV_REG_FINAL.pdf.

129 Lester & Cork, *supra* note 11, at 43.

130 *Id.* at 49–51.

131 *Id.* at 41.

132 *See* discussion *infra* Section IV.A.

133 *See* Lester & Cork, *supra* note 11, at 51.

134 *Id.* at 44–47.

their tobacco products posed but obfuscated the information and misled the public.[135] The tobacco companies cast doubt on the scientific studies that linked smoking to cancer while marketing their products to vulnerable populations, including children.[136] A similar set of facts emerge in contemporary cases, like those pursued by AG Healey, and in a potential case against Meta. In all of these cases, a large corporation or an entire industry possesses internal information or knowledge that its products are dangerous, and yet they deceive consumers, downplay the harm, and unfairly target vulnerable populations, such as youth.

The Big Tobacco litigation evolved from mostly unsuccessful individual claims, to moderately successful private class actions, and finally to actions by state AGs that resulted in a massive nationwide settlement.[137] Initially, as evidence of the health risks associated with cigarettes mounted from the 1950s to 1970s, individual smokers began to sue the tobacco companies, with few victories.[138] "At the time, cigarettes were hardly viewed as the enemy," with tobacco companies sponsoring "game shows and cartoons and cigarette ads featur[ing] endorsements from doctors, dentists, and celebrities."[139] The early plaintiffs sought "monetary damages for medical expenses, lost wages, and pain and suffering caused by [the tobacco companies'] products."[140] These cases advanced theories of negligence, product liability, and personal injury.[141] Plaintiffs were largely unsuccessful, however, as the companies won on arguments of contributory negligence, portraying plaintiffs as "'morally responsible for their own illness' because they had made the choice to smoke, fully aware of the risks."[142]

A 1983 landmark lawsuit, *Cipollone v. Liggett Group*,[143] made public for the first time internal industry documents that "reveal[ed] what the tobacco companies knew about the health effects and harms of smoking, when they learned that information, and what they did with their knowledge."[144] The documents showed that the tobacco companies were "fully aware of the risks of smoking" and yet "intentionally and

135 *Id.* at 45, 49.
136 *Id.* at 46–51.
137 *Id.* at 43–51 (outlining the different waves of litigation).
138 *Id.* at 44.
139 Kristi Keck, *Big Tobacco: A History of Its Decline*, CNN (June 19, 2009), https://edition.cnn.com/2009/POLITICS/06/19/tobacco.decline/#.
140 Lester & Cork, *supra* note 11, at 44.
141 *Id.* at 44–46.
142 *Id.* at 46 (internal quotation marks omitted).
143 Cipollone v. Liggett Grp., 505 U.S. 504 (1992).
144 Lester & Cork, *supra* note 11, at 46.

aggressively deceiv[ed] the public."[145] These revelations turned the tide on the public perception of the tobacco industry, which put pressure on public officials and pushed future litigation to move beyond personal injury and towards rebuking corporate malfeasance.[146]

By the 1990s, the medical community reached a consensus that cigarette smoking caused diseases such as cancer, and litigants began to achieve greater success in their claims against Big Tobacco companies.[147] Private plaintiffs brought claims as class actions, which allowed them to "amass resources and expertise on a scale sufficient to challenge the industry's litigation juggernaut."[148] Plaintiffs desperately needed these resources to win because the industry consistently used a "scorched earth litigation strategy," where it devoted its vast resources to delay cases, drive up costs, flood opponents with overwhelming and useless information, and abuse the discovery process.[149] To bring down the Big Tobacco companies for their misconduct, it would take a group of well-resourced plaintiffs with strong enforcement power. By 1994, state AGs brought the power of their offices to the litigation fray.[150]

With states forced to pay high Medicaid bills for their residents' smoking-related illnesses, almost every state in the nation sued the tobacco industry between 1994 and 1998 to recover such incurred costs.[151] The state AGs put forth a variety of theories of liability.[152] Some states, like Maryland,[153] utilized their UDAP statutes to allege that Big Tobacco companies engaged in deceptive advertising and unfair marketing to vulnerable populations.[154] Other states brought claims under the Racketeer Influenced and Corrupt Organization ("RICO") statutes, arguing that by hiding the harms of smoking, tobacco companies conspired to mislead consumers, public officials, and the general public.[155] On the other hand, Scott Harshbarger ("AG Harshbarger"), the Massachusetts AG at the time, relied on the power of Chapter 93A to promulgate the lasting regulations that still govern tobacco sales in

145 *Id.*
146 *Id.*
147 *Id.* at 47–48.
148 *Id.* at 48.
149 *Id.* at 47–48.
150 *Id.* at 49.
151 *Id.*
152 *See e.g.*, *id.* at 44.
153 Ausness, *supra* note 88, at 833.
154 Lester & Cork, *supra* note 11, at 48.
155 *Id.* at 49.

the Commonwealth today.[156]

The purpose of the various lawsuits and regulation efforts was not just to recover state costs incurred from treating the illnesses of cigarette smokers. The AGs also sought to change the public's perception of the tobacco industry by exposing its lies to ultimately reduce youth smoking, prevent tobacco companies from advertising to children, and secure monetary damages to fund tobacco prevention and control programs.[157]

The wave of state lawsuits threatened the Big Tobacco companies' financial viability, causing them to settle the claims in a nationwide settlement.[158] On November 23, 1998, Philip Morris, R.J. Reynolds, Brown & Williamson, and Lorillard reached a Master Settlement Agreement ("MSA") with 46 states and five U.S. territories.[159] The MSA is "the largest civil litigation settlement in U.S. history."[160] The terms of the MSA continue to apply to the tobacco industry's present and future conduct.[161] The MSA requires "the participating [cigarette] manufacturers to make annual payments to the settling states in perpetuity," "that tobacco industry documents be made available to the public," and "that the participating manufacturers . . . fund . . . [the] National Public Education Foundation for tobacco control activities," among other things.[162] The MSA also restricted, and continues to restrict, the industry's advertising methods.[163] It prohibits "participating manufacturers from engaging in advertising, marketing, and promotional activities that target minors" and prohibits the

156 DAVIDSON, *supra* note 128, at 1. Prior to promulgating such regulations, AG Harshbarger also filed suit against several companies in the tobacco industry. Massachusetts' litigation claims, however, were not based on Chapter 93A, instead alleging five other counts: "[T]he undertaking and violation of a special duty regarding the health effects of smoking (Count I); sales of tobacco products in breach of a warranty of merchantability (Count II); conspiracy to suppress information regarding the safety of smoking (Count III); restitution for injury caused by wrongful conduct (Count IV); and unjust enrichment from unlawful conduct (Count V)." Mass. v. Philip Morris, Inc., 942 F. Supp. 690, 692 (D. Mass. 1996) (noting the claims brought by Massachusetts); *see Massachusetts Files Suit Against Tobacco Industry*, N.Y. TIMES (Dec. 20, 1995), at A16.

157 Lester & Cork, *supra* note 11, at 50.

158 *Id.* at 54–56.

159 *Id.* at 56; *The Tobacco Master Settlement Agreement*, MASS.GOV., https://www.mass.gov/service-details/the-tobacco-master-settlement-agreement (last visited Dec. 2, 2021).

160 Lester & Cork, *supra* note 11, at 56.

161 *See e.g.*, *id.* at 58.

162 *The Tobacco Master Settlement Agreement*, *supra* note 159.

163 *Id.*

manufacturers from making "material misrepresentations of fact regarding the health consequences of smoking."[164]

While the MSA was an incredible achievement for the litigating states, some states' AGs lamented that it did not go far enough in building a strong tobacco control infrastructure.[165] For example, although the tobacco companies must provide states with substantial annual payments, the settlement did not dictate how the money would be used, and most state legislatures have diverted the funds to non-public-health areas.[166] Additionally, loopholes in the settlement allowed tobacco companies to continue to engage in aggressive marketing strategies that are not covered by the settlement, such as point-of-sale advertising and event sponsorship.[167]

Massachusetts AG Harshbarger criticized the settlement.[168] In a public address in November 1998, AG Harshbarger announced that in addition to accepting the MSA, he would be promulgating tobacco sale regulations under his authority granted by Chapter 93A—stating that the "terms of the settlement are not 'ideal,' and that 'before I leave this office in January, I will promulgate first-in-the-nation consumer protection regulations that will, among other things, limit the advertising of tobacco products in retail establishments within 1,000 feet of schools.'"[169] AG Harshbarger kept his word and in 1999, the AG's Office promulgated regulations under Section 2(c) that limit certain advertising and sales practices for a variety of tobacco products, including cigarettes.[170] The regulations were primarily intended to shield the youth from predatory tobacco advertising and to increase enforcement prohibiting tobacco sales to underage consumers.[171]

164 *Id.*

165 Lester & Cork, *supra* note 11, at 71, 74.

166 *Id.* at 69, 74.

167 *Id.* at 71.

168 DAVIDSON, *supra* note 128, at 9–10.

169 *Id.* at 9, n.54, 55.

170 *Id.* at 1; *see* 940 CMR § 21.00 *et seq.*; 940 CMR § 22.00 *et seq.*

171 DAVIDSON, *supra* note 128, at 1, 3–4; *see* 940 CMR § 21.01 ("The purpose of 940 CMR 21.00 is to eliminate deception and unfairness in the way cigarettes, smokeless tobacco products, and electronic smoking devices are marketed, sold and distributed in Massachusetts in order to address the incidence of cigarette smoking, the use of smokeless tobacco and electronic smoking devices by youth. 940 CMR 21.00 imposes requirements and restrictions on the sale and distribution of cigarettes and smokeless tobacco products and electronic smoking devices in Massachusetts in order to prevent access to such products by underage consumers and accidental injury to children as a result of ingestion of or contact with liquid nicotine.").

The tobacco industry strongly opposed the regulations in Massachusetts.[172] An industry spokesman accused AG Harshbarger of "'grandstanding' and 'public posturing,' characterizing the Attorney General as 'a politician who prefers rhetoric over results.'"[173] Members of the industry challenged the regulations in federal court, arguing that federal law preempted the state regulations and that the regulations violated the First Amendment.[174] Although the AG received mostly favorable rulings from the lower courts, the Supreme Court eventually annulled the outdoor advertising and point-of-sale regulations.[175] However, the case was not a total loss for the Commonwealth: the Court upheld the tobacco sales and distribution regulations.[176]

### *B. Takeaways from Big Tobacco*

The Big Tobacco case makes several contributions to the litigation strategy distilled in this Article. First, the Big Tobacco litigation provided an archetype of an insidious defendant. The misconduct of the Big Tobacco industry is so notorious that litigants frequently analogize corporate malfeasance in other industries to the actions of the tobacco companies.[177] For example, in the early 2000s, impact litigators invoked the "tobacco model" in consumer protection claims against the soft drink industry for deceptively marketing their obesity-causing products to children.[178] One of the leading lawyers in that effort, Richard Daynard, sought to prohibit soda vending machines in schools, comparing soda's harm to that of cigarettes: "It is less egregious, but it is a little like having a cigarette machine in a school."[179] By analogizing a defendant's actions to the notoriety and sheer scale of the unlawful conduct by the Big Tobacco companies, plaintiffs can communicate the egregiousness of said defendant's conduct in their own cases.

Second, the Big Tobacco litigation exemplifies how state

172 *See e.g.*, DAVIDSON, *supra* note 128, at 13, 19.
173 *Id.* at 13 (citation omitted).
174 *Id.* at 1.
175 *Id.*
176 *Id.* AG Harshbarger's proposed outdoor advertising regulations prohibited tobacco ads in enclosed stadiums, from inside retail establishments facing toward or visible from outside the retail building, and in any location within a 1,000 foot radius of any public playground or elementary or secondary school. *Id.* at 5.
177 *See* discussion *infra* Section IV.
178 *See* Sarah Taylor Roller et al., *Obesity, Food Marketing and Consumer Litigation: Threat or Opportunity?*, 61 FOOD & DRUG L. J. 419, 441 (2006).
179 *Id.* at 441–42 (citation omitted).

AGs can use UDAP laws combined with scientific evidence, especially the industry's own internal studies, to prove the unfair conduct and deception of corporate defendants. This feature also appears in the Exxon litigation discussed in Section IV.B of this Article.[180] Third, the Big Tobacco case showcases the power of state AGs when they unite in litigation. The consolidated lawsuit can be thought of as a class action of AG plaintiffs—with the litigation's success further promoting future collaboration among state AGs.[181] Fourth, the litigation serves as an early example of state AGs seeking relief in the form of abatement for state health care costs.[182] State AGs are currently employing this strategy in ongoing e-cigarette litigation.[183] Finally, AG Harshbarger's use of his authority to issue regulations under Chapter 93A marks a show of strength of the potential for state UDAP laws to regulate an industry that had escaped other forms of regulation.[184]

## IV. DEVELOPING THE DOCTRINE: E-CIGARETTES AND EXXONMOBIL, THE NEW BIG TOBACCO

AG Healey built on the model employed against the Big Tobacco companies and ambitiously used UDAP litigation to pursue corporate accountability in emerging contexts, including vaping, social media, and climate change. Despite the exemplary downfall of the Big Tobacco companies, contemporary corporations continue to engage in similar misconduct. However, the world has drastically changed in the decades since the 1990s, especially with the advent of the internet.[185] The interconnectedness and immediacy of the internet has made science more accessible[186] and revolutionized advertising through the

180 *See generally* Amended Complaint, Commonwealth v. Exxon Mobil Corporation, No. 1984-CV-03333 (Mass. Super. Ct. June 5, 2020), Docket File Ref. No. 24 [hereinafter *Exxon Mobil Am. Compl.*] (using scientific evidence and Exxon's internal knowledge to allege Chapter 93A claim).

181 *See Multistate Litigation and Settlements*, NAAG, https://www.naag.org/issues/antitrust/multistate-litigation-and-settlements/ (last visited Jan. 2, 2023).

182 *See* Lester & Cork, *supra* note 11, at 50.

183 *See* discussion *infra* Section IV.A.

184 DAVIDSON, *supra* note 128, at 1, 3–4.

185 Caitlin Dewey, *36 Ways the Web Has Changed Us*, WASH. POST (Mar. 12, 2014), https://www.washingtonpost.com/news/arts-and-entertainment/wp/2014/03/12/36-ways-the-web-has-changed-us/.

186 Jackie Flynn Mogensen, *The Pandemic Made Science More Accessible than Ever. Let's Keep It that Way*, MOTHER JONES (July 6, 2021), https://www.motherjones.com/politics/2021/07/the-pandemic-made-science-more-accessible-than-ever-lets-keep-it-that-way/.

emergence of social media.[187] As such, while the Big Tobacco litigation provides the basic consumer protection litigation strategy model, AG Healey's cases against e-cigarette companies and Exxon build upon that foundation, adapting the strategy for the 21st century. Specifically, the e-cigarette cases advance a novel theory for assessing penalties based on social media marketing while the Exxon case posits a "vote with their dollar" theory of causation[188] to link a specific corporation's conduct to broad societal harm.

While the current e-cigarette and Exxon litigation mark an extension of Chapter 93A into new contemporary contexts, the harms alleged continue to fall within the public interest as the statute authorizes the AG to protect.[189] The next two sections provide a closer look at the precise legal theories the Commonwealth alleges in these present-day cases.

### *A. E-Cigarettes: Consumer Protection in a Social Media Landscape*

Like the tactics of state AGs in achieving the Big Tobacco MSA of 1998, AG Healey, on behalf of the Commonwealth, used consumer protection law to hold e-cigarette and vaping companies accountable for their role in contributing to the youth nicotine addiction epidemic. The Big Tobacco litigation focused on combustible cigarettes, but as technology evolved, novel tobacco products, including e-cigarette and vaping devices, emerged.[190] E-cigarette companies have modeled much of their marketing on Big Tobacco marketing—notably, through targeted advertising to youth—and state AGs are invoking the Big Tobacco model of litigation in going after these newer tobacco companies.

In 2018, AG Healey announced her office was investigating online e-cigarette retailers to determine if they were in violation of state laws and regulations, including Chapter 93A and the regulations

187 *How Social Media Has Changed Marketing*, UNIV. TEX. AUSTIN, https://sites.utexas.edu/leverage/how-social-media-has-changed-marketing/#:~:text=Furthermore%2C%20since%20social%20media%20usually,base%20faster%20and%20more%20efficiently (last visited Jan. 2, 2023).

188 As discussed in Section IV.B, *infra*, the Commonwealth's "vote with their dollar" theory of causation in the Exxon case posits that, had Exxon not deceived investors and the public, consumers would express their moral values by not using fossil fuel products or Exxon products, thereby taking their "dollars" to businesses other than Exxon.

189 *See* MASS. GEN. LAWS ch. 93A, § 4.

190 *See* Micah L. Berman, *Tobacco Litigation, E-Cigarettes, and the Cigarette Endgame*, 13 NE. U. L. REV. 219, 229–34 (2021).

promulgated pursuant to its authority.[191] As a result of that investigation, AG Healey sued two major e-cigarette companies: Eonsmoke, LLC ("Eonsmoke") in 2019,[192] and Juul Labs, Inc. ("Juul") in 2020.[193] In both cases, the AG alleged that the companies violated Chapter 93A by intentionally targeting young people through their advertising; failing to verify the age of online purchasers of their products; and failing to ensure shipments of their products were received by someone 21 years or older, which is the state's minimum legal sales age for tobacco products.[194] Additionally, like the strategy of West Virginia's suit against Big Tobacco,[195] AG Healey also brought a public nuisance claim against Juul for contributing to and/or causing the public nuisance of youth nicotine use and addiction.[196] In fact, AG Healey accused Juul—which is widely viewed as the original and most dominant vaping company in the industry[197]—of "*creating* a youth vaping epidemic by intentionally marketing and selling its e-cigarettes to young people."[198]

Eonsmoke was the first case AG Healey filed as a result of her investigation of the vaping industry.[199] Although Juul is a "bigger fish" in the e-cigarette and vaping industry, the AG used Eonsmoke as a way of testing her legal theories for her case against Juul, with the goal of setting positive precedent that could later be applied in the Juul case.

Because there was less at stake in terms of monetary recovery, Eonsmoke was a strategic test case. Eonsmoke is a smaller company than Juul and held a smaller share of the Massachusetts e-cigarette market. For comparison, Eonsmoke brought in $90 million in revenue

191 Press Release, Off. of Att'y Gen. Maura Healey, AG Healey Announces Investigation into JUUL, Other Online E-Cigarette Retailers Over Marketing and Sale to Minors (July 24, 2018), https://www.mass.gov/news/ag-healey-announces-investigation-into-JUUL-other-online-e-cigarette-retailers-over-marketing.

192 *Eonsmoke Compl.*, *supra* note 120, at 1.

193 *Juul Compl.*, *supra* note 94, at 1.

194 Press Release, Off. of Att'y Gen. Maura Healey, AG Healey Sues National E-cigarette Retailer Eonsmoke for Marketing and Selling Nicotine Vaping Products to Minors (May 30, 2019), https://www.mass.gov/news/ag-healey-sues-national-e-cigarette-retailer-eonsmoke-for-marketing-and-selling-nicotine; *Attorney General's Office Lawsuit Against JUUL*, OFF. OF ATT'Y GEN. MAURA HEALEY, https://www.mass.gov/lists/attorney-generals-office-lawsuit-against-juul (last visited Dec. 7, 2021).

195 Ausness, *supra* note 88, at 833.

196 *Juul Compl.*, *supra* note 94, at 64–65.

197 *See* Jia Tolentino, *The Promise of Vaping and the Rise of Juul*, NEW YORKER (May 7, 2018), https://www.newyorker.com/magazine/2018/05/14/the-promise-of-vaping-and-the-rise-of-juul.

198 *Attorney General's Office Lawsuit Against JUUL*, *supra* note 194 (emphasis added).

199 AG Healey Sues National E-cigarette Retailer Eonsmoke for Marketing and Selling Nicotine Vaping Products to Minors, *supra* note 194.

in 2019, and, "[b]etween 2015 and 2018, Eonsmoke completed at least 2,347 transactions consisting of the sale of e-cigarettes to consumers in Massachusetts through its website."[200] On the other hand, Juul projected $3.4 billion in revenue in 2019,[201] and between June 2015 and July 2019, Massachusetts consumers completed over 106,000 transactions from the Juul e-commerce website, amounting to over $6,795,600 in sales.[202]

Additionally, Eonsmoke's alleged unfair or deceptive conduct was more egregious and obvious than Juul's. Consider that from 2015 to 2018, Eonsmoke had absolutely no age-verification program for online sales,[203] whereas Juul at least had an age-verification system (which the Commonwealth alleges was still inadequate).[204] Furthermore, Eonsmoke's advertising was more blatantly marketed to youth, including a 2018 social media advertisement featuring a picture of a vaping device, which looks like a USB, with the caption: "Mom! It's a USB Drive! #eonsmoke."[205] Despite the promise of Eonsmoke as a test case for Juul, in the end it did not set much of a precedent as the court defaulted the defendants and the case later settled, leaving key questions about the Commonwealth's legal theories undetermined.[206]

One such remaining question is how the court should assess civil penalties under Chapter 93A for social media advertising as opposed to print advertising. Chapter 93A stipulates that the AG may recover civil penalties of up to $5,000 per violation of the statute.[207] Massachusetts courts have ruled that in previous cases of unfair or deceptive advertising related to print, radio, or television advertisements, each instance of publication of those ads constitutes a violation.[208] However, print,

200 Commonwealth's Memorandum of Law in Support of Motion for Assessment of Damages & Entry of Final Judgments & Permanent Injunction Against Defaulted Defendants, at 4, 41, Commonwealth v. Eonsmoke, LLC, No. 1984-CV-01728, (Mass. Super. Ct. May 7, 2021) [hereinafter *Eonsmoke Mem. Assessment of Damages*].

201 *Juul Expects Skyrocketing Sales of $3.4 Billion, Despite Flavored Vape Restrictions*, Bloomberg (Feb. 22, 2019), https://www.bloomberg.com/news/articles/2019-02-22/juul-expects-skyrocketing-sales-of-3-4-billion-despite-flavored-vape-ban.

202 *Juul Compl.*, *supra* note 94, at 35.

203 First Am. Compl., Commonwealth v. Eonsmoke, LLC, No. 1984-CV-01728, 24 (Mass. Super. Ct. Nov. 9, 2020) [hereinafter *Eonsmoke Am. Compl.*].

204 *Juul Compl.*, *supra* note 94, at 35–38.

205 *Eonsmoke Am. Compl.*, *supra* note 203, at 21.

206 Press Release, Off. of Att'y Gen. Maura Healey, AG Healey Secures Nearly $51 Million from National E-cigarette Retailer and Owners for Marketing and Selling Vaping Products to Young People (Dec. 9, 2021), https://www.mass.gov/news/ag-healey-secures-nearly-51-million-from-national-e-cigarette-retailer-and-owners-for-marketing-and-selling-vaping-products-to-young-people.

207 Mass. Gen. Laws ch. 93A, § 4.

208 Commonwealth v. Fall River Motor Sales, Inc., 409 Mass. 302, 313–15 (1991);

radio, and television advertisements are fundamentally different from social media advertising.[209] Viewership of print, radio, and television advertisements is limited to a specified time frame—the time of publication—and only reaches those who are tuned in at that moment.[210] Social media's reach is entirely different because a social media user can publish—or "post"—an ad just once, but the ad is programmed to target users whenever they are online and can live on indefinitely.[211] The posted ad is published repeatedly on different individual users' feeds and continues to gain "impressions" and "shares" over time.[212] To assess damages for social media advertising, the court may need metrics on how many people an advertising post reached, which could indicate how many times an ad is considered published.[213] In Eonsmoke, the Commonwealth was likely unable to obtain such this information from the social media platforms because some of the offending posts were deleted.[214]

Deleting content may be a way for defendants to destroy posts that could be used as evidence in litigation. For example, on its website, Facebook states that it cannot restore account content that has been deleted.[215] Additionally, Facebook asserts that its ability to provide third parties access to individual users' content, even when the information is requested through subpoena, is limited by the federal Stored Communications Act.[216] Without data from the social media platforms, the Commonwealth will need to propose an alternative method of illustrating the actual duration, frequency, scope, and reach of the

Commonwealth v. Zak, No. 2011-624, 2015 Mass. Super. LEXIS 1894, at *34–35, *38 (Mass. Super. Ct. July 14, 2015).

209 *See How Social Media Has Changed Marketing*, *supra* note 187.

210 *See id.*

211 *See* Jamie Lam, *Social Media Literacy Basics: Your Posts Will Exist Forever*, SCMP (Feb. 18, 2020), https://www.scmp.com/yp/report/journalism-resources/article/3072320/social-media-literacy-basics-your-posts-will-exist.

212 Kayla Carmicheal, *Social Media Impressions Vs. Reach: What's More Important?*, HUBSPOT.COM (Nov. 22, 2019) (updated Jan. 10, 2022), https://blog.hubspot.com/marketing/impressions-vs-reach.

213 *See id*; Commonwealth v. Fall River Motor Sales, Inc., 409 Mass. 302 (1991) (noting damages for traditional unfair and deceptive advertisements under Chapter 93A are based on the frequency of publication).

214 *See, e.g.*, *Eonsmoke Mem. Assessment of Damages*, *supra* note 200, at 9 ("Before Defendants removed Eonsmoke's social media content, the Attorney General's Office captured images of some content posted by Eonsmoke using Eonsmoke's social media accounts.")

215 *May I Obtain Any Account Information or Account Contents Using a Subpoena?*, FACEBOOK, https://www.facebook.com/help/133221086752707 (last visited Jan. 29, 2022).

216 *Id.*; *see* 18 U.S.C. § 2701 *et seq.*

defendant's social media posts in the Juul case.[217]

Illustrating the novelty of the social media advertising context, the issue of how courts should assess penalties based on social media marketing is a question of first impression in the Massachusetts courts. Given the lack of precedent in the Eonsmoke case, the Commonwealth looked to other jurisdictions to propose a theory of assessment of damages.[218] The Commonwealth analogized the Eonsmoke case to *People v. Johnson & Johnson*, where a California court used the number of visitors to a website's sub-pages to measure the number of violations for deceptive ads.[219] The *Johnson & Johnson* court took the overall number of visitors to the website and multiplied it by California's share of the national population to estimate the proportionate number of California visitors to the website.[220] The court used this proportion to assess penalties based on the number of "views" of the website in California.[221] In Eonsmoke, the Commonwealth sought penalties using the same method as the court in *Johnson & Johnson*—taking the total number of views for each post and multiplying it by the proportion of the national population that resides in Massachusetts (two percent).[222] It is unclear how receptive the Eonsmoke court was to this theory because the parties settled the case before the court issued an order on the Commonwealth's Motion for Assessment of Damages.[223] Still, the Commonwealth's approach in Eonsmoke presents a workable method for assessing penalties for social media advertising that could be applied in a future case, including that of Juul.

With both Eonsmoke and Juul, the Commonwealth noted significant similarities between the vaping companies' concerted campaigns to market their products to youth and those of the Big Tobacco companies. For example, Lorillard Tobacco Co., one of the Big Tobacco companies, placed its youth-oriented advertising "in

217 *See* Commonwealth v. Fall River Motor Sales, Inc., 409 Mass. 302 (1991); Commonwealth v. Zak, No. 2011-624, 2015 Mass. Super. LEXIS 1894 (Mass. Super. Ct. July 14, 2015) (damages for traditional unfair and deceptive advertisements under Chapter 93A are based on frequency of publication).

218 *Eonsmoke Mem. Assessment of Damages*, *supra* note 200, at 39–40.

219 *Eonsmoke Mem. Assessment of Damages*, *supra* note 200, at 39–40; *see* Statement of Decision of J. Sturgeon, People v. Johnson & Johnson, No. 37-2016-00017229, app. 5–7 (Cal. Super. Ct. Jan. 30, 2020).

220 Statement of Decision of J. Sturgeon, *supra* note 219, at app. 5–7.

221 *Id.*

222 *Eonsmoke Mem. Assessment of Damages*, *supra* note 200, at 39–40.

223 *See* AG Healey Secures Nearly $51 Million from National E-cigarette Retailer and Owners for Marketing and Selling Vaping Products to Young People, *supra* note 206.

magazines, on billboards, at point of sale . . . , and in other venues that historically and currently reach millions of teens."[224] Similarly, Juul took out advertisements on websites whose primary audience is young people, including on Nickelodeon's websites, Cartoon Network's website, socialstudiesforkids.com, and teen.com.[225] Furthermore, both Eonsmoke and Juul advertise their products on social media sites frequented by teens, such as YouTube, Facebook, Instagram, and Snapchat.[226] The Commonwealth made its analogies to Big Tobacco's misconduct clear in the Eonsmoke court filings, stating that Eonsmoke's conduct was the same as Lorillard's, which "intentionally exploit[ed] adolescents' vulnerability to imagery by creating advertising that utilize[d] the themes of independence, adventurousness, sophistication, glamour, athleticism, social inclusion, sexual attractiveness, thinness, popularity, rebelliousness, and being 'cool.'"[227] Likewise, the Commonwealth's complaint against Juul states that "JUUL knowingly used images of models that 'registered' or appeared . . . to be inappropriately or unsuitably young" in "[p]layful and provocative photographs" in order to appeal to young people's desire to be cool.[228] The similarities between the misconduct in Big Tobacco and the e-cigarette industry also carry over to the claims and relief the Commonwealth is seeking in the lawsuit against Juul.

In the ongoing lawsuit against Juul, the Commonwealth claims that Juul knew or should have known that it was hooking youth on its products, which contain high levels of nicotine, and that continuing to target youth despite this knowledge constitutes unfair or deceptive conduct.[229] There are three counts in the complaint. With the first two counts, the Commonwealth alleges that Juul violated Chapter 93A when it (1) engaged in unfair conduct by targeting its marketing to underage consumers who are particularly vulnerable to its appeal;

224 *Eonsmoke Mem. Assessment of Damages*, *supra* note 200, at 34 (quoting Evans v. Lorillard Tobacco Co. ("Lorillard II"), No. 2004-2840-B, 2011 WL 7860228 (Mass. Super. Ct. Sept. 6, 2011), *aff'd in part, rev'd in part*, ("Lorillard III"), 465 Mass. 411 (2013)).

225 *Juul Compl.*, *supra* note 94, at 16–18.

226 *Eonsmoke Mem. Assessment of Damages*, *supra* note 200, at 8; *Juul Compl.*, *supra* note 94, at 19.

227 *Eonsmoke Mem. Assessment of Damages*, *supra* note 200, at 34 (quoting Evans v. Lorillard Tobacco Co. ("Lorillard II"), No. 2004-2840-B, 2011 WL 7860228 (Mass. Super. Sept. 6, 2011), *aff'd in part, rev'd in part*, ("Lorillard III"), 465 Mass. 411 (2013)).

228 *Juul Compl.*, *supra* note 94, at 15–16.

229 *See id.*

and (2) engaged in deceptive conduct by making false or misleading claims to consumers or failing to disclose material facts to consumers regarding the nicotine concentration of Juul's e-cigarette products.[230] With the third count, the Commonwealth alleges that Juul violated the tobacco sales and distribution regulations promulgated under Chapter 93A by selling and shipping e-cigarette products without age verification.[231] Finally, the Commonwealth alleges that Juul's unfair or deceptive conduct "contributes to and/or is the predominant cause of the continuing public nuisance of youth nicotine use and addiction that significantly interferes with the public health, safety, peace, comfort, and convenience."[232] Notably, the last claim illustrates how Chapter 93A's prohibition on unfair or deceptive conduct overlaps with public nuisance law: the conduct, by virtue of being unfair or deceptive, serves as evidence of the public nuisance.[233] Like the strategy of state AGs during the Big Tobacco litigation, AG Healey used the public nuisance claim to seek abatement and restitution for the costs the Commonwealth has incurred as a result of youth nicotine addiction, including health care costs and the costs of "treatment, prevention, intervention, and recovery initiatives to abate the harms of nicotine addiction in youth."[234]

Throughout the e-cigarette litigation, the Commonwealth has relied on scientific evidence not only to prove that the defendants knew their conduct was wrong, but also to plead the scope of harm caused by the defendants' conduct. While the Commonwealth did not allege that Eonsmoke or Juul conducted internal studies, as AGs had previously done in the Big Tobacco litigation,[235] the Commonwealth instead cited to numerous publicly available scientific studies in its court filings, both to argue that the companies knew or should have known about the dangers their products pose to youth, and to evidence the harm for which the Commonwealth was seeking abatement.[236]

The Commonwealth's case against Juul demonstrates the power of state AGs when they unite to amplify their bargaining strength, resources, and pressure on defendants. Akin to a class action of AGs, many states became involved in a joint effort to strategically target Juul.[237]

230 *Id.* at 59–61.
231 *Id.* at 61–64.
232 *Id.* at 64.
233 *See id.*
234 *Id.* at 65.
235 *See supra* Section III.A.
236 *See id.* at 47–58; *Eonsmoke Mem. Assessment of Damages*, *supra* note 200, at 23–28.
237 *See* Sheila Kaplan, *Juul to Pay $40 Million to Settle N.C. Vaping Case*, N.Y. TIMES (June 28, 2021), https://www.nytimes.com/2021/06/28/health/juul-vaping-

Thirty-nine state AGs announced investigations into the company, and many of them are collaborating in investigation and discovery with their state's individual lawsuits.[238] Fourteen states, including Massachusetts, have sued Juul. In June 2021, North Carolina became the first state to settle with Juul for $40 million.[239] On September 6, 2022, Juul agreed to pay nearly $440 million to settle similar claims with a group of 33 states.[240] While Massachusetts continues to collaborate with the multistate litigation efforts, the Commonwealth has also sued Juul individually, and that case has yet to settle.[241] Juul and other e-cigarette companies are facing the same nationwide pressure from state public officials that led the Big Tobacco companies to settle in the 1990s.[242] Juul also faces lawsuits from individual school districts,[243] as well as from hundreds of private individuals.[244]

Just as the litigation against Big Tobacco threatened the cigarette companies' bottom line, Juul's profitability has seen a significant downfall since the start of state investigations and litigation, and federal enforcement efforts are on the rise.[245] In the wake of a mysterious lung illness linked to vaping, public officials have begun to regulate the vaping industry.[246] In 2019, Massachusetts became the first state to permanently ban retail sales of all flavored tobacco products, including Juul pods

settlement-north-carolina.html.

238 *Id.*

239 *Id.*

240 Matthew Perrone & Dave Collins, *Juul to Pay Nearly $440M to Settle States' Teen Vaping Probe*, BOSTON GLOBE (Sept. 6, 2022) (updated 4:39 PM), https://www.bostonglobe.com/2022/09/06/nation/juul-pay-nearly-440m-settle-states-teen-vaping-probe/.

241 *See* Commonwealth v. JUUL Labs, Inc., No. 2084-CV-00402 (Mass. Super. Ct. Dec. 9, 2022).

242 *See id.*

243 Kari Paul, *More than a Dozen US School Districts Sue Juul and Other Vape Companies*, GUARDIAN (Dec. 1, 2019), https://www.theguardian.com/society/2019/dec/01/juul-vape-lawsuits-e-cigarettes-smoking-health.

244 Jamie Ducharme, *How Juul Got Vaporized*, TIME (May 17, 2021), https://time.com/6048234/juul-downfall/.

245 Jennifer Maloney, *Juul Cuts Valuation to $10 Billion*, WALL ST. J. (Oct. 29, 2020), https://www.wsj.com/articles/juul-cuts-valuation-to-10-billion-11603994473 ("Juul Labs Inc. has dropped its valuation to about $10 billion, in marked contrast to $38 billion two years ago when tobacco giant Altria Group Inc. took a 35% stake, the e-cigarette maker told employees on Thursday.").

246 Steve Brown & Angus Chen, *What to Know About the New Mass. Law Banning Flavored Vapes and Menthol Cigarettes*, WBUR (Nov. 27, 2019), https://www.wbur.org/news/2019/11/27/explainer-flavored-tobacco-vaping-law.

which appealed to youth with fruity, kid-friendly flavors.[247] Moreover, the U.S. Food and Drug Administration ("FDA") dealt Juul a potentially decisive blow on June 23, 2022, when it issued marketing denial orders to Juul for all of their products currently marketed in the United States.[248] In issuing the ban, the FDA cited Juul's products' "disproportionate role in the rise of youth vaping."[249] If upheld, the order would force Juul to stop selling and distributing all its vaping devices and vaping pods, essentially eliminating any earning potential for the company.[250] However, on June 24, 2022, in response to Juul's emergency motion to block the ban, the U.S. Court of Appeals for the D.C. Circuit entered an administrative stay of the order, which will temporarily halt the ban until the court conducts a full hearing on whether it will allow Juul to sell its products while the company appeals the FDA order.[251] If Juul can no longer sell its products, the company will likely be pressured to settle its ongoing litigation with the states.

Whatever the result, the Commonwealth's case against Juul stands as an evolution of the Big Tobacco litigation and a landmark case of using Massachusetts' consumer protection law to protect public health. As illustrated by the lack of caselaw on penalties for social media advertising, social media is a developing area of enforcement even in the courts, where the dearth of state or federal legislative regulation[252] provides little guidance to litigants. Through litigation against the e-cigarette companies, the AG could set precedent on how corporations are to be held accountable for unfair and deceptive conduct occurring on social media platforms. The Commonwealth's lawsuit against Exxon similarly presents an opportunity to regulate corporations in a developing area of law: corporate responsibility for climate change.

247 *Id.*

248 Press Release, FDA, FDA Denies Authorization to Market JUUL Products (June 23, 2022), https://www.fda.gov/news-events/press-announcements/fda-denies-authorization-market-juul-products.

249 *Id.*

250 *Id.*

251 Ken Alltucker, *Juul's Appeal Allows It to Sell Vaping Devices, Pods as Federal Court Weighs FDA Ban*, USA TODAY (June 27, 2022, 2:15 PM) (updated 3:53 PM), https://www.usatoday.com/story/news/health/2022/06/27/juul-can-sell-its-vaping-device-pods-court-weights-fda-ban/7744952001/.

252 *See* Bergengruen, *supra* note 6.

### *B. ExxonMobil: A Consumer Protection Approach to Corporate Accountability for the Climate Crisis*

Massachusetts' lawsuit against Exxon, initiated in June 2020, is a groundbreaking action that has expanded Chapter 93A to encompass corporate environmental accountability. The Commonwealth seeks to hold Exxon accountable for its role as a fossil fuel company whose products contribute to the climate crisis.[253] AG Healey filed a civil complaint against Exxon on behalf of the Commonwealth in October 2019.[254] After several moves by Exxon to delay and dismiss the case, the Commonwealth amended its complaint in June 2020.[255] The Commonwealth asserted that Exxon engages in deceptive advertising, including the failure to disclose material information, in violation of Chapter 93A.[256] The Amended Complaint includes three causes of action, alleging that Exxon has violated Chapter 93A by:

> (1) misrepresenting and failing to disclose material facts regarding systemic climate change risks to Massachusetts investors (Count I); (2) misrepresenting the purported environmental benefit of using its Synergy™ and Mobil 1™ products and failing to disclose the risks of climate change caused by its fossil fuel products to Massachusetts consumers (Count II); and (3) promoting false and misleading "greenwashing" campaigns to Massachusetts consumers (Count III).[257]

The Commonwealth is also bringing claims against Exxon for violating various regulations promulgated under Chapter 93A that prohibit

253 *See Exxon Mobil Am. Compl.*, *supra* note 180, at 1.

254 Original Complaint, Commonwealth v. Exxon Mobil Corporation, No. 1984-CV-03333, (Mass. Super. Ct. Oct. 24, 2019), Docket File Ref. No. 1.

255 *Exxon Mobil Am. Compl.*, *supra* note 180.

256 Commonwealth v. Exxon Mobil Corp., No. 1984-CV-03333, 2021 WL 3488414, at *1 (Mass. Super. Ct. June 22, 2021).

257 Commonwealth v. Exxon Mobil Corp., 2021 WL 3488414, at *1; *see generally Exxon Mobil Am. Compl.*, *supra* note 180 (stating causes of action). "Greenwashing" is a practice of portraying something as being environmentally responsible or "friendly" while obscuring or omitting the harms that that thing poses to the environment. *See Exxon Mobil Am. Compl.*, *supra* note 180, at 185 ("ExxonMobil seeks to mislead consumers, and induce purchases, with greenwashing designed to represent ExxonMobil as an environmentally responsible company developing innovative green technologies and products, when in reality, ExxonMobil's business model centers on developing, producing, and selling more of the very fossil fuels responsible for increasingly dangerous climate change.").

unfair or deceptive advertising.[258] The state is seeking declaratory relief, comprehensive injunctive relief, civil penalties, attorneys' fees, and any additional relief the court finds just and proper.[259]

The Exxon case tracks closely with the general consumer protection litigation strategy of the aforementioned cases. As with the e-cigarette litigation, the Commonwealth analogizes Exxon's conduct to that of the Big Tobacco companies[260] and makes claims similar to those made by the state AGs in the Big Tobacco litigation.[261] The Commonwealth uses scientific evidence to show that because Exxon knew the dangers of its products, its efforts to downplay such information and mislead investors and the public constitute deceptive conduct.[262] The Commonwealth additionally uses science to argue the scope of the harm of climate change.[263] Moreover, the Exxon case adds a "vote with their dollar" theory of causation to the strategy. Specificially, the Commonwealth alleges that had Exxon not deceived investors and the public about the dangers of its products to the environment, consumers would have expressed their moral values by taking their dollars elsewhere, refusing to purchase Exxon products and buying from other companies.[264]

The Commonwealth's case rests on a "failure to disclose" theory, the crux of which is knowledge.[265] The AG must first show that Exxon had knowledge about "(a) how combustion of fossil fuels (its primary product) contributes to climate change and (b) the risk that climate change creates for the value of Exxon's businesses and assets," and, second, that the company deceptively misled investors and consumers by failing to disclose that knowledge.[266] According to the Amended Complaint, as far back as the late 1970s and early 1980s, Exxon and its top

258 *See* 940 C.M.R. § 3.02(2); 940 C.M.R. § 3.05(1); 940 C.M.R. § 3.16; 940 C.M.R. § 6.03; 940 C.M.R. § 6.04.

259 *See Exxon Mobil Am. Compl.*, *supra* note 180, at 201.

260 *Id.* at 185. ("ExxonMobil's conduct is akin to that of the tobacco companies that had internal knowledge of the high health risks associated with smoking, yet intentionally withheld that information from consumers, all while sowing doubt about the link between smoking and lung cancer and other smoking-related health harms and holding themselves out as good corporate citizens making science-driven decisions.").

261 Ausness, *supra* note 88, at 833 (indicating some states, including Maryland, sued the Big Tobacco companies under their UDAP law).

262 *Exxon Mobil Am. Compl.*, *supra* note 180, at 19–51.

263 *Id.* at 51–62.

264 *Id.* at 189.

265 Exxon Mobil Corp. v. Att'y Gen., 479 Mass. 312, 316–17 (2018).

266 *Id.*

management had internal knowledge from its own in-house scientific researchers and industry group experts that use of its fossil fuel products "would have potentially 'catastrophic' effects for humankind."[267] Company executives were told that while efforts to reduce the use of fossil fuels would be required to stop the progression of climate change, such reductions would also pose a threat to the company's bottom line.[268] The Commonwealth further alleges that by the late 1980s and early 1990s, Exxon engaged in a "tobacco-industry style" campaign to raise doubt and confuse the public about the role of fossil fuels in causing climate change.[269] Specifically, the company downplayed its own scientists' findings of the extensive threat that climate change poses to human civilization.[270]

AG Healey was able to produce a strong complaint with specific and detailed factual allegations because Chapter 93A empowers the AG to engage in pre-litigation investigation.[271] In 2015, after the press uncovered the existence of Exxon's vast internal documentation relating to climate change,[272] AG Healey was able to obtain the documents prior to litigation through her "broad investigatory powers" of a CID authorized by Section 6 of Chapter 93A.[273]

To initiate a CID in Massachusetts, the AG must have a belief that a person or entity has engaged in unfair or deceptive conduct or unfair methods of competition; however, the AG does not have the burden of showing such a belief.[274] Instead, "the recipient who challenges the C.I.D. bears the burden of showing that the Attorney General acted arbitrarily or capriciously in issuing the demand."[275] This burden-shifting provides the AG with an advantage over the objects of their investigations,

267 *Exxon Mobil Am. Compl.*, *supra* note 180, at 19.
268 *Id.* at 19–29.
269 *Id.* at 5.
270 *Id.* at 29–30.
271 *See* MASS. GEN. LAWS ch. 93A, § 6 ("The attorney general, whenever he believes a person has engaged in or is engaging in any method, act or practice declared to be unlawful by this chapter, may conduct an investigation to ascertain whether in fact such person has engaged in or is engaging in such method, act or practice.").
272 Exxon Mobil Corp. v. Att'y Gen., 479 Mass. 312, 313 (2018).
273 As discussed in Section II.B., *supra*, a CID allows the AG to conduct pre-litigation discovery, a key advantage that private plaintiffs do not enjoy but surely wish they did. Obtaining such documentation prior to the filing of the complaint allows the AG to base their complaint on concrete evidence rather than mere information and belief. Interview with Stuart Rossman, *supra* note 26. *See also* Att'y Gen. v. Bodimetric Profiles, 404 Mass. 152, 157 (1989); MASS. GEN. LAWS ch. 93A, § 6.
274 Att'y Gen. v. Bodimetric Profiles, 404 Mass. at 157.
275 *Id.*

because it is easier for the AG to start an investigation than it is for an opposing entity to fight it.[276]

Exxon challenged the AG's CID in Superior Court.[277] Exxon argued, in part, that the CID violated Exxon's statutory and constitutional rights.[278] The court ruled against Exxon in each argument and permitted the AG's CID to move forward.[279] In its order, the court noted that the CID sought material with reasonable particularity and that documents going as far back as 1976 were relevant to the Commonwealth's failure to disclose claim against Exxon, which required ascertaining what Exxon knew about the risks that climate change posed to both humankind and the company's bottom line.[280]

The order illustrates the court's willingness to broadly interpret the investigatory power of Chapter 93A. Although the Commonwealth may be secure in its authority to investigate, to succeed in the case, it still must prove all the elements of its Chapter 93A claim.[281] Alleging causation, if required, poses the most difficult obstacle for the Commonwealth in its claim.

The Exxon case contributes an important theory of causation to the litigation strategy traced in this Article. Because of the uncertainty as to whether the AG must allege causation,[282] the Amended Complaint includes allegations of causation for the Chapter 93A claim.[283] To prove causation, the Commonwealth must demonstrate that Exxon's deceptive conduct made consumers act differently from how they otherwise would have; as such, the Commonwealth's main challenge is alleging causation in a case concerning the generalized harm of climate

276 Interview with Stuart Rossman, *supra* note 26.

277 *See* Exxon Mobil Corp. v. Att'y Gen., 479 Mass. 312 (2018).

278 *Id.* at 314. Exxon also filed an anti-SLAPP special motion to dismiss, but the court held that Exxon had "failed to meet its threshold burden of showing that the Commonwealth's claims are based *solely* on Exxon's petitioning activities." Mem. & Order on Def. Special Mot. Dismiss at 1–2, 4, Commonwealth v. Exxon Mobil Corporation, No. 1984-CV-03333 (Mass. Super. Ct. June 22, 2021), Docket File Ref. No. 43 (emphasis in original). SLAPP stands for Strategic Lawsuits Against Public Participation. An *anti*-SLAPP statute is a tool used to counter SLAPP suits, where the objective is not to win but rather to use litigation to intimidate opponents' exercise of rights of petitioning and speech. *Id.* at 1–2. *See* MASS. GEN. LAWS ch. 231, § 59H.

279 Exxon Mobil Corp. v. Att'y Gen., 479 Mass. at 326.

280 *Id.*

281 *See* Auto Flat Car Crushers, Inc. v. Hanover Ins. Co., 469 Mass. 813, 820 (2014) (listing the elements for a Chapter 93A claim).

282 *See* discussion *supra* Section II.B.

283 *See Exxon Mobil Am. Compl.*, *supra* note 180.

change.[284] First, the Commonwealth claims that Exxon's information about the environmental impact of using its fossil fuel products is material to consumers and influential to their purchasing decisions.[285] The Commonwealth also alleges that Exxon knew such information was material because "it has commissioned surveys and gathered and analyzed data to evaluate consumer perceptions to inform the Company's fossil-fuel marketing messaging."[286] The Commonwealth makes several allegations as to how Exxon's material omissions caused consumers to act differently:

> If ExxonMobil fully disclosed the risks to consumers and their families associated with the routine use of its fossil fuel products, and the fact that, for decades, ExxonMobil hid those risks and tried to cast doubt on the climate science it had helped to develop—such disclosure would reasonably be expected to cause a consumer to act differently than she may otherwise have acted. For example, a consumer might purchase fewer ExxonMobil fossil fuel products, or none. Consumers might opt to avoid or combine car travel trips; carpool; change driving habits; switch to more fuel-efficient vehicles, hybrid vehicles, or electric vehicles; use a car-sharing service; seek transportation alternatives all or some of the time, if available (e.g., public transportation, biking, or walking); or any combination of those choices. Some might opt to forgo driving, eliminating altogether their use of ExxonMobil products.
>
> [] Similarly, even those consumers who may elect to continue to purchase the same amounts and types of fossil fuel products might, if they were aware of ExxonMobil's egregious deception, prefer to purchase those products from oil companies other than ExxonMobil; consumers' post-Valdez boycott of Exxon, and other consumer boycotts, demonstrate that consumers frequently opt to *"vote" with their dollars* when corporate malfeasance comes to light.[287]

Notably, acting within Chapter 93A's special grant of power to the AG to act on behalf of the public as a whole,[288] the Commonwealth does not allege concrete examples of specific harm to individual consumers. Instead, the Commonwealth alleges reasonable expectations of what

284 Lowell Gas Co. v. Att'y Gen., 377 Mass. 37, 51 (1979).
285 *Exxon Mobil Am. Compl.*, *supra* note 180, at 188.
286 *Id.*
287 *Id.* at 189 (emphasis added).
288 *See* MASS. GEN. LAWS ch. 93A, § 4.

consumers' responses to Exxon's conduct might be through a "vote with their dollar" argument.[289] This theory states that, had Exxon not acted deceptively, consumers would have changed their purchasing preferences, essentially by boycotting Exxon products or opting for more environmentally friendly methods of transportation.[290]

Relatedly, the Amended Complaint also alleges that Exxon's conduct hindered the development of alternative technologies to fossil fuel-reliant products by reducing market transparency:

> ExxonMobil's deceptive and misleading product marketing and promotion and its greenwashing and climate denial campaigns reduced market transparency, ensuring that consumers entering into transactions to purchase ExxonMobil products or products that use ExxonMobil products would not have access to the same information ExxonMobil had, and, as a result, consumer demand for technologies like electric vehicles and clean energy was dampened, and delayed.[291]

By including allegations about Exxon's impact on the market for green products, the Commonwealth reinforces that corporate responsibility for climate change is a consumer issue. The Commonwealth's "vote with their dollar" theory can be an effective tool when arguing the type of generalized public harm that exists in the Exxon case. The theory forms an important linkage that tethers a harm as broad as climate change to the individual consumer context.

Moreover, that the Massachusetts AG does not need to allege harm under Chapter 93A is a unique advantage that allowed the Commonwealth's case to survive motions to dismiss where other state AGs' actions against Exxon have failed. For example, the New York AG brought a similar case against Exxon alleging that Exxon deceived investors about the true cost of climate change; however, that case alleged violations of a securities fraud law rather than consumer protection law.[292] In 2019, a New York Supreme Court dismissed the case with prejudice for failure to show harm, or, in other words, failure to show that any investor was actually misled by Exxon.[293] Massachusetts' case has survived primarily because of the advantages provided by Chapter 93A, namely, that the AG did not encounter the same difficulties

289 *Exxon Mobil Am. Compl.*, *supra* note 180, at 189.
290 *Id.*
291 *Id.* at 190.
292 Decision After Trial, People v. Exxon Mobil Corp., 452044/2018, NYSCEF Doc. No. 567 (N.Y. Super. Ct. Dec. 10, 2019).
293 *Id.*

in pleading specific harm.[294]

If the Commonwealth wins its case against Exxon, it will mark a significant broadening of Chapter 93A to address corporate climate accountability. The strategies and theories of the Exxon case are fodder for future actions by the newly elected Massachusetts AG, Andrea Campbell, as she continues to build on the precedent established by the Big Tobacco and e-cigarette cases. Like the Big Tobacco litigation, the Exxon case is about a large company that failed to disclose internal research that clearly showed the harm its products pose to society. It is a case about a corporate entity sowing doubt about facts that are harmful to its industry. It is also a case where a state AG has again used the consumer context as a platform to bring a legal claim against a corporate actor for conduct that may otherwise escape liability due to a lack of regulation. All these elements are present in another developing legal context: social media. As an emerging industry, keeping social media companies accountable for the harm their business models pose to society is critical and Meta is a ripe subject for an enforcement action.

## V. META: THE NEXT BIG TOBACCO

State AGs should follow the blueprint set in the Big Tobacco litigation and AG Healey's actions against e-cigarette companies and Exxon to regulate Meta. Social media lacks substantial regulation, and a potential action against Meta could allow state AGs to regulate the industry through consumer protection law.[295] The Massachusetts AG's Office and nine other AGs have already opened an investigation into Meta, with the Massachusetts AG utilizing the powers afforded by Chapter 93A.[296] Should Massachusetts opt to escalate the investigation into a lawsuit, the AGs could continue to collaborate in joint litigation like in Big Tobacco or with Juul.

The strategy laid out in this Article applies to Meta because there are factual similarities between Meta, Big Tobacco, and Exxon. Furthermore, the social media advertising seen in the e-cigarette litigation parallels that in a potential action against Meta. Like with the e-cigarette cases, the AG could allege that Meta violates Chapter 93A

294 *See* discussion *supra* Section II.C.

295 *See* Bergengruen, *supra* note 6; *see also* Canales, *supra* note 8.

296 Press Release, Off. of Att'y Gen. Maura Healey, AG Healey Co-Leads Nationwide Investigation into Instagram's Impact on Young People (Nov. 18, 2021), https://www.mass.gov/news/ag-healey-co-leads-nationwide-investigation-into-instagrams-impact-on-young-people.

because its business model unfairly targets youth. Also, as seen with Exxon, the AG can use scientific evidence to advance a failure to disclose theory that utilizes a "vote with their dollar" approach to causation. Additionally, a case against Meta poses a perfect opportunity for state AGs to unite like a class and push the company to make changes. Finally, as in the Juul litigation, the AGs could seek abatement relief to address the harm the defendants' products have inflicted on the public.

Meta is the parent company of three of the nation's largest social media platforms: Facebook, Instagram, and WhatsApp.[297] Meta has long been criticized for its handling of content posted on its platforms, especially political misinformation and hate speech.[298] Meta also faces challenges for its product designs and algorithms that push content and create addiction-like behaviors in users.[299] Criticism of Meta reached a fever pitch following disclosures made by whistleblower, Frances Haugen.[300] In September 2021, Haugen released thousands of pages of confidential Facebook documents to *The Wall Street Journal* and federal lawmakers.[301] Among the release were studies conducted by internal Meta scientists finding that Instagram is harmful to the mental health and body image of young users, particularly teenage girls.[302]

Haugen's release showed that, like the Big Tobacco companies

297 Nathan Reiff, *5 Companies Owned by Facebook (Meta)*, INVESTOPEDIA, https://www.investopedia.com/articles/personal-finance/051815/top-11-companies-owned-facebook.asp (last updated Oct. 16, 2022).

298 Aarti Shahani, *From Hate Speech to Fake News: The Content Crisis Facing Mark Zuckerberg*, NPR (Nov. 17, 2016), https://www.npr.org/sections/alltechconsidered/2016/11/17/495827410/from-hate-speech-to-fake-news-the-content-crisis-facing-mark-zuckerberg; Edward Segal, *Criticism of Facebook Continues on Several Fronts, with More Bad Publicity Expected Monday*, FORBES (Oct. 24, 2021), https://www.forbes.com/sites/edwardsegal/2021/10/24/criticism-of-facebook-continues-on-several-fronts-with-more-bad-publicity-expected-monday/.

299 *See Protecting Kids Online: Instagram and Reforms for Young Users: Hearing Before the S. Subcomm. on Consumer Prot., Prod. Safety, & Data Sec.*, 117th Cong. (Dec. 8, 2021), https://www.commerce.senate.gov/2021/12/protecting-kids-online-instagram-and-reforms-for-young-users; Jena Hilliard, *What Is Social Media Addiction?*, ADDICTION CTR. (Nov. 22, 2021), https://www.addictioncenter.com/drugs/social-media-addiction/.

300 Bobby Allyn, *Here Are 4 Key Points from the Facebook Whistleblower's Testimony on Capitol Hill*, NPR, https://www.npr.org/2021/10/05/1043377310/facebook-whistleblower-frances-haugen-congress (last updated updated Oct. 5, 2021).

301 *Id.*

302 Georgia Wells et al., *The Facebook Files: Facebook Knows Instagram Is Toxic for Teen Girls, Company Documents Show*, WALL ST. J. (Sept. 15, 2021), https://www.wsj.com/articles/facebook-knows-instagram-is-toxic-for-teen-girls-company-documents-show-11631620739.

and Exxon, Meta knew the dangers its product posed to society but downplayed those risks to the public. In confidential presentation slides summarizing the company's inquiry, researchers noted, "[32%] of teen girls said that when they felt bad about their bodies, Instagram made them feel worse," and, "Teens blame Instagram for increases in the rate of anxiety and depression."[303] Additionally, in 2019, Meta uncovered that "14% of boys in the U.S. said Instagram made them feel worse about themselves."[304] Most disturbingly, Meta researchers found that "[a]mong teens who reported suicidal thoughts, 13% of British users and 6% of American users traced the desire to kill themselves to Instagram."[305] The findings come from studies conducted by Meta consisting of "focus groups, online surveys and diary studies in 2019 and 2020" and "large-scale surveys of tens of thousands of people in 2021 that paired user responses with [Meta]'s own data about how much time users spent on Instagram and what they saw there."[306] Moreover, there is evidence the research has been reviewed by top Meta executives, including founder and CEO, Mark Zuckerberg.[307]

Despite knowing the findings of Meta's internal research, company executives consistently downplay Instagram's negative effects on teens.[308] At a congressional hearing in March 2021, when asked about children and mental health, Zuckerberg said, "The research that we've seen is that using social apps to connect with other people can have positive mental-health benefits."[309] Additionally, in a congressional hearing in December 2021, after Haugen's document leak, Instagram's CEO, Adam Mosseri, insisted that Instagram has a positive role in the lives of teenagers and that Meta will continue to make efforts to be transparent with the public.[310] Although the information about the internal studies has thus far only been reported in the press, state AGs could confirm its existence through investigations prior to litigation. Indeed, some states have already commenced investigations into Meta.[311]

Instagram has captured the ire of public officials at both the state and federal level. Policymakers, particularly state AGs, are undertaking

303 *Id.*
304 *Id.*
305 *Id.*
306 *Id.*
307 *Id.*
308 *Id.*
309 *Id.*
310 Romo, *supra* note 3.
311 AG Healey Co-Leads Nationwide Investigation into Instagram's Impact on Young People, *supra* note 296.

efforts to hold the company accountable. In May 2021, AG Healey co-led a bipartisan coalition of 44 AGs urging Meta (then, Facebook, Inc.), to abandon its plans to launch "Instagram Kids," a version of Instagram for children under 13.[312] In a letter to Zuckerberg, the AGs expressed concern over social media's harmful effects on children; cyberbullying on Instagram; the use of Instagram by predators to target children; Meta's poor record in protecting children's welfare on its platforms; and "children's lack of capacity to navigate the complexities of what they encounter online, including advertising, inappropriate content, and relationships with strangers."[313] Since Haugen's document leak, state AGs have intensified their enforcement actions against Meta. In November 2021, AG Healey announced that she was co-leading a bipartisan, nationwide investigation into Meta for its actions providing and promoting Instagram to young people despite knowing that Instagram's use is associated with harms to physical and mental health.[314] As illustrated by AG Healey's case against the e-cigarette companies and Exxon, an investigation can often be a precursor to the AG bringing a lawsuit against the subject of the investigation.

Given the analogous facts between the Meta case and the previous cases discussed in this Article, Meta is a perfect subject for AGs to hold accountable using the same consumer protection litigation strategy. An action against Meta would expand UDAP litigation into the mostly-unregulated social media industry, focusing on the platform's business model rather than mere advertising practices.[315] There are clear parallels between the conduct at issue with Meta and the conduct of Big Tobacco, e-cigarette companies, and Exxon. First, the Big Tobacco case, the e-cigarette cases, and the potential case against Meta allege public health harms relating to the well-being of young people. The latter two cases also implicate the use of social media and predatory targeting of young people as part of the companies' business models. Like with the Big Tobacco and e-cigarette cases, there is broad scientific evidence that the companies' products have negative health effects for young people.[316]

312 Press Release, Off. of Att'y Gen. Maura Healey, AG Healey Co-Leads Bipartisan Coalition of 44 Attorneys General Urging Facebook to Abandon Launch of Instagram Kids (May 10, 2021), https://www.mass.gov/news/ag-healey-co-leads-bipartisan-coalition-of-44-attorneys-general-urging-facebook-to-abandon-launch-of-instagram-kids.

313 *Id.*

314 AG Healey Co-Leads Nationwide Investigation into Instagram's Impact on Young People, *supra* note 296.

315 *See* Kang, *supra* note 21.

316 *See* Wells et al., *supra* note 302.

For example, in court filings in the Eonsmoke case, the Commonwealth cited nearly 10 scientific studies and reports documenting the harms that e-cigarettes and tobacco addictions pose to youth.[317] In their letter to Meta expressing concern over the Instagram Kids proposal, the AGs also cited scientific studies to support their claims that Instagram negatively affects children's well-being.[318] In the e-cigarette litigation, the AG cited similar studies to show that even if the defendants claim they did not know the harms their products posed to young people, they *should have known* given the extensive publicly available research.[319]

The AGs could argue the same with Meta. In fact, they could go even further, because, like Exxon and the Big Tobacco companies before it, Meta has internal research seen by its top executives that show the company knew that Instagram adversely affects teenagers' mental health and body image.[320] Additionally, like Big Tobacco and Exxon, Meta executives publicly downplay and dispute this information and tout their products as good for society.[321] Once again, the AGs can analogize Meta's conduct to the Big Tobacco companies' conduct to emphasize its egregiousness.

The similarities in facts between a potential action against Meta and the cases profiled in this Article also extend to the claims the AG could bring against Meta. Like with AG Healey's case against the e-cigarette companies, the new Massachusetts AG could allege that Meta violated Chapter 93A by engaging in unfair conduct through its creation of an addictive product targeted at particularly vulnerable young people despite the company's knowledge about its products' harms. As in the case against Exxon, the AG could allege that Meta violated Chapter 93A by engaging in deceptive conduct when the company failed to disclose the findings of its internal studies showing harm to young people and when it instead engaged in a public campaign to downplay the information.

In Massachusetts, although it is unclear whether Chapter 93A requires the AG to show causation, given the breadth of scientific studies and Meta's own research, the Commonwealth has a strong case to allege that Instagram's addictive algorithms exacerbate—or in some

317 *See Eonsmoke Mem. Assessment of Damages*, *supra* note 200, at 4, 41.

318 Letter from Nat'l Ass'n Att'ys Gen. to Mark Zuckerberg, CEO, Facebook, Inc. (May 10, 2021), https://www.mass.gov/doc/naag-letter-to-facebook/download.

319 *See Juul Compl.*, *supra* note 94, at 47–58; *Eonsmoke Mem. Assessment of Damages*, *supra* note 200, at 23–28.

320 *See* Wells et al., *supra* note 302.

321 *See* Romo, *supra* note 3.

cases cause—serious mental health issues among teens.[322] These issues include negative body image, eating disorders, low self-esteem, and suicidality.[323] Regarding its potential deceptive conduct for a failure to disclose claim, like in Exxon, the Commonwealth could use survey data to plead a "vote with their dollar" theory of causation. Under such a theory, the Commonwealth could argue that users would have changed their behavior had they known about the harms of Instagram—perhaps by not using Instagram or by using a different app. Recall that an act or practice is deceptive "if it *could reasonably be found* to have caused a person to act differently from the way he otherwise would have acted."[324] Under this standard, the Commonwealth need not allege that any consumer actually changed their behavior based on the deception.[325] It only needs to show that the deception could reasonably be found to change a consumer's behavior.[326] Therefore, it may not need actual survey data. Like in Exxon, the Commonwealth's argument about what a consumer could reasonably be expected to do may be sufficiently forceful. Although Chapter 93A does not require the AG to show actual harm, scientific evidence supports that Instagram and its business model (which is built on hooking users to the app) are harmful to young people.[327]

State AGs could also use the Big Tobacco, e-cigarette, and Exxon litigation as a blueprint for damages. It is unclear what theory of damages the Massachusetts AG would use against Meta, but it would likely seek the standard for Chapter 93A claims brought by the AG, including declaratory relief, injunctive relief, civil penalties (in the maximum amount of $5,000 per violation), and the costs of investigation and attorneys' fees.[328] Like with the Big Tobacco and e-cigarette litigation, the AG may also seek damages in the form of abatement for the public costs of treating teen mental health. Finally, the AG could unite with other state AGs and enter into a nationwide settlement like the MSA. By bringing an action against Meta, the AG could pressure the company to take measures to counteract the harms of Instagram, including by making the platform less addictive or by changing the algorithms to bar accounts and posts that promote body dysmorphia or glorify eating

322 *See* Wells et al., *supra* note 302.
323 *See id.*
324 Lowell Gas Co. v. Att'y Gen., 377 Mass. 37, 51 (1979) (emphasis added).
325 *Id.*
326 *Id.*
327 *See* Wells et al., *supra* note 302.
328 *See Exxon Mobil Am. Compl.*, *supra* note 180, at 201; *Eonsmoke Am. Compl.*, *supra* note 203, at 31–32; *Juul Compl.*, *supra* note 94, at 66.

disorders in suggested posts.[329]

Overall, aspects of the Meta case are like a blend of the Big Tobacco, e-cigarette, and Exxon litigation. The Massachusetts AG, as well as state AGs nationwide, can similarly blend the strategies from those cases in potential enforcement actions against Meta. Such actions could further expand consumer protection laws to vindicate the public interest within a distinctly modern context lacking other forms of regulation.[330]

## Conclusion

State AGs, and particularly AG Healey, have utilized consumer protection law in creative ways to hold corporations accountable for broad social harms in emerging contexts governed by little other regulation. The Meta case exists in a distinctly modern field with little regulation. Social media companies have long escaped accountability for their addictive business model and the effects of their products on users' mental health.[331] State AGs could follow the Massachusetts AG's lead and use consumer protection law to combat corporate malfeasance where other forms of regulation have failed.

As Supreme Court Justice Louis Brandeis famously stated, it is a virtue of federalism that "a single courageous state" may serve as a laboratory of democracy, with the ability to experiment with new social and economic practices or institutions without impacting the rest of the country.[332] Justice Brandeis called for bold action by state officials to test out novel approaches to regulation that, if successful, could be exported to the rest of the nation.[333] Massachusetts is a courageous state whose legislature, through Chapter 93A, has given the AG the tools to enforce the law in new and creative ways. Furthermore, AG Healey was a leader in ambitiously utilizing consumer protection litigation to hold corporations accountable in industries where other lawmakers

329 *See* Romo, *supra* note 3 ("[S]everal senators revealed that they created fake Instagram accounts [posing as teen girls] to test how effectively the company is adhering to its own guidelines and regulations. . . . In many instances the fake users were quickly hit with disturbing content glorifying anorexia and other eating disorders as well as content promoting body dysmorphia. . . . The fake account was flooded with content about diets, plastic surgery and other damaging material for an adolescent girl.").

330 *See also* Kang, *supra* note 21.

331 *See also* Bergengruen, *supra* note 6.

332 New State Ice Co. v. Liebmann, 285 U.S. 262, 311 (1932).

333 *See id.* at 310–11 (1932).

lack the flexibility or political will to step in. Other AGs have the power to experiment with UDAP laws in their own states and should look to Massachusetts and the strategy identified in this Article as models.

# PROTECTING TRIBAL PUBLIC HEALTH FROM CLIMATE CHANGE

*By Heather Tanana*[*]

* Assistant Research Professor & Wallace Stegner Fellow, University of Utah, S.J. Quinney College of Law; Associate Faculty, Center for Indigenous Health, Johns Hopkins University. Citizen of the Navajo Nation.

## TABLE OF CONTENTS

## ABSTRACT

*The COVID-19 pandemic brought national attention to challenges that tribal communities have been facing for decades, such as limited health services and a lack of water access. Although the end to the pandemic seems to be in sight, climate change will continue to threaten the public health and survival of tribal communities. Since time immemorial, Native Americans have recognized the sanctity of water. Water is life. However, climate change impacts are shifting the landscape across the country and many tribes lack the necessary infrastructure to protect their communities. For example, in the Southwest, approximately 30 to 40% of homes on the Navajo Nation lack plumbing and drinking water access. These households must haul water long distances from wells and other community point sources. Due to climate change, the region is experiencing prolonged droughts and groundwater supplies are drying up. As a result, residents increasingly compete for limited water resources to fulfill all the community's needs–from agricultural to domestic.*

*The lack of infrastructure in Indian country is the direct result of federal policies. Recognizing the intrinsic connection between access to clean water and public health, the Indian Health Service (IHS) Sanitation Facilities Construction Program was established in 1959 to support drinking water and sanitation projects in tribal communities. However, IHS (including the sanitation program) has been historically underfunded and understaffed, hindering the federal agency's ability to fulfill its mission to raise the physical, mental, social, and spiritual health of Native Americans to the highest level. Climate change presents another challenge that must be addressed in efforts that seek to promote tribal public health.*

*With a special emphasis on water, this Article identifies climate change-related health threats to tribal communities and analyzes the federal government's treaty and trust responsibility to protect Native Americans from those threats. It also explores how the federal government can better support tribes in exercising self-determination to the fullest to be drivers of their own future.*

## INTRODUCTION

Climate change is a global phenomenon affecting everyone. However, the experiences of particular people and communities[1] vary greatly, ranging from increasing heat waves and prolonged droughts to rising sea levels and catastrophic flooding. Within the United States, the adverse impacts of climate change are falling disproportionately on underserved and underrepresented communities,[2] including Native Americans.[3] Colonization by the United States, coupled with its subsequently enacted federal policies, have exacerbated tribal vulnerabilities to climate change by creating systemic inequities.[4] Federal Indian law—the body of law that defines the unique legal and political status of federally recognized tribes and establishes the relationship between tribes, states, and the federal government—originated from the racist belief that Native Americans were savages,

1 This Article refers to the Indigenous people of what is now called the United States using various terms including Native American, American Indian and Alaska Native, Indian, and Indigenous. There is no official consensus regarding the terminology used to refer to Indigenous peoples in the United States. Federal law often utilizes the terms "American Indian and Alaska Native" or "Indian." Each term is used regularly in practice and, depending on the context, can be appropriate. In this Article, Native American is generally used, unless referring to a specific law or policy that uses another term. If quoting or describing primary sources, this Article will also utilize the language used by the source. In the context of Indigenous lands and law, this Article employs "Indian country" and "Indian law," commonly used terms in scholarship concerning Indigenous peoples. Indian country is defined as all lands within Indian reservations, including rights-of-way, dependent tribal communities, and Indian allotments. 18 U.S.C. § 1151 (2022).

2 *Climate Change and Social Vulnerability in the United States: A Focus on Six Impacts. U.S. Environmental Protection Agency*, EPA 430-R-21-003 (2021), https://www.epa.gov/cira/social-vulnerability-report (quantifying the degree to which socially vulnerable populations may be more exposed to the highest impacts of climate change). "The impacts of climate change will not be equally distributed across the U.S. population. Those who are already vulnerable due to a range of social, economic, historical and political factors have a lower capacity to prepare for, cope with, and recover from climate change impacts." *Id.* at 9. *See also* U.S. GLOBAL CHANGE RESEARCH PROGRAM, CLIMATE SCIENCE SPECIAL REPORT: FOURTH NATIONAL CLIMATE ASSESSMENT (NCA4), VOL. 2, IMPACTS, RISKS, AND ADAPTATION IN THE UNITED STATES 27 [hereinafter NCA4 VOL. 2], https://nca2018.globalchange.gov/downloads/NCA4_2018_FullReport.pdf ("Populations including older adults, children, low-income communities, and some communities of color are often disproportionately affected by, and less resilient to, the health impacts of climate change.").

3 *See* Section I of this Article discussing the different impacts of climate change on tribal communities.

4 *See* Section II.A of this Article, providing a brief history of federal Indian policies.

inferior to white settlers.[5] Within this framework, tribes were forced into a "state of pupilage," where "[t]heir relations to the United States resemble[d] that of a ward to his guardian."[6] This required them to rely on the federal government "for protection, rely upon its kindness and its power, appeal to it for relief to their wants, and address the President as their Great Father."[7] And yet, the federal government has largely failed to uphold the treaty and trust responsibilities it owes to the tribes, as evidenced by the extensive unmet needs experienced today.[8] "Due at least in part to the failure of the federal government to adequately address the wellbeing of Native Americans over the last two centuries, Native Americans continue to rank near the bottom of all Americans in health, education, and employment outcomes."[9]

The COVID-19 pandemic brought national attention to the historic inequities faced in Indian country.[10] Media outlets across the

5 *See* Joubin Khazaie, *Fanon, Colonial Violence, and Racist Language in Federal American Indian Law*, 12 U. MIA. RACE & SOC. JUST. L. REV. 297, 297 (2022) ("[R]acist language enshrined in foundational Supreme Court decisions involving Native tribes continuously enacts a form of colonial violence that seeks to preserve a white racial dictatorship."); *see also* Adam Crepelle, *Lies, Damn Lies, and Federal Indian Law: The Ethics of Citing Racist Precedent in Contemporary Federal Indian Law*, 44 N.Y.U. REV. OF L. & SOC. CHANGE 529, 532 (2021) ("Jurisprudence loaded with grotesque 19th-century racist stereotypes and factual errors about American Indians remains valid precedent.").

6 Cherokee Nation v. Georgia, 30 U.S. 1, 2 (1831).

7 *Id.* at 17.

8 *See generally* U.S. COMM'N ON C.R., BROKEN PROMISES: CONTINUING FEDERAL FUNDING SHORTFALL FOR NATIVE AMERICANS (2018) [hereinafter BROKEN PROMISES] (examining the federal government's failure to fully fund treaty and statutory obligations).

9 *Id.* at "Letter of Transmittal".

10 Indian country is defined as all lands within Indian reservations, including rights-of-way, dependent tribal communities, and Indian allotments. 18 U.S.C. § 1151 (2022). This widely accepted definition of Indian country derives from a criminal statute, however, it "also generally applies to questions of civil jurisdiction . . . ." Alaska v. Native Village of Venetie Tribal Gov't, 522 U.S. 520, 527 (1998). Established by the House of Representatives at the beginning of the pandemic, the Select Subcommittee on the Coronavirus Crisis was charged with examining any disparate impacts of the coronavirus. *An Unequal Burden: Addressing Racial Health Disparities in the Coronavirus Pandemic*, SELECT SUBCOMMITTEE ON THE CORONAVIRUS CRISIS, https://coronavirus.house.gov/subcommittee-activity/briefings/coronavirus-panel-hold-member-briefing-racial-health-disparities (last visited Jan. 20, 2023). During a June 4, 2020 subcommittee briefing, Fawn Sharp (President of the National Congress of American Indians) testified about the federal government's neglect of its legal obligations to tribes and the resulting disparities that heightened their vulnerability to the pandemic. *Hearing on An Unequal Burden: Addressing Racial Health Disparities in the Coronavirus Pandemic*

world highlighted the virus's disproportionate impact on Indigenous peoples, particularly within the United States.[11] Native Americans have experienced substantially higher rates of COVID-19 incidence, hospitalization, and death compared with other racial groups.[12] As of September 15, 2022, Native Americans were 1.6 times more likely to contract COVID-19, 2.7 times more likely to be hospitalized, and 2.1 times more likely to die as a result of COVID-19 than white, non-Hispanic persons.[13] While no tribe was immune to the pandemic, several tribal communities were particularly ravaged, including the Navajo Nation.[14] This disproportionate impact has been attributed to challenges that tribal communities have faced for decades, such as limited health services; inadequate housing; and a lack of infrastructure, particularly for water access.[15] The Navajo Nation, which has the largest reservation in the country, experienced more cases and deaths per capita than any state.[16] "At the start of the COVID-19 outbreak, the Indian Health Service (IHS) identified approximately 9,650 homes on the Navajo Nation without piped water in their homes."[17] When testifying before the House of Representatives, Navajo Nation President Jonathan Nez largely attributed the outbreak of COVID-19 among the Navajo Nation to the lack of water in the homes of Navajo people, emphasizing that "clean water is a sacred and scarce commodity."[18]

---

*Before the Select Subcomm. on the Coronavirus Crisis*, 116th Cong. 2 (2020) [hereinafter Sharp Testimony] (written testimony of Fawn Sharp, President of the National Congress of American Indians).

11 *See, e.g.*, Simon Romero, *Checkpoints, Curfews, Airlifts: Virus Rips Through Navajo Nation*, N.Y. TIMES (Apr. 9, 2020) (updated Apr. 20, 2020), https://www.nytimes.com/2020/04/09/us/coronavirus-navajo-nation.html.

12 *Hospitalization, and Death by Race/Ethnicity*, CTR. FOR DISEASE CONTROL AND PREVENTION, https://www.cdc.gov/coronavirus/2019-ncov/covid-data/investigations-discovery/hospitalization-death-by-race-ethnicity.html (last updated Dec. 28, 2022).

13 *Id.*

14 Romero, *supra* note 11. *See also Dikos Ntsaaígíí-19 (COVID-19)*, NAVAJO DEP'T OF HEALTH, https://ndoh.navajo-nsn.gov/COVID-19.

15 *See* Sharp Testimony, *supra* note 10, at 3–6.

16 Hollie Silverman et al., *Navajo Nation Surpasses New York State for the Highest COVID-19 Infection Rate In the US*, CNN (May 18, 2020), https://www.cnn.com/2020/05/18/us/navajo-nation-infection-rate-trnd/index.html.

17 *Protecting You and Your Family's Health*, NAVAJO SAFE WATER, https://storymaps.arcgis.com/stories/1b4dc0d978c74d97a559e615730d4cd4 (last updated Sept. 15, 2022).

18 *Addressing the Urgent Needs of Our Tribal Communities: Hearing Before the H. Comm. on Energy and Com.*, 116th Cong. 7–8 (2020) (statement of Jonathan Nez, President, Navajo Nation).

Even after the COVID-19 pandemic, climate change will continue to threaten the public health and survival of tribal communities. Aside from exacerbating future pandemic threats,[19] climate change presents an increasing risk to water security. From prolonged droughts to coastal flooding, climate change impacts are shifting the landscape across the country, further contributing to the water-related challenges many tribes experience.[20] For example, the Colorado River provides water to approximately 40 million people, 7 states, and 30 federally recognized tribes with "Basin Tribes hold[ing] water rights to approximately 3 million acre-feet of Colorado River water, which equates to about 25% of the river's current average annual flow."[21] However, a substantial portion of tribal water rights are unrealized, in part due to the lack of necessary infrastructure to access the water and funding to create such access.[22] Meanwhile, "decisions made a century ago overallocated the river's water . . . [and] climate change has magnified the problem . . . ."[23]

Many tribes in the Colorado River Basin ("the Basin") already faced water security challenges, and climate change is exacerbating the problem. These challenges can relate to clean drinking water access, as mentioned with the Navajo Nation, or agricultural use. Both have a direct impact on tribal public health. Through ownership of a 7,700-acre farm, known as the Ute Mountain Ute Tribe Farm & Ranch Enterprise, the tribe has provided agricultural and financial support to its members since its formation in 1962.[24] But in 2021, due to drought and associated

19 *See* Xavier Rodó et al., *Changing Climate and the COVID-19 Pandemic: More than Just Heads or Tails*, 27 NATURE MED. 576, 576 (2021).

20 *See* Part I.A. of this Article discussing climate impacts to water and tribes.

21 Letter from Tribal Leaders, to Deb Haaland, Sec'y of the Interior, U.S. Dep't of the Interior (Nov. 15, 2021), https://s3.documentcloud.org/documents/21165278/2021-11-15-tribes-letter-to-sec-haaland.pdf; *see also* WATER & TRIBES INITIATIVE, POLICY BRIEF #4: THE STATUS OF TRIBAL WATER RIGHTS IN THE COLORADO RIVER BASIN 1 (2021) [hereinafter TRIBAL WATER RIGHTS], http://www.naturalresourcespolicy.org/publications/policy-brief-4-final-4.9.21-.pdf.

22 *See* TRIBAL WATER RIGHTS, *supra* note 21, at 1–2.

23 John Fleck & Anne Castle, *Green Light for Adaptive Policies on the Colorado River*, 14 WATER no.1:2, Dec. 2021, at 2.

24 UTE MOUNTAIN UTE TRIBE FARM & RANCH ENTERPRISE, https://www.utemtn.com/ (last visited Dec. 25, 2022); Sarah Troy, *As Drought in the West Worsens, the Ute Mountain Ute Tribe Faces a Dwindling Water Supply*, THE COLO. TRUST: COLLECTIVE COLO. (July 19, 2021), https://collective.coloradotrust.org/stories/as-drought-in-the-west-worsens-the-ute-mountain-ute-tribe-faces-a-dwindling-water-supply/; Rachelle Todea, *Ute Mountain Ute Tribe Faces Another Devastating Drought Year, but Recent Rain, Wheat Prices Bring Hope*, WATER EDUCATION COLO. (June 8, 2022), https://www.watereducationcolorado.org/fresh-water-news/ute-mountain-ute-tribe-faces-another-devastating-drought-year-but-recent-rain-

water cuts, the enterprise received only 10% of its water allocation from a main water source, the McPhee Reservoir. [25] The decrease in water led to a reduced crop production, which necessitated laying off 50% of the farm's employees, half of whom are tribal members.[26] In addition to the obvious economic implications, unemployment has been associated with negative health consequences, including depression and other stress-related illnesses.[27] To protect its community, the Ute Mountain Ute Tribe is looking for help by way of more water or assistance from the federal government.[28] Based upon climate projections, it is increasingly likely that any assistance will have to come from the government rather than Mother Nature. [29]

In contrast, some tribes in other parts of the country are dealing with the effects of too much water. Take for instance the Quileute Tribe, who sought federal assistance over a decade ago to respond to climate change. After ceding more than 800,000 acres of land, the Quileute Tribe was forced onto a one square mile reservation on the coast of the western Olympic Peninsula in Washington, surrounded by Olympic National Park.[30] Home to approximately 400 people, the tribal village was being threatened by the rising Pacific Ocean.[31] The community's single road was often under water, and tribal members feared that a tsunami would lead to the extinction of their people.[32] Seeking federal legislation to facilitate a move to higher ground, Chairwoman Bonita Cleveland testified in 2011:

---

wheat-prices-bring-hope/.

25 Troy, *supra* note 24.

26 Todea, *supra* note 24.

27 ROBERT WOOD JOHNSON FOUNDATION, HOW DOES EMPLOYMENT—OR UNEMPLOYMENT—AFFECT HEALTH? 1 (2013), http://www.rwjf.org/content/dam/farm/reports/issue_briefs/2013/rwjf403360.

28 *See* Nina Kravinsky, *Drought Is Forcing Farmers in Colorado to Make Tough Choices*, NPR (Nov. 6, 2021), https://www.npr.org/2021/11/06/1051527449/drought-farmers-southwest-colorado-climate-change.

29 Fleck & Castle, *supra* note 23, at 5 (discussing climate change projections for reductions in Colorado River flows).

30 Ben Tracy, *Climate Change Forces Native American Tribes to Relocate*, CBS NEWS: CBS EVENING NEWS WITH NORAH O'DONNELL, (Nov. 4, 2021, 6:49 PM) (UPDATED 7:53 PM), https://www.cbsnews.com/news/quileute-tribe-climate-change/.

31 *Id.*

32 *Quileute Tribe Tsunami Protection Legislation*: *Hearing on S. 636 Before the S. Comm. on Indian Affs.*, 112th Cong. 1 (2011), https://www.indian.senate.gov/sites/default/files/upload/files/Bonita-Cleveland-testimony-S-636-and-attachment.pdf (statement of Bonita Cleveland, Chair of the Quileute Tribe).

> As Tribal Chair, I am constantly asked why it has taken so long for the federal government to recognize the injustice to our Tribe and the danger we face. Our Tribal School is at sea level next to the Pacific Ocean and the students ask their teachers: "Could we be killed by the wave?" and "Could we get out in time?"[33]

Recognizing that most of the reservation was located within the coastal flood plain—with tribal administrative buildings, the school, and housing all located in a tsunami zone—Congress passed legislation in 2012, returning 785 acres of Olympic National Park land to the Quileute Tribe.[34] While the land transfer has enabled the tribe to gradually move tribal structures and homes to higher ground, further measures will be necessary to protect the tribe from future climate impacts, as illustrated through the tribe's subsequent hazard mitigation plan, vulnerability assessment, and climate plan.[35]

Regardless of the specific climate impacts experienced, whether a water shortage or excess as demonstrated by the Ute Mountain Ute and Quileute Tribe respectively, the federal government must do more to uphold its promises and protect tribal communities. The federal responsibility to tribes is based, in part, on the fact that the United States is a settler nation, founded upon Indigenous land.[36] "Historical research shows that land dispossession and forced migration are the primary means by which settler populations achieve large-scale political and

33 *Id.*

34 Act of Feb. 27, 2012, Pub. L. No. 112–97, 126 Stat. 257 (2012) (providing the Quileute Indian Tribe tsunami and flood protection, and for other purposes) (codified at 16 U.S.C. §§ 1131-1132, 251; 25 U.S.C. § 2701).

35 Richard Arlin Walker, *Tribal Nations Adapt to Being at "Ground Zero" of the Climate Crisis*, HIGH COUNTRY NEWS (Apr. 14, 2021), https://www.hcn.org/articles/climate-change-tribal-nations-adapt-to-being-at-ground-zero-of-the-climate-crisis; QUILEUTE NATION, *Climate Change*, https://quileutenation.org/natural-resources/climate-change/ (last visited Dec. 25, 2022). The Quileute Tribe's climate plan specifically notes that some important structures, such as the marina, are "water-dependent and won't be moved." Katherine Krueger, *Climate Plan for the Quileute Tribe of the Quileute Reservation*, QUILEUTE NAT. RES., 51–2 (2017), https://quileutenation.org/wp-content/uploads/2021/05/April-2017-UPDATE-to-Climate-Plan-QT-of-the-QR.pdf. The tribe is pursuing structural protections for these facilities. *Id.*

36 Alex Tallchief Skibine, *Towards a Trust We Can Trust: The Role of the Trust Doctrine in the Management of Natural Resources*, *in* TRIBES, LAND, AND THE ENVIRONMENT 7, 7 (Sarah A. Krakoff & Ezra Rosser eds., 2012) (discussing theories of the source of the trust doctrine, including that it originated from land transfers between the United States and tribes).

economic control over Indigenous populations."[37] The United States is no exception. This country was built upon millions of acres of stolen land, beginning with the arrival of European settlers.[38] Through treaty or by force, the federal government continued to usurp land, often displacing Native communities.[39] Such action "created the groundwork for contemporary conditions in which Indigenous peoples . . . face greater vulnerabilities to their health and food security, lack access to culturally appropriate education, and have heightened exposures to contaminants."[40] These disparities are particularly egregious given the federal government's special relationship and legal responsibility to tribes.

Specifically, according to the Indian Health Care Improvement Act (IHCIA), "Federal health services to maintain and improve the health of the Indians are consonant with and required by the Federal Government's historical and unique legal relationship with, and resulting responsibility to, the American Indian people."[41] Stemming from treaty obligations, the federal government agreed to promote tribal well-being and support tribes' basic needs, including critical items such as health care (e.g., medical facilities and clean drinking water).[42] Such treaties between the United States and tribes frequently included provisions for medical services, physicians, or hospitals for the care of Native Americans.[43] Today, the IHS is the federal agency responsible for providing health services to Native Americans.[44] Recognizing the intrinsic connection between water and public health, the IHS Sanitation Facilities Construction Program was established in 1959 to provide safe water, wastewater, and solid waste systems for federally recognized

37 Justin Farrell et al., *Effects of Land Dispossession and Forced Migration on Indigenous Peoples in North America*, 374 SCIENCE, no. 6567 (Special Issue), Oct. 2021, at 1.

38 *Id.*

39 *Id. See also* BROKEN PROMISES, *supra* note 8, at 15.

40 Farrell et al., *supra* note 37, at 1.

41 25 U.S.C. § 1601.

42 BROKEN PROMISES, *supra* note 8, at 2.

43 *Basis for Health Services*, INDIAN HEALTH SERV. (Jan. 2015), https://www.ihs.gov/newsroom/factsheets/basisforhealthservices/; *see e.g.*, Treaty with the Kiowa and Comanche, art. 14, Oct. 21, 1867, 15 Stat. 581, https://treaties.okstate.edu/treaties/treaty-with-the-kiowa-and-comanche-1867.-(0977) ("The United States hereby agrees to furnish annually to the Indians the physician . . . and that such appropriations shall be made from time to time, on the estimates of the Secretary of the Interior, as will be sufficient to employ such [person].").

44 *About IHS*, INDIAN HEALTH SERV. [hereinafter *About IHS*], https://www.ihs.gov/aboutihs/ (last visited Dec.1, 2022).

tribes.[45] However, IHS—including the sanitation program—has been historically underfunded and understaffed.[46] The IHS health care expenditure per capita is only one-third of what the federal government spends per person nationwide on health care.[47] Not only are laws and policies meaningless without resources to enforce them, but in this case, such "[u]nder-funding violates the basic tenants of the trust relationship between the [federal] government and Native peoples."[48]

Overall, "[t]he efforts of the federal government have been insufficient to meet the promises of providing for the health and wellbeing of tribal citizens, as a vast health disparity exists today between Native Americans and other population groups."[49] Native Americans experience a life expectancy that is 5.5 years less than the national average and die at higher rates than other Americans from various chronic diseases, including heart disease, diabetes, and chronic liver disease and cirrhosis.[50] The federal government has also failed to meet its treaty and trust responsibilities to provide basic infrastructure, in turn creating unsafe and unsanitary living conditions.[51] "A century ago, the U.S. government invested in modern water and sanitation systems as a means of eradicating water-borne diseases and stimulating economic prosperity, but this government investment in water infrastructure over

45 *Division of Sanitation Facilities Construction*, INDIAN HEALTH SERV., https://www.ihs.gov/dsfc/ (last visited Jan. 9, 2023).

46 BROKEN PROMISES, *supra* note 8, at 66–67; HEATHER TANANA ET AL., WATER & TRIBES INITIATIVE, UNIVERSAL ACCESS TO CLEAN WATER FOR TRIBES IN THE COLORADO RIVER BASIN 4 (2021) [hereinafter UNIVERSAL ACCESS], https://tribalcleanwater.org/wp-content/uploads/2021/09/WTI-Full-Report-4.20.pdf.

47 NAT'L CONG. OF AM. INDIANS, *Reducing Disparities in the Federal Health Care Budget*, *in* FISCAL YEAR 2020 INDIAN COUNTRY BUDGET REQUEST 55, 55 (2019), https://www.ncai.org/07_NCAI-FY20-Healthcare.pdf ("In FY 2017, the IHS per capita expenditures for patient health services were just $3,332 compared to $9,207 per person for health care spending nationally.").

48 BROKEN PROMISES, *supra* note 8, at 2.

49 *Id.* at 65.

50 INDIAN HEALTH SERV., INDIAN HEALTH DISPARITIES 1 (2019), https://www.ihs.gov/sites/newsroom/themes/responsive2017/display_objects/documents/factsheets/Disparities.pdf.

51 *Addressing Tribal Needs Through Innovation and Investment in Water Resources Infrastructures Through the U.S. Bureau of Reclamation: Hearing on Energy and Water Dev. Appropriations for 2022 Before the H. Comm. on Appropriations & Subcomm. on Energy and Water Dev.*, 117th Cong. 2 (2021) [hereinafter *Energy and Water Dev. Hearing*] (statement of Bidtah N. Becker, Associate Attorney, Navajo Tribal Utility Authority); *See also* Part II of this Article discussing the federal government's responsibility to tribes and water insecurity in Indian country.

the past one hundred years has largely bypassed reservations."[52]

Thus, many tribes lack the necessary water infrastructure to protect their communities against public health threats not experienced in the rest of the country. Nearly 48% of homes in tribal communities—over half a million Native Americans—do not have access to reliable water sources, clean drinking water, or basic sanitation, as compared to less than 1% of total homes in the United States lacking such access.[53] Inaccessible clean water and sanitation contribute to high morbidity and mortality rates among Native Americans.[54] Indian country is already in a deficit. If left unchecked, climate change will compound the disparity.

This Article looks at how to protect tribal public health from climate change. With a special emphasis on water, Part I discusses climate change impacts, including the related health and cultural threats to tribal communities. Part II analyzes the federal government's treaty and trust responsibility to protect Native Americans from those threats as well as the relevant federal programs. Finally, Part III concludes by exploring how the federal government can collaborate with tribes and better support them to exercise tribal self-determination to the fullest and be drivers of their own future.

## I. CLIMATE CHANGE IN INDIAN COUNTRY

*Indigenous health is based on interconnected social and ecological systems that are being disrupted by a changing climate. As these changes continue, the health of individuals and communities will be uniquely challenged by climate impacts to lands, waters, foods, and other plant and animal species. These impacts threaten sites, practices, and relationships with cultural, spiritual, or ceremonial importance that are foundational to Indigenous peoples' cultural heritages, identities, and physical and mental health.*

— UNITED SOUTH AND EASTERN TRIBES SOVEREIGNTY PROTECTION FUND[55]

52 *Id.*

53 DEMOCRATIC STAFF OF H. COMM. ON NAT. RES., 114TH CONG., WATER DELAYED IS WATER DENIED: HOW CONGRESS HAS BLOCKED ACCESS TO WATER FOR NATIVE FAMILIES 1 (Comm. Print 2016), http://blackfeetnation.com/wp-content/uploads/2016/10/House-NRC-Water-Report-Minority-10-10-16.pdf.

54 *Id.* at 3.

55 *The Impacts of Climate Change on Tribal Communities: Oversight Hearing Before the Subcomm. on Indigenous Peoples of the U.S. of the H. Comm. on Nat. Res.*, 116th Cong. (2019) (statement of United South and Eastern Tribes Sovereignty Protection Fund).

Indigenous peoples, including Native Americans, are part of frontline communities that experience the "first and worst" consequences of climate change.[56] Social inequities, exclusion from the decision-making process, and inequitable access to resources have all contributed to higher environmental risks for frontline communities, including climate-related disasters.[57]

The impacts of climate change are wide and far-reaching. Rising global temperatures and increasingly severe heatwaves have produced the warmest period in the history of modern civilization.[58] Numerous studies have documented a "host of other climate variables or 'indicators' consistent with a warmer world," including "melting glaciers and ice sheets, shrinking snow cover and sea ice, rising sea levels, more frequent high temperature extremes and heavy precipitation events."[59] Drier and warmer conditions have also contributed to an increase in wildfires, which magnifies health risks and impacts quality of life by degrading air quality.[60]

While Indigenous peoples "may be affected by climate change in ways that are similar to others in the United States, [they] can also be affected uniquely and disproportionately."[61] In contrast to other frontline communities, tribes possess inherent sovereign authority.[62] There are 574 federally recognized tribes in the United States.[63] Each tribe is unique and independent, but they share a common history of colonization.[64] Many tribal nations were removed from their traditional homelands onto reservations and lands that "were not considered

56 Georgetown Climate Ctr., *Equitable Adaptation Legal & Policy Toolkit*, GEO. L., https://www.georgetownclimate.org/adaptation/toolkits/equitable-adaptation-toolkit/introduction.html?chapter (last visited Dec. 25, 2022).

57 Marla Nelson et al., *Getting By and Getting Out: How Residents of Louisiana's Frontline Communities Are Adapting to Environmental Change*, 32 HOUS. POL'Y DEBATE (SPECIAL ISSUE) 1, 84, 94 (2021).

58 U.S. GLOB. CHANGE RSCH. PROGRAM, *Executive Summary: Highlights of the Findings of the U.S. Global Change Research Program Climate Science Special Report*, *in* CLIMATE SCIENCE SPECIAL REPORT: FOURTH NATIONAL CLIMATE ASSESSMENT, VOL. 1 at 12, 12 (2017), https://science2017.globalchange.gov/downloads/CSSR2017_FullReport.pdf.

59 NCA4 VOL. 2, *supra* note 2, at 76.

60 *Id.* at 50, 56.

61 *Id.* at 574.

62 BROKEN PROMISES, *supra* note 8, at 12 ("Tribal nations are distinctive sovereigns that have a special government-to-government relationship with the United States.").

63 *Indian Affairs*, U.S. DEP'T OF THE INTERIOR, https://www.bia.gov/about-us (last visited Dec. 25, 2022).

64 UNIVERSAL ACCESS, *supra* note 46, at 23.

to be located in the most desirable area of the Nation."[65] However, tribes retained a spiritual and cultural connection to the land and their environment, viewing the Earth as a living being to be cared for and respected. As a result, impacts to the environment extend to the entire community. "As climate change threatens to dramatically change the environment, culture and tradition that is tied to environmental occurrences is threatened."[66]

*Tó éí ííná até* (Navajo).[67] *Paatuwaqatsi* (Hopi).[68] *Payy new aakut* (Ute).[69] *Xa 'iipayk* (Quechan).[70] Each tribe has its own language, but the meaning is the same: Water is Life.[71] Water is essential to the health and survival of any community. As discussed further below, water also carries significant cultural and spiritual importance for tribes. Recognizing the critical role of water, this Part focuses on the climate change impacts to water resources, beginning with an overview of the physical changes to water, followed by a discussion of the health and cultural-related impacts of these changes.

### *A. Climate-Related Changes to Water*

Water is critical to the public health of all communities. And yet, climate change is significantly impacting water, which in turn influences human health and disease. Water's sensitivities to climate-related events affect every region in the United States.[72] However, there are three main categories of climate-change impacts to water that present threats to tribal communities: rising sea-levels, diminishing water supply, and degrading water quality.

First, sea-level rise is threatening the continued viability of coastal communities.[73] "[T]he combined effects of extreme rainfall

65 Arizona v. California, 373 U.S. 546, 598 (1963).

66 Randall S. Abate & Elizabeth Ann Kronk Warner, *Commonality Among Unique Indigenous Communities: An Introduction to Climate Change and its Impacts on Indigenous Peoples*, *in* CLIMATE CHANGE AND INDIGENOUS PEOPLES: THE SEARCH FOR LEGAL REMEDIES 3, 12 (Randall S. Abate & Elizabeth Ann Kronk Warner eds., Edward Elgar Publ'g 2013).

67 UNIVERSAL ACCESS, *supra* note 46, at iv.

68 *Id.*

69 *Id.*

70 *Id.*

71 *Id.*

72 NCA4 VOL. 2, *supra* note 2, at 149.

73 *See* CONG. RSCH. SERV., SEA-LEVEL RISE AND U.S. COASTS: SCIENCE AND POLICY CONSIDERATIONS 23–25 (2016), https://crsreports.congress.gov/product/pdf/R/R44632 (discussing global and relative sea level, and policy considerations

events and rising sea level are increasing flood frequencies, making coastal and low-lying regions highly vulnerable to climate change impacts."[74] Sea-level rise has amplified coastal flooding and erosion impacts, making some areas uninhabitable (both temporarily and permanently).[75] Furthermore, sea-level rise has exacerbated saltwater intrusion into coastal rivers and aquifers, which threatens drinking water supplies, infrastructure, and ecosystems.[76]

The associated emergency response costs to these impacts carry a heavy price tag for coastal communities, often requiring federal assistance.[77] Between fiscal years 2016 and 2020, federal agencies provided roughly $391 million to Alaska Native villages to repair damaged infrastructure and protect against environmental threats, including erosion, flooding, and thawing permafrost.[78] However, more than one-third of the highly threatened Native villages did not receive assistance during that timeframe, indicating that significant work lies ahead to ensure protection of these communities.[79]

In a recent assessment of the federal budget's exposure to climate risks, the Office of Management and Budget estimated "that annual Federal spending increases on coastal disaster response spending are projected to range from $4 [to] $32 billion" annually.[80] Flooding, in particular, is "the most common and the most expensive natural disaster in the United States."[81] Given the high costs (and projected increases), it is not surprising that since 2013, the U.S. Government Accountability Office has listed the federal government's fiscal exposure to climate change on the "High Risk List,"[82] indicating the federal operation's

related to sea-level rise).

74 NCA4 VOL. 2, *supra* note 2, at 150.

75 *Id.* at 326–29

76 *Id.* at 153–54.

77 *See id.* at 330–35.

78 U.S. GOV'T ACCOUNTABILITY OFF., GAO-22-104241, ALASKA NATIVE ISSUES: FEDERAL AGENCIES COULD ENHANCE SUPPORT FOR NATIVE VILLAGE EFFORTS TO ADDRESS ENVIRONMENTAL THREATS 22 (2022) [hereinafter GAO ALASKA NATIVE ISSUES], https://www.gao.gov/assets/gao-22-104241.pdf.

79 *Id.* at 27.

80 OFF. OF MGMT. & BUDGET, EXEC. OFF. OF THE PRESIDENT, FEDERAL BUDGET EXPOSURE TO CLIMATE 280 (2022), https://www.whitehouse.gov/wp-content/uploads/2022/04/ap_21_climate_risk_fy2023.pdf.

81 *Id.* at 281 (internal citations omitted).

82 *Limiting the Federal Government's Fiscal Exposure by Better Managing Climate Change Risks*, U.S. GOV'T ACCOUNTABILITY OFF. [hereinafter GAO HIGH RISK LIST—CLIMATE], https://www.gao.gov/highrisk/limiting-federal-governments-fiscal-exposure-better-managing-climate-change-risks (last visited Jan. 25, 2023).

need of transformation to address economy, efficiency, or effectiveness challenges.

While some communities will be able to rebuild after experiencing a coastal disaster, for others, rebuilding may be impossible due to land loss or safety concerns. An estimated 13.1 million people are potentially at risk of needing to migrate to escape rising sea-levels by the year 2100, including many tribal communities.[83] From Alaska and the Pacific Northwest to Louisiana and the Northeast, tribal communities are increasingly facing the reality of displacement.[84]

Newtok, a Yup'ik village on the southwest coast of Alaska, "is emblematic of other Alaska Native villages in low-lying wetlands that have considered climate migration as a resilience strategy and [its people] are subject to a combination of erosion, permafrost degradation, and flooding from storms."[85] In 1994, tribal officials began to evaluate potential resettlement sites—finally agreeing upon a site nine miles southeast of the village and within Newtok's traditional lands, named Mertarvik.[86] Almost three decades later, Newtok residents continue to "face increased disaster risks because the relocation to Mertarvik will not be complete before coastal erosion and flooding make Newtok uninhabitable."[87]

On the other side of the country, the Shinnecock Indian Nation is fighting against rising seas to hold onto what remains of their ancestral lands; the tribe's current-day territory comprises 800 acres of land on Long Island, New York, adjacent to Southampton, New York.[88] According to tribal projections, almost half the Shinnecock Nation peninsula will be inundated by high water during a 100-year storm[89] by

83 NCA4 VOL. 2, *supra* note 2, at 335.

84 *See* GAO ALASKA NATIVE ISSUES, *supra* note 78; U.S. GOV'T ACCOUNTABILITY OFF., GAO-20-488, CLIMATE CHANGE: A CLIMATE MIGRATION PILOT PROGRAM COULD ENHANCE THE NATION'S RESILIENCE AND REDUCE FEDERAL FISCAL EXPOSURE 16 (2020) [hereinafter GAO CLIMATE CHANGE], https://www.gao.gov/assets/710/708284.pdf.

85 GAO CLIMATE CHANGE, *supra* note 84, at 17.

86 *Id.* at 18–19.

87 *Id.* at 20.

88 ANCHOR QEA, LLC ET AL., SHINNECOCK INDIAN NATION, CLIMATE VULNERABILITY ASSESSMENT AND ACTION PLAN 5 (2019), https://www.peconicestuary.org/wp-content/uploads/2019/10/Shinnecock-Indian-Nation-Climate-Vulnerability-Assessment-and-Action-Plan.pdf.

89 "[T]he term '100-year storm' is used to define a rainfall event that statistically has this same 1-percent chance of occurring. In other words, over the course of 1 million years, these events would be expected to occur 10,000 times." Water Science School, *The 100-Year Flood*, USGS (June 7, 2018), https://www.usgs.gov/

2050.[90] Dr. Kelsey Leonard, a Shinnecock tribal member and Indigenous water justice researcher, reflected on the climate-driven impacts faced by the tribe and suggested ways to apply those teachings to the future:

> We have seen increasing, unusual mortality events of whale relatives[—humpback and right—]since 2016 along the Atlantic coast . . . we have a unique relationship as Indigenous people of this coastline with those beings. They are here, they are telling us something: that we need to change the way we are responding to climate changes, to be a witness to those messages and to be able to learn from them and adapt.[91]

Although the tribe is actively engaged in building up natural defenses (e.g., raising sand dunes, restoring oyster reefs), the success of these efforts is yet to be determined and "depends . . . on how quickly the world as a whole reduces emissions and stems the rate of sea level rise."[92]

Climate change is also putting the future reliability of water supplies at risk. "As temperatures continue to rise, there is a risk of decreased and highly variable water supplies for human use and ecosystem maintenance."[93] In the Southwest, intensifying droughts, increasingly heavy downpours, and reduced snowpack combined with a growing population, deteriorating infrastructure, and groundwater depletion contribute to a reduction in "the future reliability of water supplies."[94] In the United States, groundwater is a critical water source and provides more than 40% of the "water used for agriculture (irrigation and livestock) and domestic water supplies."[95] Historically, groundwater has been used as a buffer against water scarcity.[96] However,

special-topics/water-science-school/science/100-year-flood.

90 SHINNECOCK INDIAN NATION, CLIMATE CHANGE ADAPTATION PLAN 9–11 (2013), https://www.epa.gov/sites/default/files/2016-09/documents/shinnecock_nation_ccadaptation_plan_9.27.13.pdf.

91 Meredith Haas, *Indigenous Values to Restore Coastal Areas*, SEA GRANT R.I. (Nov. 16, 2021), https://seagrant.gso.uri.edu/indigenous-values-to-restore-coastal-areas/.

92 Somini Sengupta & Shola Lawal, *The Original Long Islanders Fight to Save Their Land from a Rising Sea*, N.Y. TIMES (Apr. 22, 2021), https://www.nytimes.com/2020/03/05/climate/shinnecock-long-island-climate.html; *see also* ANCHOR QEA, LLC ET AL., *supra* note 88, at 28–30.

93 NCA4 VOL. 2, *supra* note 2, at 152.

94 *Id.* at 150–51.

95 *Id.* at 152; *see* Water Science School, *Groundwater Use in the United States*, USGS (June 18, 2018), https://www.usgs.gov/special-topics/water-science-school/science/groundwater-use-united-states#overview.

96 NCA4 VOL. 2, *supra* note 2, at 151; Amir AghaKouchak et al. *Water and Climate: Recognize Anthropogenic Drought*, 524 NATURE 409, 410 (2015) (discussing increased groundwater extraction and use in response to droughts).

rising temperatures and prolonged droughts are putting groundwater supplies at risk.[97] Changes in surface water supply also result in groundwater depletions, through further increases in groundwater abstraction and consumption.[98] "Higher temperatures also result in increased human use of water, particularly through increased water demand for agriculture arising from increased evapotranspiration."[99]

From the Southwest to the Great Plains, tribes are experiencing water access barriers exacerbated by climate change. A common example of the deficit between supply and demand is the Basin, where water allocations exceed the average supply.[100] The Basin provides water to 30 federally recognized tribes,[101] 7 states (Colorado, New Mexico, Utah, Wyoming, Arizona, California, and Nevada), and 2 countries (United States and Mexico).[102] Current river flows are "20% below the already inadequate 20th century average, with a substantial portion of that reduction attributed to climate change, and continued declines are predicted."[103] Numerous studies have concluded that climate change has worsened water scarcity in the Basin due to streamflow decline associated

97 *See* Jonathan T. Overpeck & Bradley Udall, *Climate Change and the Aridification of North America*, 117 PROCS. NAT'L ACAD. SCIS. 11856, 11856–57 (2020); Thomas Meixner et al., *Implications of Projected Climate Change for Groundwater Recharge in the Western United States*, 534 J. HYDROLOGY 124, 124–38 (2016).

98 Richard Taylor, *Hydrology: When Wells Run Dry*, 516 NATURE 179, 179 (2014).

99 NCA4 VOL. 2, *supra* note 2, at 152. Evapotranspiration is the process by which water moves from the land surface into the atmosphere via evaporation and transpiration (i.e., when plants take water from the soil and release water vapor into the air). Water Science School, *Evapotranspiration and the Water Cycle*, USGS, https://www.usgs.gov/special-topics/water-science-school/science/evapotranspiration-and-water-cycle.

100 TRIBAL WATER RIGHTS, *supra* note 21, at 3.

101 The Colorado River Basin is home to the "Ak-Chin Indian Community, Chemehuevi Indian Tribe, Cocopah Indian Tribe, Colorado River Indian Tribes, Fort McDowell Yavapai Nation, Fort Mojave Indian Tribe, Gila River Indian Community, Havasupai Tribe, Hopi Tribe, Hualapai Indian Tribe, Jicarilla Apache Nation, Kaibab Band of Paiute Indians, Las Vegas Tribe of Paiute Indians, Moapa Band of Paiute Indians, White Mountain Apache, Navajo Nation, Pascua Yaqui Tribe, Quechan Indian Tribe, Salt River Pima-Maricopa Indian Community, San Carlos Apache Tribe, San Juan Southern Paiute Tribe, Shivwits Band of Paiute Indian Tribe of Utah (Constituent Band of the Paiute Indian Tribe of Utah), Southern Ute Indian Tribe, Tohono O'odham Nation, Tonto Apache Tribe, Ute Indian Tribe, Ute Mountain Ute, Yavapai-Apache Nation, Yavapai- Prescott Indian Tribe, and Pueblo of Zuni." *Id.* at 1 n.2.

102 *Colorado River Basin*, U.S. BUREAU OF RECLAMATION, https://www.usbr.gov/ColoradoRiverBasin/ (last visited Jan. 25, 2023).

103 Fleck & Castle, *supra* note 23, at 2.

with increasing temperatures.[104] Every additional one degree Celsius of warming results in an estimated 9% decline in river flow.[105] Tribes have claims to a significant portion of the water in the Basin. Twenty-two of the Basin tribes have either fully or partially resolved their water rights, accounting for approximately 22% to 26% of the Basin's average annual water supply.[106] Additionally, several tribes have unresolved water rights that still need to be quantified, and many of the recognized tribal water rights have yet to be fully developed.[107]

"Previous modeling studies have focused on the impact of climate change without considering . . . under-utilized Indian water rights."[108] These omissions contribute to community vulnerability and uncertainty regarding water availability for other users in the Basin.[109] While increases in water-use efficiency has helped, current demand still exceeds supply and future demand is expected to further increase.[110] Not only will tribes continue to resolve and develop their water rights, but human population growth is also projected to increase an average of 53% in the Basin states by the year 2030.[111]

Groundwater depletion is also contributing to the limited water supply and demand gap for the Hopi Tribe, whose reservation is surrounded entirely by the Navajo Nation in northeastern Arizona.[112]

104 Y.C. Ethan Yang et al., *Impact of Climate Change on Adaptive Management Decisions in the Face of Water Scarcity*, 588 J. HYDROLOGY, no 125015, Sept. 2020. at 1, 1.

105 P.C.D. Milly & K.A. Dunne, *Colorado River Flow Dwindles as Warming-Driven Loss of Reflective Snow Energizes Evaporation*, 367 SCIENCE, no. 6483, Feb. 2020, at 1, 1.

106 TRIBAL WATER RIGHTS, *supra* note 2, at 8; *see generally* HOMA SALEHABADI ET AL., CTR. FOR COLO. RIVER STUDS., THE FUTURE HYDROLOGY OF THE COLORADO RIVER BASIN, WHITE PAPER NO. 4 (2020), https://www.fs.usda.gov/rm/pubs_journals/2020/rmrs_2020_salehabadi_h001.pdf (offering projections of low water supply drought scenarios in the Colorado River, and management strategies).

107 *See* TRIBAL WATER RIGHTS, *supra* note 21, at 8.

108 Yang et al., *supra* note 104, at 1.

109 *Id.* at 2 (identifying under-utilized Indian water rights as a challenge to future water management in the Basin).

110 *See* discussion *infra* Part II (addressing tribal water rights, including the legal basis for tribal water rights and related challenges).

111 Population Growth, SAVE THE COLO., https://savethecolorado.org/threats/population-growth/ (last visited Jan. 2, 2023) (growth compared to population numbers in 2000).

112 Simon Romero, *In Arizona, Drought Ignites Tensions and Threatens Traditions Among the Hopi*, N.Y. TIMES (Oct. 2, 2021), https://www.nytimes.com/2021/10/02/us/arizona-megadrought.html. *See also* JON P. MASON, U.S. GEOLOGICAL SURVEY, GROUNDWATER, SURFACE-WATER, AND WATER-CHEMISTRY DATA, BLACK MESA AREA, NORTHEASTERN ARIZONA—2016–2018 (2021), https://pubs.usgs.gov/of/2021/1124/ofr20211124.pdf (summarizing data collected through the U.S. Geological Survey water-monitoring program in the Black Mesa study area,

Dried up springs have heightened tensions among farmers and ranchers as they compete for limited water on Hopi land.[113] Between 1968 and 2005, the Peabody Coal Company significantly depleted groundwater aquifers underlying the Hopi and Navajo Reservations, jeopardizing crop irrigation.[114] While Peabody certainly contributed to the current water conditions on Hopi lands, climate change is further diminishing water supplies through rising temperatures and shifting rainfall patterns.[115]

Over 1,000 miles away, the Standing Rock Sioux Tribe is also confronted with water supply challenges related to drought and deteriorating infrastructure.[116] In 2003, the Standing Rock Sioux Tribe in North Dakota did not have water for several days due to dropped water levels from drought.[117] Silt and sludge clogged the sole intake pipe from the Missouri River, effectively halting the tribe's water supply.[118] Without any other water sources, the IHS hospital was forced to temporarily shut down, requiring tribal members to travel approximately 60 miles to receive medical services.[119] While a new pipeline was completed in 2017 to provide safe and clean drinking water for the community,[120] the tribe continues to experience extreme drought, which prompted the tribe to issue an Emergency Drought and Extreme Fire Declaration in 2021.[121]

---

including declining groundwater on the Hopi Reservation in northeastern Arizona).

113 Romero, *supra* note 112.

114 Richard T. Carson et al., *The Existence Value of a Distinctive Native American Culture: Survival of the Hopi Reservation*, 75 ENV'T AND RESO. ECONS. 931, 933 (2020).

115 MASON, *supra* note 112, at 3 (quantifying declines in water levels in the Black Mesa area, enclosed within the Navajo and Hopi Reservations).

116 Karen Cozzetto et al., *Climate Change Impacts on the Water Resources of American Indians and Alaska Natives in the U.S.*, 120 CLIMATIC CHANGE 569, 578 (2013); *see also Water Problems on the Standing Rock Sioux Reservation: Hearing Before the S. Comm. on Indian Affs.*, 108th Cong. (2004) [hereinafter *Water Problems*], https://www.govinfo.gov/content/pkg/CHRG-108shrg97093/html/CHRG-108shrg97093.htm (testimony received from the Standing Rock Sioux Tribe and several different federal agencies identifying the water challenges the Tribe experienced and highlighting the need for coordinated efforts among the agencies to address the problem).

117 Cozzetto et al., *supra* note 116, at 578.

118 *Id.*

119 *See Water Problems*, *supra* note 116 (statement of Charles W. Murphy, Chairman, Standing Rock Sioux Tribe).

120 *Standing Rock Rural Water Supply System Delivers Water*, U.S. BUREAU OF RECLAMATION (Aug. 21, 2017), https://www.usbr.gov/newsroom/newsroomold/newsrelease/detail.cfm?RecordID=60316.

121 Morgan Benth, *Standing Rock Issues Emergency Drought and Extreme Fire Declaration*, KFYR TV (Apr. 8, 2021), https://www.kfyrtv.com/2021/04/08/standing-rock-issues-emergency-drought-and-extreme-fire-declaration/. In mid-June of 2021,

Finally, water quality is being further threatened by climate change. Inadequate water quality is pervasive in tribal communities, with many tribes experiencing water quality challenges for decades.[122] According to the Environmental Protection Agency (EPA), "about 86[%] of tribal water systems currently comply with health-based drinking water standards, compared to 93[%] of community water systems nationally."[123] In some instances, water quality has been degraded due to traditional energy development.[124] Indian country is rich in mineral and energy resources, containing approximately 20% of known oil and gas reserves, 30% of western coal reserves, and 50% of uranium deposits.[125] Past energy development, however, led to elevated levels of contaminants, such as uranium, in groundwater sources.[126]

> Extraction of over 30 million tons of uranium ore through four decades left a legacy of [roughly] 500 abandoned uranium mines across the Western US and over 1000 associated waste features across Navajo Nation alone, resulting in decades of exposures of Navajo Nation residents to uranium and a wide range of co-occurring metals, including arsenic, cadmium, copper, and lead.[127]

Such exposure is occurring in part due to consumption of contaminated water.[128]

Naturally occurring contaminants have also plagued tribes, including the Hopi Tribe. The Hopi Reservation's drinking water systems have been contaminated with arsenic—ranging between 2 and 4 times the legal limit set by EPA—since installation in the 1960s.[129] The

---

approximately 42% of the Standing Rock Sioux Reservation was experiencing extreme drought. Nat'l Drought Mitigation Ctr., *U.S. Drought Monitor Now Searchable by Tribal Area*, UNIV. OF NEB. (Aug. 10, 2021), https://drought.unl.edu/Publications/News.aspx?id=378.

122 UNIVERSAL ACCESS, *supra* note 46, at 16–17.

123 Hannah Northey, *EPA Unveils Plan to Address Tribal Water Woes*, E&E NEWS PM (Oct. 14, 2021), https://www.eenews.net/articles/epa-unveils-plan-to-address-tribal-water-woes/.

124 UNIVERSAL ACCESS, *supra* note 46, at 16–17.

125 U.S. GOV'T ACCOUNTABILITY OFF., GAO-19-359, TRIBAL ENERGY: OPPORTUNITIES EXIST TO INCREASE FEDERAL AGENCIES' USE OF TRIBAL PREFERENCE AUTHORITY 4 (2019), https://www.gao.gov/assets/gao-19-359.pdf.

126 *See* UNIVERSAL ACCESS, *supra* note 46, at 16.

127 Sara S. Nozadi et al., *Prenatal Metal Exposures and Infants' Developmental Outcomes in a Navajo Population*, 19 INT'L J. ENV'T RSCH. AND PUB. HEALTH, no. 19, 425, Jan. 2022, at 1, 1–2.

128 *See id*. at 426, 437–39, 442.

129 UNIVERSAL ACCESS, *supra* note 46, at 2, 17.

tribe estimates that 75% of residents are drinking arsenic-contaminated water.[130] "The lack of other readily-available water sources, coupled with a high poverty rate (60[%] of Hopi residents live below the poverty line) leaves many with no other option but to drink the hazardous water."[131] "The EPA has ranked the contamination on the Hopi Reservation as one of its highest priorities and longest running arsenic drinking water violations."[132]

In 2019, the EPA fined the tribe for failing to reduce arsenic levels in its drinking water systems in violation of the Safe Drinking Water Act; ironically, the situation was created by the federal government when it initially built the system.[133] Ultimately, the Hopi Tribe agreed to pay a $3,800 penalty and secured additional federal support for the Hopi Arsenic Mitigation Project (HAMP) to address arsenic contamination on the reservation.[134] Through HAMP, the tribe "has identified new potable water sources, mapped a path for a regional pipeline to deliver the clean water to the villages, and drilled new wells."[135] In an announcement on October 30, 2020, the Trump Administration promised $5 million to assist the tribe in delivering clean water to Hopi villages, the first phase of the water delivery plan.[136] A couple years later, the project received additional funding through the Infrastructure Investment and Jobs Act, allowing the Hopi Tribe to complete a new regional water system.[137]

Climate change is exacerbating the water quality gap in Indian country. Increases in high flow events (e.g., intense storms and flooding) "can increase the delivery of sediment, nutrients, and microbial pathogens" into surface waters.[138] As previously noted, in coastal

130 *Id.* at 17.

131 *Id.*

132 *Hearing Before the H. Appropriations Subcomm. on Interior, Env't & Related Agencies*, 116th Cong. (Mar. 7, 2019) (statement of Timothy Nuvangyaoma, Chairman, Hopi Tribe).

133 *Id.*; Denise Adamic, *U.S. EPA Settles with Hopi Tribe for Safe Drinking Water Act Violations*, EPA (Nov. 25, 2019), https://www.epa.gov/newsreleases/us-epa-settles-hopi-tribe-safe-drinking-water-act-violations.

134 Adamic, *supra* note 133.

135 UNIVERSAL ACCESS, *supra* note 46, at 17.

136 *Id.*

137 *Biden-Harris Administration Announces $10 Million in Bipartisan Infrastructure Law Investments for Tribal Water Systems*, U.S. DEP'T OF THE INTERIOR (May 5, 2022), https://www.doi.gov/pressreleases/biden-harris-administration-announces-10-million-bipartisan-infrastructure-law; Hopi Utiliities Corporation, *Hopi Tribe Dedicates Hopi Arsenic Mitigation Project*, HOPI TUTUVENI (Aug. 17, 2022), https://www.hopi-nsn.gov/wp-content/uploads/2022/08/Aug-17-issue-final.pdf.

138 NCA4 VOL. 2, *supra* note 2, at 153.

areas, sea-level rise can increase saltwater intrusion into coastal rivers and aquifers, threatening drinking water supplies.[139] Warming water temperatures and changes in precipitation and runoff affect pollutant transport into and within water bodies.[140] Water temperature increases also contribute to increases in harmful algal blooms, [141] which degrade water quality.[142] Warmer water holds less oxygen, which could lead to decreased dissolved oxygen and therefore impact aquatic ecosystems.[143] Rising temperatures may cause increased evapotranspiration, leading to groundwater salinization.[144]

Changes in water quality have been observed on the Navajo Nation. For example, some of the well water in the southwestern portion of the reservation has "become so saline that the water is unusable for livestock and has corroded the piping and equipment used for bringing the water to the surface."[145] The Yurok Tribe is the largest tribe in California, inhabiting lands surrounding the lower Klamath River.[146] A range of anticipated climate changes in Yurok territory could affect water resources including "warming surface water temperatures," "lower dissolved oxygen concentrations," "expanding harmful algal blooms," "higher pollutant loadings," and "saltwater intrusion."[147] All

139 Chelsea Kolb et al., *Climate Change Impacts on Bromide, Trihalomethane Formation, and Health Risks at Coastal Groundwater Utilities*, 3 ASCE-ASME J. RISK AND UNCERTAINTY ENG'G SY.'S PART A: CIV. ENG'G, no. 3, September 2017, at 1, 1 (2017), http://dx.doi.org/10.1061/AJRUA6.0000904.

140 *See* Rory Coffey et al., *A Review of Water Quality Responses to Air Temperature and Precipitation Changes 2: Nutrients, Algal Blooms, Sediment, Pathogens*, 55 J. AM. WATER RES. ASS'N 844, 845–47 (2018).

141 Algae are simple plants, which under certain conditions, may grow out of control creating "blooms" that produce toxins or other harmful effects on people and animals. *What Is a Harmful Algal Bloom?*, NAT'L OCEANIC ATMOSPHERIC ADMIN., https://www.noaa.gov/what-is-harmful-algal-bloom (last updated Apr. 27, 2016).

142 Steven C. Chapra et al., *Climate Change Impacts on Harmful Algal Blooms in U.S. Freshwaters: A Screening-Level Assessment*, 51 ENV'T SCI. & TECH. 8933, 8933–43 (2017).

143 JULIE NANIA ET AL., CONSIDERATIONS FOR CLIMATE CHANGE AND VARIABILITY ADAPTATION ON THE NAVAJO NATION 45 (Getches-Wilkinson Ctr. Nat. Res., Energy, & the Env't, Univ. of Colo. L. Sch. ed., 2014).

144 *Id.* at 49. Salinization refers to an increase in salt content. *Salinize*, MERRIAM-WEBER DICTIONARY, https://www.merriam-webster.com/dictionary/salinize (last visited Jan. 25, 2023).

145 NANIA ET AL., *supra* note 143, at 45.

146 *Our History*, THE YUROK TRIBE, https://www.yuroktribe.org/our-history (last visited Jan. 25, 2023).

147 YUROK TRIBE, YUROKTRIBE: CLIMATE CHANGE ADAPTATION PLAN FOR WATER AND AQUATIC RESOURCES, https://www7.nau.edu/itep/main/tcc/docs/tribes/

of these changes are expected to degrade water quality.[148]

In 2021, faced with deteriorating water conditions, the Yurok Tribe advised residents to boil their water for the foreseeable future and issued a State of Emergency Declaration Due to Drought.[149] The declaration recognized that the Yurok Reservation and Klamath Basin were experiencing drought conditions not projected to resolve in the near future, which resulted in poor instream water quality.[150] Furthermore, the tribe resolved to "seek assistance from all federal, state, local, tribal, and volunteer resources to include funding resources available to assist in responding to this emergency."[151] As discussed further in the following sections, rising sea levels, diminished water supply, and poor water quality all threaten the health and cultural resources of tribes.

### *B. Health Impacts of Climate Change*

Clean drinking water and sanitation are essential to the full enjoyment of life and integral to the realization of all human rights.[152] The link between water and survival is so strong that the United Nations (UN), several countries, and a few states have recognized a human right to water.[153] This right comprises numerous factors, including an ample and safe supply of water for both personal and domestic applications.[154]

---

tribes_Yurok.pdf.

148 *Id.*

149 Carlos Olguin, *Yurok Tribe Warns of Drinking Water Issues*, KRCR (July 23, 2021), https://krcrtv.com/north-coast-news/eureka-local-news/yurok-tribe-warns-of-drinking-water-issues; YUROK TRIBAL COUNCIL, RES. NO. 21-059, STATE OF EMERGENCY DECLARATION DUE TO DROUGHT (May 13, 2021) [hereinafter Yurok Emergency Declaration], https://www.waterboards.ca.gov/drought/docs/2021/yurok_resolution_21-59_emergency_decl_drought.pdf.

150 Yurok Emergency Declaration, *supra* note 149, at 1.

151 *Id.* at 4.

152 G.A. Res. 64/292, The Human Right to Water and Sanitation, (July 28, 2010).

153 *Id.*; *see also* Global Analysis and Assessment of Sanitation and Drinking-Water (GLAAS), *National Systems to Support Drinking-Water Sanitation and Hygiene: Global Status Report 2019*, WORLD HEALTH ORGANIZATION [WHO], at 48–55 (2019), https://apps.who.int/iris/bitstream/handle/10665/326444/9789241516297-eng.pdf?ua=1. Massachusetts and Pennsylvania recognize the right to water in their state constitutions, and California and Virginia have been successful in passing legislation to recognize this right. MASS. CONST., art. XCII; PA. CONST., art. 1, § 27; Assemb. B. 685, 2011-12 Leg. Sess. (Cal. 2012) (codified at CAL. WATER CODE § 106.3); Assemb. B. 401, 2015-16 Leg. Reg. Sess. (Cal. 2015).; H.R.J. Res. 538, 2021 Leg., Spec. Sess. (Va. 2021).

154 U.N. HUM. RTS. OFF. OF THE HIGH COMM'R, THE RIGHT TO WATER, 35, at 8–9 (Aug. 2010), https://www.ohchr.org/sites/default/files/Documents/Publications/

Yet, as climate change makes water more scarce, the right to water will become more difficult to attain, negatively impacting human health.[155] Each of the climate-related changes to water discussed above influence health in numerous ways. Reduced water supplies limit access to water, which can contribute to malnutrition and diarrheal disease.[156] Drought-related increased dust and diminished air quality has been associated with medical conditions including allergies, asthma, and other respiratory disorders.[157] Changes in climate can increase vector-borne disease transmission.[158] Finally, events influenced by climate change, such as natural disasters or heat waves, can negatively impact mental health and exacerbate preexisting mental health conditions.[159]

The COVID-19 pandemic has demonstrated the connection between climate change and health. Many of the underlying systems that led to disparate COVID-19 transmission are the same systems that are vulnerable to climate change, including water security.[160] Sanitation and access to running water are important determinants of disease transition.[161] COVID-19 prevention measures include handwashing, physical distancing, and household cleaning—behaviors that require access to sufficient, safe, and affordable water.[162] The Centers for Disease Control and Prevention (CDC) also recognized that "[h]istorical trauma

FactSheet35en.pdf.

155 *Food and Waterborne Diarrheal Disease*, CTRS. FOR DISEASE CONTROL AND PREVENTION (Dec.21, 2020), https://www.cdc.gov/climateandhealth/effects/food_waterborne.htm

156 *Id.*

157 NCA4 VOL. 2, *supra* note 2, at 544–45.

158 *Diseases Carried by Vectors*, CTRS. FOR DISEASE CONTROL AND PREVENTION (Dec. 21, 2020), https://www.cdc.gov/climateandhealth/effects/vectors.htm. Vector-borne diseases are distributed by vectors "(such as fleas, ticks, and mosquitoes, which spread pathogens and cause illness)". *Id.* Lyme, dengue fever, West Nile virus disease, Rocky Mountain spotted fever, plague, and tularemia are examples of vector-borne diseases in North America. *Id.*

159 *Mental Health and Stress-Related Disorders*, CTRS. FOR DISEASE CONTROL AND PREVENTION (June 18, 2020), https://www.cdc.gov/climateandhealth/effects/vectors.htm.

160 *See* James D. Ford et al., *Interactions Between Climate and Covid-19*, 6 THE LANCET e825 (2022) (discussing long-term climate change and pre-pandemic vulnerabilities that increased COVID-19 risk for marginalized communities).

161 *Disease Threats and Global WASH Killers: Cholera, Typhoid, and Other Waterborne Infections*, CTRS. FOR DISEASE CONTROL AND PREVENTION, https://www.cdc.gov/healthywater/global/WASH.html (last visited Jan.8, 2023) ("Many diarrheal diseases spread through unsafe water and sanitation.").

162 *How to Protect Yourself and Others*, CTRS. FOR DISEASE CONTROL AND PREVENTION (Oct. 19, 2022), https://www.cdc.gov/coronavirus/2019-ncov/prevent-getting-sick/prevention.html; UNIVERSAL ACCESS, *supra* note 46, at 8.

and persisting racial inequity have contributed to disparities in health and socioeconomic factors between [American Indian/Alaska Native, or "AI/AN"] and white populations that have adversely affected [American Indian/Alaska Native] communities; these factors likely contribute to the observed elevated incidence of COVID-19" within this population.[163]

At the beginning of the pandemic, the COVID-19 incidence rate among Native Americans was 3.5 times that among white persons.[164] Native Americans also experienced substantially greater COVID-19 mortality rates compared to other groups.[165] Morbidity and mortality caused by the disease have been associated with mental health challenges.[166] Symptoms of anxiety and depression disorders, suicidal ideation, and substance use increased considerably in the United States during the pandemic.[167] The limited data available indicates that Native Americans experienced trauma and mental health issues at greater rates than white Americans.[168] A 2021 survey found that 74% of Native American respondents said someone in their household experienced serious problems with depression, anxiety, stress, or sleeping compared to 52% of white respondents.[169]

163 Sarah M. Hatcher et al., *COVID-19 Among American Indian and Alaska Native Persons–23 States, January 31–July 3, 2020*, 69 MORBIDITY & MORTALITY WKLY. REP. 1166, 1167 (2020).

164 *Id.* This rate was calculated based upon the 23 states that had adequate COVID-19 related race/ethnicity patient data. "Arizona, which accounts for at least one third of all COVID-19 cases among AI/AN persons nationwide, was excluded" due to missing race/ethnicity data. *Id.* at 1166. Overall, the authors noted that the analysis underestimated the actual COVID-19 incidence among AI/AN persons due to several factors, including incomplete reporting and misclassification of AI/AN persons. *Id.*

165 Katherine Leggat-Barr et al., *COVID-19 Risk Factors and Mortality Among Native Americans*, 45 DEMOGRAPHIC RSCH. 1185, 1205 (2021).

166 Mark É. Czeisler et al., *Mental Health, Substance Use, and Suicidal Ideation During the COVID-19 Pandemic-United States, June 24-30, 2020*, MMWR MORBIDITY & MORTALITY WKLY. REP. 1049,1049 (2020).

167 *Id.*; *see also* U.S. GOV'T ACCOUNTABILITY OFF., GAO-22-104437, BEHAVIORAL HEALTH AND COVID-19: HIGHER RISK POPULATIONS AND RELATED FEDERAL RELIEF FUNDING 1, 11, 13 (2021) [hereinafter GAO BEHAVIORAL HEALTH AND COVID-19].

168 GAO BEHAVIORAL HEALTH AND COVID-19, *supra* note 167, at 13. "COVID-19 has had widespread repercussions for the behavioral health of the nation as a whole, but certain populations may be at higher risk of behavioral health effects" including people from certain racial and ethnic groups, such as Native Americans. *Id.* at 11.

169 NPR ET AL., HOUSEHOLD EXPERIENCES IN AMERICA DURING THE DELTA VARIANT OUTBREAK, BY RACE/ETHNICITY 2 (2021), https://cdn1.sph.harvard.edu/wp-content/uploads/sites/94/2021/10/EthnicityRWJFNPRHORP.pdf; *see generally* AM. PSYCHIATRIC ASS'N, CORONAVIRUS, MENTAL HEALTH AND INDIGENOUS PEOPLE IN THE UNITED STATES 2, https://www.psychiatry.org/File%20Library/

While the long-term effects and full impact of the pandemic may not immediately be known, it is abundantly clear that Native Americans have been disproportionately impacted by COVID-19. Many of those taken by COVID-19 were tribal elders, bearers of traditional knowledge, language, and culture:

> The virus claimed fluent Choctaw speakers and dressmakers from the Mississippi Band of Choctaw Indians. It took a Tulalip family matriarch in Washington State, then her sister and brother-in-law. It killed a former chairman of the Yocha Dehe Wintun Nation in California who spent decades fighting to preserve Native arts and culture. It has killed members of the American Indian Movement, a group founded in 1968 that became the country's most radical and prominent civil rights organization for American Indian rights.[170]

The COVID-19 impact felt by Native families and the community as a whole reflects disparate exposure to factors facilitating viral transmission, including shared transportation, water access, and large household sizes.[171] Other research has associated the incidence of COVID-19 cases in Indian country with a lack of indoor plumbing.[172] As noted by Senator Lisa Murkowski, "[F]or so many of our Native communities, particularly in remote villages, that lack basic sanitation infrastructure[—]where there is no running water [or] flush toilets[—]even basic safeguards like washing your hands was pretty close to impossible."[173]

While the pandemic highlighted the widespread lack of clean and safe water access in Indian country, tribal communities have suffered from water insecurity for decades.[174] In the Meriam Report, the federal government documented poor water and sanitation conditions in Indian country as early as 1928.[175] The report detailed the conditions of

---

Psychiatrists/APA-COVID-19-Mental-Health-Facts-Indigenous-People.pdf.

170 Jack Healy, *Tribal Elders Are Dying from the Pandemic, Causing a Cultural Crisis for American Indians*, NY TIMES (Jan. 12, 2021), https://www.nytimes.com/2021/01/12/us/tribal-elders-native-americans-coronavirus.html.

171 *Id.*

172 Desi Rodriguez-Lonebear et al., *American Indian Reservations and COVID-19: Correlates of Early Infection Rates in the Pandemic*, 26 J. PUB. HEALTH MGMT. & PRAC. 371, 371–77 (2020).

173 *Examining the COVID-19 Response in Native Communities: Native Health Systems One Year Later: Hearing Before the S. Comm. on Indian Affs.* 117th Cong. 2 (2021), https://www.govinfo.gov/content/pkg/CHRG-117shrg45086/html/CHRG-117shrg45086.htm (statement of Sen. Lisa Murkowski, Vice Chairman, S. Comm. on Indian Affs.).

174 UNIVERSAL ACCESS, *supra* note 46.

175 LEWIS MERIAM, THE PROBLEM OF INDIAN ADMINISTRATION: REPORT OF A SURVEY MADE

American Indians across the country, documenting scarce supplies and noting that "[s]ometimes it is difficult even to get enough to drink, so lack of cleanliness of body, clothing, and homes is a natural consequence and is found with discouraging frequency."[176]

Almost a century later, lack of access to clean and safe water continues to be reported.[177] Today, Native American households are more likely to lack indoor plumbing than all other households in the United States.[178] For some tribal communities, the disparate access is startling. For example, Navajo residents are 67 times less likely than other Americans to have access to running water,[179] with approximately 30% to 40% of homes on the Navajo Nation lacking access to a public water system.[180] These households must haul water for long distances from wells and other community point sources.[181]

Such impacts directly put tribal public health at risk. The connection between water availability and human health is clear. Up to 60% of the human body is water—water is necessary for human survival.[182] But, as discussed previously, the future reliability of water supplies is at risk as many tribal-community water sources are drying up or otherwise being depleted. Climate change impacts to water quality also present a risk to human and ecosystem health by threatening the progress achieved in the 21st century to reduce infectious disease and other environmental toxins.[183] Climate change is increasing the risk

---

AT THE REQUEST OF HONORABLE HUBERT WORK, SECRETARY OF THE INTERIOR, AND SUBMITTED TO HIM, Feb. 21, 1928, 220 (The Johns Hopkins Press 1928) [hereinafter MERIAM REPORT].

176 *Id.* at 220.

177 BROKEN PROMISES, *supra* note 8, at 180–84.

178 U.S. WATER ALLIANCE & DIG DEEP, CLOSING THE WATER ACCESS GAP IN THE UNITED STATES: A NATIONAL ACTION PLAN 22, 38 (2019) [hereinafter CLOSING THE WATER ACCESS GAP].

179 *About the Project*, DIGDEEP: NAVAJO WATER PROJECT, https://www.navajowaterproject.org/project-specifics (last visited Jan. 8, 2023).

180 U.S. BUREAU OF RECLAMATION, COLORADO RIVER BASIN TEN TRIBES PARTNERSHIP TRIBAL WATER STUDY REPORT ch. 5, § 5.5 (2018), https://www.usbr.gov/lc/region/programs/crbstudy/tws/docs/Ch.%205.5%20Navajo%20Current-Future%20Water%20Use%2012-13-2018.pdf; CLOSING THE WATER ACCESS GAP, *supra* note 178, at 23, 38.

181 CLOSING THE WATER ACCESS GAP, *supra* note 178, at 38.

182 Water Science School, *The Water in You: Water and the Human Body*, U.S. GEOLOGICAL SURV. (May 22, 2019), https://www.usgs.gov/special-topics/water-science-school/science/water-you-water-and-human-body.

183 *See* Karen Levy et al., *Climate Change Impacts on Waterborne Diseases: Moving Forward Designing Interventions*, 5 CURRENT. ENV'T HEALTH REPS. 272, 272 (2019).

of waterborne diseases, endangering human health.[184] "Waterborne diseases include many different types of infections that are transmitted via water and include pathogens across a range of taxa (viruses, bacteria, protozoa, and helminths). These pathogens can cause an array of symptoms, including diarrhea, fever, and other flu-like symptoms, neurological disorders, liver damage, and others."[185] "Flooding events in particular increased the incidence of the following three diseases: hepatitis A virus, bacillary dysentery, and campylobacter."[186] The rise in waterborne diseases has resulted in substantial health care costs, with an estimated $2.2 to $3.7 billion attributable to fighting waterborne pathogens.[187] Finally, poor water quality and related pathogens have also been connected to lower mental and social development in children.[188]

Infrastructure, water quantity, and water quality are interrelated. When water supplies are exhausted, subsidence (the sinking of the ground) can occur as more groundwater is removed, affecting water infrastructure and leading to the formation of sinkholes.[189] Poorly maintained infrastructure can hinder water delivery, contribute to system water loss, and degrade water quality.[190] Viral and bacterial contamination is further propagated by a deficient water and sewer infrastructure.[191] "Disruptions to infrastructure are already occurring and will likely become more common with a changing climate."[192]

In general, drinking water infrastructure in the United States is poorly rated based on its current condition, safety, capacity, and other factors.[193] A large portion of water systems were built over a

184 *Id.* at 273, 282.

185 *Id.* at 273.

186 Tener Goodwin Veenema et al., *Climate Change-Related Water Disasters' Impact on Population Health*, 49 J. NURSING SCHOLARSHIP 625, 628 (2017). Indeed, a recent study found that almost 60% of diseases caused by pathogens have been worsened by climate change. Camilo Mora, *Over Half of Known Human Pathogenic Diseases Can Be Aggravated by Climate Change*, 12 NATURE CLIMATE CHANGE 869, 870 (2022).

187 Coffey et al., *supra* note 140, at 844.

188 Faissal Tarrass, *The Effects of Water Shortages on Health and Human Development*, 132 PERSPS. IN PUB. HEALTH 240, 241 (2012).

189 *Navigation and Transportation*, NAT'L INTEGRATED DROUGHT INFO. SYS., https://www.drought.gov/sectors/navigation-and-transportation (last visited Jan. 3, 2023).

190 Deborah Vacs Renwick et al., *Potential Public Health Impacts of Deteriorating Distribution System Infrastructure,* 111 J. AM. WATER WORKS ASS'N, no. 2, Feb. 2019, at 42, 43, 48 (2019).

191 NCA4 VOL. 2, *supra* note 2, at 545.

192 *Id.* at 150.

193 AM. SOC'Y CIV. ENG'RS, THE ECONOMIC BENEFITS OF INVESTING IN WATER INFRASTRUCTURE 4 (2020).

century ago and therefore require upgrades or enhanced systems to handle the demands of increased population growth, increased treatment requirements, and climate change.[194] Aging and deteriorating infrastructure increases risks of water contamination and non-potable water delivery[195] and contributes to trillions of gallons of water loss each year through leakage.[196]

The infrastructure challenges that exist across the United States are particularly pronounced in tribal communities. Infrastructure in these communities is often completely "lacking, inadequate, or poorly maintained, increasing tribal vulnerability to flooding, drought, and waterborne diseases."[197] On the Warm Springs Reservation, the Confederated Tribes of Warm Springs is experiencing infrastructure challenges that carry prohibitive costs to address.[198] Three out of four of its water delivery systems require major upgrades or replacement, with some pipes made of wood and clay.[199] Maintaining the current systems at status quo costs a minimum of $5 to $6 million, with an additional $40 to $50 million required to provide for "future improvements to meet the growing population."[200] Climate change contributes to infrastructure challenges in Indigenous communities by further damaging existing infrastructure and disrupting services.[201] Overall, such infrastructure deficiencies harm the social, physical, and mental well-being of tribes and impair their ability to thrive.[202]

Finally, climate change will likely exacerbate the already disproportionate mental health conditions among Native Americans. The high rates of mental health disorders and behavior-related chronic diseases are well documented in tribal communities.[203] Indigenous

194 *Id.* at 6.

195 *See generally* Vacs Renwick et al., *supra* note 190 (discussing how the deterioration of water distribution systems affects water supply, water quality, and public health).

196 *Id.* at 10.

197 Cozzetto et al., *supra* note 116, at 574.

198 *Build Back Better: Water Infrastructure Needs for Native Communities: Hearing Before the S. Comm. On Indian Affs.*, 117th Cong. 10 (2021), https://www.govinfo.gov/content/pkg/CHRG-117shrg44761/html/CHRG-117shrg44761.htm (statement of Raymond Tsumpti, Chairman, Confederated Tribes of Warm Springs).

199 *Id.* at 11.

200 *Id.*

201 *See* NCA4 VOL. 2, *supra* note 2, at 580.

202 NAT'L CONGRESS OF AM. INDIANS, TRIBAL INFRASTRUCTURE: INVESTING IN INDIAN COUNTRY FOR A STRONGER AMERICA 4, at 326–329 (2017), https://www.ncai.org/NCAI-InfrastructureReport-FINAL.pdf.

203 *See generally Behavioral Health Fact Sheet*, INDIAN HEALTH SERV., https://www.ihs.

people have reported serious psychological distress as high as 2.5 times that of the general population.[204] Various studies have connected adverse mental health outcomes with climate change impacts,[205] suggesting that climate change will likely compound existing mental health issues in Native American communities. "People exposed to weather- or climate-related disasters have been shown to experience mental health impacts including depression, post-traumatic stress disorder, and anxiety, all of which often occur simultaneously."[206] In individuals whose households were victim to flood, risk of flood, or drought, higher frequencies of depression, anxiety, as well as alcohol and tobacco use have been reported.[207] In addition, higher temperatures have also been associated with heightened aggressive behaviors, including homicide.[208] Those most likely to suffer these impacts are some of society's most vulnerable populations, including tribal communities.[209] As tribes increasingly experience climate-related impacts, their community members' health will suffer unless protective measures are put into place.

### *C. Cultural Impacts of Climate Change*

"Indigenous peoples are among the first to face the direct consequences of climate change, due to their dependence upon, and close relationship, with the environment and its resources."[210] Many tribal communities have a strong connection to the land and environment. Traditional practices are often tied to the environment, with particular locations viewed as sacred and certain waters used for ceremonial purposes.[211] As such, climate change not only threatens the physical

gov/newsroom/factsheets/behavioralhealth/; *see also* NCA4 VOL. 2, *supra* note 2, at 546.

204 NAT'L CTR. FOR HEALTH STATS., HEALTH, UNITED STATES, 2017: WITH SPECIAL FEATURE ON MORTALITY xi, tbl.46 (2017), https://www.cdc.gov/nchs/data/hus/hus17.pdf (noting a 2015 to 2016 study observation that, in the antecedent thirty days, 3.6% of American adults reported experiencing serious psychological distress, compared to 9.2% of Native American adults).

205 *See, e.g.*, NCA4 VOL. 2, *supra* note 2, at 540–52.

206 *Id.* at 326.

207 *Id.* at 546.

208 *Id.*

209 *Id.* at 333, 541.

210 *Climate Change*, U.N. DEP'T OF ECON. & SOC. AFFS., https://www.un.org/development/desa/indigenouspeoples/climate-change.html (last visited Jan. 3, 2023).

211 *See* NCA4 VOL. 2, *supra* note 2, at 578 ("[T]he lands, waters, and other natural resources of Indigenous peoples hold sacred cultural significance.").

environment, but also threatens tribal traditions and culture. The Hopi Declaration of Water captures this special relationship between the Hopi and water:

> *As children of water,*
> *we raise our voices in solidarity to speak for all waters.*
>
> *Water, the breath of all life, water the sustainer of all life,*
> *water the voice of our ancestors, water pristine*
> *and powerful.*
>
> *Today we join hands, determined to honor,*
> *trust and follow the ancient wisdom of our ancestors*
> *whose teachings and messages continue to*
> *live through us.*
>
> *The message is clear: Honor and respect water*
> *as a sacred and life-giving gift from the Creator of Life.*
> *Water, the first living spirit on Earth.*
>
> *All living beings come from water,*
> *all is sustained by water,*
> *all will return to water to begin life anew.*
>
> *We are of water, and the water is of us.*
> *When water is threatened, all living things are*
> *threatened.*
>
> *What we do to water, We do to ourselves.*[212]

Climate impacts to water are threatening tribal sites, practices, and relationships with places of cultural, spiritual, or ceremonial importance.[213] The loss of tribal land and culturally important resources due to climate change also magnifies historical trauma experienced by many Native Americans, trauma that stems from colonization and subsequent federal policies.[214]

212 Sandra Cosentino, *Hopi Declaration of Water*, CROSSING WORLDS HOPI PROJECTS (Nov. 19, 2016), https://crossingworlds.org/hopi-water-declaration/. The declaration was adopted at the Hopi Hisot Navoti gathering on October 23, 2003. *Id.*

213 *See* Cozzetto et al., *supra* note 116.

214 NCA4 VOL. 2, *supra* note 2, at 582.

The Yurok Tribe and Klamath River exemplify how climate-driven impacts to the environment are affecting tribal traditions. The Yurok Tribe, the largest tribe in California, has over 5,000 tribal members.[215] Members of the Yurok Tribe are characterized as:

> [Having] had a strong relationship with 'We-roy, also known as the Klamath River, since time immemorial and Yurok culture, ceremonies, religion, fisheries, subsistence, economies, residence, and all other lifeways are intertwined with the health of the River, its ecosystem, and the multiple species reliant on a thriving Klamath River ecosystem.[216]

In 2019, the Yurok Tribe passed a tribal resolution granting personhood to the Klamath River, in part to protect the river from climate change impacts.[217] Historically, the Yurok have lived along the Klamath River, and their creation story emphasizes the importance of living in balance with the natural world.[218] The Yurok's cultural practices are dependent on the continued health of the river.[219] But, over the past several years, "[t]he Klamath River has seen increasing harms of point and nonpoint source pollutants entering its waters, rises in temperature due to dams and climate change, and large toxic algae blooms poisoning its waters."[220]

Climate change also affects traditional food sources. "[C]olonialism and associated experiences of forced removal, relocation, and assimilation" disrupted the relationship between

215 *Our History*, YUROK TRIBE, https://www.yuroktribe.org/our-history (last visited Jan. 4, 2023).

216 YUROK TRIBAL COUNCIL, RES. NO. 19-40, RESOLUTION ESTABLISHING THE RIGHTS OF THE KLAMATH RIVER (May 9, 2019), http://files.harmonywithnatureun.org/uploads/upload833.pdf.

217 Lulu Garcia-Navarro, *Tribe Gives Personhood to Klamath River*, NPR (Sept. 28, 2019), https://www.npr.org/2019/09/29/765480451/tribe-gives-personhood-to-klamath-river.

218 *Id.* ("[T]he Yurok people have always lived along the banks of the Klamath River. And in our creation story, the creator told us that as long as we lived in a balance with the natural world we would never want for anything. And we live that way for a very long time."). According to the Yurok creation story, *Wesona-me'gotoL* (the one up-above) created salmon and humans, as well as the River to provide a place for them to interact with one another. Eva Cordtz, '*It Takes Our Purpose': How the Decline of the Chinook Salmon Threatens the Yurok Tribe*, (Jan. 25, 2020), https://storymaps.arcgis.com/stories/08d3b5dc6bbf4326bc87466efd55b8fc. "Salmon are truly the essence of Yurok existence and foundational to Yurok identity for they would not exist without them." *Id.* (internal citation omitted).

219 Geneva E. B. Thompson, *Codifying the Rights of Nature: The Growing Indigenous Movement*, 59 JUDGES' J., Spring 2020, at 12, 14.

220 *Id.* at 12.

Native Americans and traditional food systems.[221] Traditional foods are integral to the holistic health of individual and community health.[222] "The importance of traditional foods for [I]ndigenous health surpasses nutritional value."[223] Traditional foods carry spiritual and cultural importance as well.[224] However, engaging in traditional food practices, such as seal and whale hunting, is becoming more dangerous due to climate-related impacts; for example, warmer temperatures will cause sea ice to thin, increasing the likelihood of hunters sustaining injuries from falling through thin sea ice.[225] In the Northwest, the rise in ocean water temperatures and streamflow pattern changes have stressed salmon populations, threatening the cultural identities and economies of Indigenous communities in the region.[226] The loss of traditional foods has a particularly detrimental effect on tribal communities, because many of these communities exist within food deserts.[227] "The lack of healthy store-bought foods means that nutrient-rich traditional foods are often replaced with less healthy alternatives."[228] All of these impacts "raise questions about the future availability of resources" and "continued viability of these traditional cultures."[229]

Some tribal communities—most notably those in Alaska, the Southeast, and the Pacific Northwest—also risk displacement due to coastal and riverine flooding, land erosion, and permafrost thawing.[230] These communities increasingly must consider whether to relocate away from tribal lands that have become uninhabitable.[231] In Alaska, permafrost is melting, destabilizing the ground upon which villages have long stood.[232] Between 2003 and 2009, the federal government identified 31 Alaskan Native villages that were imminently threatened by erosion,

221 KATHRYN NORTON-SMITH ET AL., U.S. DEP'T OF AGRIC., PNW-GTR-944, CLIMATE CHANGE AND INDIGENOUS PEOPLES: A SYNTHESIS OF CURRENT IMPACTS AND EXPERIENCES 24 (2016).

222 *Id.*

223 *Id.*

224 *Id.*

225 *Id.* at 25.

226 NCA4 VOL. 2, *supra* note 2, at 150.

227 NORTON-SMITH ET AL, *supra* note 221, at 25.

228 *Id.*

229 Daniel Cordalis & Dean B. Suagee, *The Effects of Climate Change on American Indian and Alaska Native Tribes*, 22 NAT. RES. & ENV'T 45, 47 (2008).

230 NCA4 VOL. 2, *supra* note 2, at 585.

231 *See id.* at 585–86.

232 U.S. GOV'T ACCOUNTABILITY OFF., GAO-09-551, ALASKA NATIVE VILLAGES: LIMITED PROGRESS HAS BEEN MADE ON RELOCATING VILLAGES THREATENED BY FLOODING AND EROSION 7 (2009).

12 of which had considered migrating to reduce their exposure.[233] The threat has only grown more severe over the last decade. As sea levels continue to rise, "retreat or migration will become an unavoidable option in some areas along the U.S. coastline" in coming decades.[234]

With the recognition that relocation due to climate change will be unavoidable in some coastal areas, the federal government has begun to explore ways to improve climate resilience, including preemptively relocating people and property away from severe impact areas.[235] For example, the state of Louisiana received $48.3 million in Community Development Block Grant-Disaster Recovery funds to resettle residents of Isle de Jean Charles—a community that has lost more than 98% of its land area over the last six decades due to rising sea levels.[236] "[E]ven though the funds were intended to help tribal members resettle, the Isle de Jean Charles band of the Biloxi-Chitimacha-Choctaw Tribe officially withdrew from participating" in the resettlement due to concerns that relocation would make their claim for federal recognition more difficult and sever their connection to their land.[237]

Like the Isle de Jean Charles Band, many tribal communities are hesitant to relocate.[238] Because tribal jurisdiction generally extends to reservation boundaries, moving from tribal lands can "cut [tribes] off from their origins, the places of their collective memory, and the rights to self-determination."[239] Indigenous people across the contiguous United States have already lost 98.9% of their historical lands.[240] For the tribes that have retained a land base, the average present-day size is only 2.6% of their estimated historical areas.[241] Having been dispossessed of so much of their land already, it is understandable that tribes would be reluctant to cede more land, except as a last resort.

Climate-related relocation also compounds historical trauma experienced by many Native Americans.[242] Historical trauma is defined as "cumulative emotional and psychological wounding across generations,

233 *Id.* at 12.
234 GAO CLIMATE CHANGE, *supra* note 84, at 30.
235 *Id.* at 1, 3.
236 Nelson et al., *supra* note 57, at 85.
237 *Id.* at 87. Notably, the Isle de Jean Charles Band of Biloxi-Chitimacha-Choctaw is a state-recognized tribe. *Id.*
238 NORTON-SMITH ET AL., *supra* note 221, at 9.
239 *Id.*
240 Farrell et al., *supra* note 37, at 3.
241 *Id.*
242 *See* NCA4 VOL. 2, *supra* note 2, at 582.

including the lifespan, which emanates from massive group trauma."[243] "Many Indigenous peoples still experience historical trauma associated with colonization, removal from their homelands, and loss of their traditional ways of life, and this has been identified as a contributor to contemporary physical and mental health impacts."[244] The boarding school era perpetuated historical trauma among tribal communities, once again removing Native Americans from their homes, but focusing on children.[245] Between 1819 and 1969, 408 federal Indian boarding schools were in operation.[246] Enrollment at these schools ranged from one child to over 1,200 children.[247] As recently reported by the Bureau of Indian Affairs, "[T]he United States directly targeted American Indian, Alaska Native, and Native Hawaiian children in the pursuit of a policy of cultural assimilation that coincided with Indian territorial dispossession."[248] The U.S. Senate summarized the federal government's intentions as follows:

> Beginning with President Washington, the stated policy of the Federal Government was to replace the Indian's culture with our own. This was considered "advisable" as the cheapest and safest way of subduing the Indians, of providing a safe habitat for the country's white inhabitants, of helping the whites acquire desirable land, and of changing the Indian's economy so that he would be content with less land. Education was a weapon by which these goals were to be accomplished.[249]

From colonization, and most recently the boarding school era, tribal communities are still healing from historical and intergenerational trauma. Climate change is likely to inflict further trauma by threatening remaining ties to land and the ability to practice traditional ways of life.

243 Maria Yellow Horse Brave Heart et al., *Historical Trauma Among Indigenous Peoples of the Americas: Concepts, Research, and Clinical Considerations*, 43 J. PSYCHOACTIVE DRUGS 282, 283 (2011).

244 NCA4 VOL. 2, *supra* note 2, at 582. Historical trauma has been connected to depression, substance abuse, and other psychological issues. Brave Heart et al., *supra* note 243, at 284.

245 BUREAU OF INDIAN AFFAIRS, FEDERAL INDIAN BOARDING SCHOOL INITIATIVE INVESTIGATIVE REPORT 88–89 (2022).

246 *Id.*

247 *Id.* at 7.

248 *Id.* at 3.

249 *Id.* at 21 (citing S. REP. NO. 91-501, at 143 (1969)).

## II. THE CONVERGENCE OF FEDERAL TREATY AND TRUST RESPONSIBILITIES, TRIBAL HEALTH, AND CLIMATE CHANGE

*Our Tribe relinquished vast tracks of our Tribal homelands and resources in exchange for the U.S. governments* [sic] *solemn promise to uphold and protect our Tribes* [sic] *inherent right to Self-Governance and to provide adequate resources to secure the well-being of our community and Tribal citizens. This trust responsibility is a legally enforceable fiduciary obligation on the part of the U.S. to protect Tribal treaty rights, lands, assets and resources.*

— W. RON ALLEN, TRIBAL CHAIRMAN, JAMESTOWN S'KLALLAM TRIBE[250]

The federal government has a unique responsibility to tribes that includes promoting tribal health. While international law supports fulfillment of this responsibility,[251] the underlying legal basis is found in domestic law.[252] Rooted in treaties and the trust responsibility, the federal government is responsible for providing health care services to raise the health status of Native Americans to the highest possible level.[253] President Joe Biden recommitted the federal government to honoring trust and treaty responsibilities to tribes when the Administration acknowledged:

> The United States has made solemn promises to Tribal Nations for more than two centuries. Honoring those commitments is particularly vital now, as our Nation faces crises related to health, the economy, racial justice, and climate change—all of

250 *2020 Appropriations Testimony for EPA, BIA and HIS: Hearing Before the H. Appropriations Subcomm. on Interior, Env't & Related Agencies*, 116th Cong. (2019) (statement of Hon. W. Ron Allen, Chairman/CEO, Jamestown S'klallam Tribe).

251 The United Nations Declaration on the Rights of Indigenous Peoples recognizes that "Indigenous individuals have an equal right to the enjoyment of the highest attainable standard of physical and mental health" as well as "the right to maintain and strengthen their distinctive spiritual relationship with their traditionally owned or otherwise occupied and used lands, territories, waters . . . and other resources." G.A. Res.61/295, ¶ 24–25 (Sept. 13, 2007). Principles of international law also were used to create the initial framework of federal Indian law. *See* Rebecca Tsosie, *Reconceptualizing Tribal Rights: Can Self Determination Be Actualized Within the U.S. Constitutional Structure?* 15 LEWIS & CLARK L. REV. 923, 925–28 (2011) (discussing the significance of international human rights law in forming the substrate for the promotion of Indigenous rights).

252 BROKEN PROMISES, *supra* note 8, at 61–62 (discussing the basis for the federal government's special trust responsibilities and legal obligations to provide health care for Native Americans).

253 *About IHS*, *supra* note 44.

which disproportionately harm Native Americans.[254]

The United States' obligation to provide health services to tribal communities is well-established and long-standing. However, federal efforts to address climate change impacts are relatively new and still evolving.[255] Historically, the United States has not been a leader on climate change. Indeed, during the Trump Administration, several federal agency websites containing climate data and scientific information were removed, including the EPA's site dedicated to climate change.[256]

While the United States has not had a strong track record towards mitigating climate change, in the past few decades, there has been steady Congressional momentum to identify climate change impacts in the United States.[257] The Global Change Research Act of 1990 mandated the development and coordination of "a comprehensive and integrated United States research program . . . to understand, assess, predict, and respond to human-induced and natural processes of global change."[258] The U.S. Global Change Research Program (USGCRP) is the federal program responsible for carrying out this mandate.[259] USGCRP is currently developing the Fifth National Climate Assessment, which is set to be released in 2023 and includes a chapter dedicated to tribes and Indigenous peoples.[260] The Biden Administration has also taken steps to make climate change a federal priority, including issuing presidential executive orders to address climate change and promote environmental justice.[261] Additionally, Congress recently passed a landmark climate

254 Memorandum No. 02075, 86 Fed. Reg. 7,491, 7,491 (Jan. 26, 2021).

255 *See* CONG. RSCH. SERV., U.S. CLIMATE CHANGE POLICY (2021), http://crsreports.congress.gov/product/pdf/R/R46947 (providing a history of United States federal climate policy and identifying recent legislative and executive action).

256 Chris Mooney & Juliet Eilperin, *EPA Website Removes Climate Science Site from Public View After Two Decades*, WASH. POST (Apr. 29, 2017), https://www.washingtonpost.com/news/energy-environment/wp/2017/04/28/epa-website-removes-climate-science-site-from-public-view-after-two-decades/.

257 15 U.S.C. § 2931(b).

258 Global Change Research Act, Pub. L. No. 101-606, 104 Stat. 3096, § 101(b).

259 15 U.S.C. § 2933.

260 *Fifth National Climate Assessment*, U.S. GLOBAL CHANGE RESEARCH PROGRAM, https://www.globalchange.gov/nca5 (last visited Nov. 21, 2022). The First National Climate Assessment was published in 2000, the Second National Climate Assessment in 2009, the Third National Climate Assessment in 2014. *Previous Assessments*, U.S. Global Change Research Program, https://www.globalchange.gov/what-we-do/assessment/previous-assessments (last visited Nov. 21, 2022). The Fourth National Climate Assessment was published in 2018. *Fourth National Climate Assessment*, U.S. GLOBAL CHANGE RESEARCH PROGRAM, https://www.globalchange.gov/nca4 (last visited Nov. 21, 2022).

261 *See, e.g.*, Exec. Order No. 13,990, 86 Fed. Reg. 7,037 (Jan. 20, 2021).

bill known as the Inflation Reduction Act of 2022, which includes $369 billion in climate investments (e.g., clean energy tax credits; incentives for carbon capture and storage technologies) aimed at reducing greenhouse gas emissions.[262] The Act has been recognized as an important step towards averting the worst consequences of global warming.[263]

While these actions will help limit irreversible impacts of climate change on human health and the environment, the fact remains that the effects of global warming are already being experienced throughout the United States, particularly by tribal communities. As the federal government seeks to uphold its promise to promote tribal health, climate change must be considered when fulfilling this responsibility.[264]

This Part discusses the federal government's treaty and trust responsibility to protect against the threats identified in Part I. First, a brief history is provided on the federal government's efforts to provide health services to Native Americans, as well as the legal basis for doing so. Next, the establishment of reservations as permanent homelands for tribes and related principles of water law are discussed. Finally, as the primary federal agency responsible for the health and welfare of Native Americans, the IHS's past and present actions to combat water insecurity are examined.

### *A. Federal Responsibility to Provide Health Services*

The federal government and tribes historically have a contentious relationship.[265] Tribes pre-date the formation of the United

262 *See* H.R. 5376, 117th Cong. (2022). The Act also included several health provisions that relate to Medicare drug prices and Affordable Care Act subsidies. *Id. See also* CONG. RSCH. SERV., SELECTED HEALTH PROVISIONS OF THE INFLATION REDUCTION ACT (2022), https://crsreports.congress.gov/product/pdf/IF/IF12203.

263 *See* Ben King et al., *A Congressional Climate Breakthrough*, RHODIUM GROUP (July 28, 2022), https://rhg.com/research/inflation-reduction-act/.

264 Notably, tribes are not idly standing by. *See* Elizabeth Kronk Warner, *Indigenous Adaptation in the Face of Climate Change*, 21 J. ENV'T & SUSTAINABILITY L. 129, 130 (2015). Tribes have enacted their own laws and policies targeting climate change to protect their community. *Id.* at 146–165 (discussing several different tribal adaptation and mitigation actions). While other literature has addressed tribal responses to climate change, this Article focuses on the federal government's responsibility to promote the health and welfare of Native Americans, including protection from climate change impacts.

265 *See generally* NED BLACKHAWK, VIOLENCE OVER THE LAND: INDIANS AND EMPIRES IN THE EARLY AMERICAN WEST (Harvard University Press, 6th ed. 2006) (discussing the origins of the United States and subsequent conflict and violence upon which it

States and have retained their inherent sovereignty to this day.[266] That sovereignty, however, is not absolute. In a series of cases, commonly known as the *Marshall* trilogy, the Supreme Court established the basic framework of federal Indian law, recognizing that tribes are sovereign nations with the retained power to govern their people and land.[267] Yet, tribes are also "domestic dependent nations," and based upon this status, they necessarily look to the federal government for protection.[268] This unique relationship imposes certain federal responsibilities and obligations on behalf of and for the benefit of tribes, including the duty to protect tribes and their members.[269]

Since the formation of this country, the federal government has enacted different policies directed toward tribal nations. "Federal policies have shaped the landscape in Indian country, leaving a lasting effect on the well-being of Tribal communities."[270] The vast majority of federal policies were directed at removing tribes from their homelands to open up land for white settlers and assimilating Native Americans into mainstream society.[271] Beginning in the 1960s with the Self-Determination and Self-Government Era, the federal government shifted its stance to engage with tribes on a sovereign-to-sovereign

---

was built, focusing on the West).

266 Heather Tanana & John Ruple, *Synching Science and Policy to Address Climate Change in Tribal Communities*, 36 NAT. RES. & ENV'T 37, 37 (2021)*; see also* BROKEN PROMISES, *supra* note 8, at 5.

267 *See, e.g.*, Cherokee Nation v. Georgia, 30 U.S. 1, 4 (1831) ("[Tribal] nations have been recognized as sovereign and independent States possessing both the exclusive right to their territory and the exclusive right of self-government within that territory."). "The history of Indian law in the Supreme Court opens with the Marshall Trilogy—*Johnson v. M'Intosh*, 21 U.S. 543 (1823); *Cherokee Nation v. Georgia*, 30 U.S. 1 (1831); and *Worcester v. Georgia*, 31 U.S. 515 (1832)." Matthew L.M. Fletcher, *A Short History of Indian Law in the Supreme Court*, ABA (2014), https://www.americanbar.org/groups/crsj/publications/human_rights_magazine_home/2014_vol_40/vol--40--no--1--tribal-sovereignty/short_history_of_indian_law/.

268 *Cherokee Nation*, 30 U.S. at 17.

269 *See, e.g.*, COHEN'S HANDBOOK OF FEDERAL INDIAN LAW § 4.01(2)(d) (Nell Jessup Newton et al. eds., 2012) [hereinafter COHEN'S HANDBOOK] (citing *Ex parte* Crow Dog, 109 U.S. 556, 568 (1883)).

270 Heather Tanana, *Learning from the Past and the Pandemic to Address Mental Health in Tribal Communities*, 2 ARIZ. ST. L. J. ONLINE 191, 192 (2020) [hereinafter *Learning from the Past*]; *see also* Betty Pfefferbaum et al., *Learning How to Heal: An Analysis of the History, Policy, and Framework of Indian Health Care*, 20 AMERICAN INDIAN LAW REVIEW 265 (1996) (providing an overview of federal law and policy affecting Native American health since the 1800s).

271 *Learning from the Past*, *supra* note 270, at 195; *see also* COHEN'S HANDBOOK, *supra* note 269, §§ 1.01–1.07 (summarizing the Indian federal policies).

basis and promote tribal self-governance.[272] Despite changes in the underlying goal sought through different federal Indian policy eras, the federal government generally has recognized its responsibility to provide health care services to Native Americans over the past century.

Rooted in "treaty obligations, the federal government is primarily responsible for providing health services to Native Americans."[273] Many treaties identified health services as part of the United States' payment to tribes for the cessation of millions of acres of tribal land.[274] "Of the 389 ratified Indian treaties, 31 (12%) contain provisions specifically related to Indian health care: 28 providing for a physician and 9 providing for a hospital."[275] The obligation to provide health services also "has been interpreted to be a part of the federal government's trust responsibility to tribes."[276]

272 Tribal self-governance is an expression of tribal sovereignty and refers to the right to regulate "internal and social relations," including the right to prescribe laws applicable to tribal members and to enforce those laws. *See e.g.*, United States v. Wheeler, 435 U.S. 313, 322 (1978).

273 *Learning from the Past*, *supra* note 270, at 198*; see also Basis for Health Services*, *supra* note 43 (discussing the "legal basis for the federal obligation to provide health care to American Indians").

274 DAVID N. DEJONG, IF YOU KNEW THE CONDITIONS: A CHRONICLE OF THE INDIAN MEDICAL SERVICE AND AMERICAN INDIAN HEALTH CARE, 1908–1955 at 5 (Lexington Books 2008).

275 *Id.*

276 *Learning from the Past*, *supra* note 270, at 198. Trust duties of the United States fall within three broad categories: (1) protection of trust property; (2) protection of the tribal right to self-government; and (3) provision of social, medical, and education services necessary for survival of the tribes. Kirke Kickingbird & Everett R. Rhoades, *The Relation of Indian Nations to the U.S. Government*, *in* AMERICAN INDIAN HEALTH: INNOVATIONS IN HEALTH CARE PROMOTION, AND POLICY 61, 68 (Everett R. Rhoades ed., 2000) (citing AMERICAN INDIAN POLICY REVIEW COMMISSION, 95TH CONG., 1ST SESS., FINAL REP. (Comm. Print 1977)). Promoting the health of Native Americans falls within the third category and has been recognized by Congress as "the policy of this Nation, in fulfillment of its special trust responsibilities and legal obligations to Indians." Indian Health Care Improvement Act, 25 U.S.C. § 1602 ("IHCIA"). While the few courts that have directly addressed this issue acknowledge the federal trust responsibility, a split exists regarding whether the trust responsibility alone creates an enforceable legal duty to provide health care services; the 8th Circuit has recognized that the trust responsibility includes a duty to provide health services. *See, e.g.*, White v. Califano, 437 F. Supp. 543, 555 (D.S.D. 1977), aff'd, 581 F.2d 697 (8th Cir. 1978). However, claims to enforce this duty are strongest when paired with treaty and statutory obligations under the IHCIA or Indian Self-Determination Education Assistance Act. *See, e.g.*, Rosebud Sioux Tribe v. United States, 9 F.4th 1018, 1023 (8th Cir. 2021). In contrast, the Ninth Circuit has found that neither the general federal-tribal trust relationship nor the IHCIA create a judicially enforceable duty on behalf of the United States

In the early 1800s, administration of tribal affairs was based in the Department of War.[277] During this time, military physicians provided episodic care to Native Americans near military posts.[278] With limited resources for tribal health care, however, these services were minimal.[279] In 1849, the Department of Interior assumed jurisdiction over tribal matters, including health services, leading to a more organized, systematic approach.[280] "In subsequent decades, the federal government gradually assumed increasing obligations to provide health care, usually a physician and medications, to tribes." [281]

However, healthcare needs continued to exceed available assistance.[282] Following exposure to Europeans explorers, the Indigenous inhabitants of North America were devastated by the high morbidity and mortality rates of infectious diseases.[283] It is estimated that the Native population attrition rate from infectious diseases was as high as 75% between 1520 and the late 1800s.[284] "The challenges of infectious disease were so acute that after 1908 every Indian commissioner gave health matters a prominent place in their annual report to Congress."[285]

To bring about reform, a committee of 100 academics, social scientists, and specialists were assembled to advise on Native American affairs.[286] The committee's report acknowledged the federal government had a unique responsibility to provide health care to Native Americans—"to combat such evils as tuberculosis, pyorrhea, and trachoma"—and urged the use of "whatever means [necessary] to quickly and effectively"

---

to provide a specific standard of medical care. Quechan Tribe of Fort Yuma Indian Rsrv. v. United States, 599 F. App'x 698, 699 (9th Cir. 2015).

277 Emery A. Johnson & Everett R. Rhoades, *The History and Organization of Indian Health Services*, *in* AMERICAN INDIAN HEALTH: INNOVATIONS IN HEALTH CARE PROMOTION, AND POLICY 74, 74 (Everett R. Rhoades ed., 2000).

278 *Id.*

279 DEJONG, *supra* note 274, at 10–11.

280 Everett R. Rhoades & Dorothy A. Rhoades, *The Public Health Foundation of Health Services for American Indians & Alaskan Natives*, 104 AM. J. PUB. HEALTH 278, 279 (2014).

281 *Id. at* 279–280.

282 *Id.* at 281.

283 Edwin Asturias et al., *Infectious Diseases*, *in* AMERICAN INDIAN HEALTH: INNOVATIONS IN HEALTH CARE PROMOTION, AND POLICY 362 (Everett R. Rhoades ed., John Hopkins Univ. Press 2000).

284 *Id.*

285 DEJONG, *supra* note 274, at 24.

286 H. JOURNAL, 68th Cong., 1st sess., 638 (1924); JOSEPH E. OTIS, THE INDIAN PROBLEM: RESOLUTION OF THE COMMITTEE OF ONE HUNDRED APPOINTED BY THE SECRETARY OF THE INTERIOR AND A REVIEW OF THE INDIAN PROBLEM (1924).

address their needs.[287] The committee also recommended that Congress appropriate adequate funding to provide more hospitals and health professionals to serve Native Americans.[288]

Several federal laws have impacted the health and general welfare of Native Americans.[289] The Snyder Act of 1921 was one of the first major laws passed that established the underlying framework for the Native American healthcare system that exists today. The Snyder Act authorized funds for the "benefit, care, and assistance of the Indians throughout the United States for . . . relief of distress and conservation of health," including the employment of physicians and delivery of health services.[290] Under the Department of Interior, the Bureau of Indian Affairs was responsible for providing these services at the time.[291] While the Snyder Act formally authorized Native American health programs, the Act established these programs as discretionary, subject to "such moneys as Congress may from time to time appropriate."[292]

A few years later, another review was completed of Native American conditions that again found widespread impoverishment and poor health within tribal communities. The renowned Meriam Report was published in 1928.[293] The report found "inadequate health facilities and equipment, unqualified and/or a shortage of health personnel, inadequate salaries and housing for health professionals, and a system of purchasing obsolete and outdated medical supplies and medicines from excess army and navy supplies."[294] The report concluded that "[t]aken as a whole[,] practically every activity undertaken by the national government for the promotion of the health of the Indians is below a reasonable standard of efficiency."[295]

"The end of World War II sparked a wave of conservatism and nationalism in the United States."[296] Under the Truman Administration, the executive branch considered integration, consolidation, and

287 OTIS, *supra* note 286, at 2.
288 *Id.* at 3, 35–37.
289 *See* Donald Warne & Linda Bane Frizzell, *American Indian Health Policy: Historical Trends and Contemporary Issues*, 104 AM J. PUB. HEALTH 263, 263 (2014) (discussing key federal laws impacting the health and welfare of Native American populations).
290 Act of Nov. 2, 1921 (Snyder Act), Pub. L. No. 67-85, ch. 115, 42 Stat. 208 (1921) (codified as amended at 25 U.S.C. § 13).
291 *Id.*
292 *Id.*
293 MERIAM REPORT, *supra* note 175, at 189.
294 DEJONG, *supra* note 274, at 55. *See* MERIAM REPORT, *supra* note 175, at 189–345 (chapter devoted to Native American health).
295 MERIAM REPORT, *supra* note 175, at 189.
296 DEJONG, *supra* note 274, at 109.

elimination of duplicative governmental programs to reduce government waste.[297] In 1951, the federal government adopted a policy of providing services only when Native Americans could not receive care elsewhere through state and local health facilities.[298] In furtherance of consolidation efforts, "all functions, responsibilities, authorities, and duties . . . relating to the maintenance and operation of hospital and health facilities for Indians, and the conservation of the health of Indians" were transferred from the Department of Interior to the Public Health Service (PHS) in 1955, and the Division of Indian Health was created, now known as the IHS.[299]

Still seeking to assimilate Native Americans into broader society, Congress directed the PHS to conduct a comprehensive survey of Native American health conditions.[300] The results, published in a 1957 report entitled *Health Services for American Indians*, identified the disparate health conditions faced by Native Americans and the challenges that the newly formed Division of Indian Health would have to address to improve these conditions (e.g., inadequate health services; substandard and overcrowded housing; and lack of domestic water and adequate sanitation facilities).[301] The report recognized that "[a] substantial Federal Indian health program [would] be required [to correct these] gross [] deficiencies."[302] The report also recommended that plans to increase tribal community health resources should be implemented in collaboration with tribal communities "on a reservation-by-reservation basis."[303]

In 1970, President Richard Nixon issued an Indian policy

297 *Id.*

298 *Id.* at 149.

299 Transfer Act, Pub. L. No. 83-568, 68 Stat. 674 (1954). "It was anticipated that improved funding and more efficient operations would result from expertise within the PHS and its relationships with state and local health authorities." Johnson & Rhoades, *supra* note 277, at 75. The Division of Indian Health was elevated to bureau status and redesignated as the Indian Health Service in 1968. *Records of the Indian Health Service*, NAT'L ARCHIVES, https://www.archives.gov/research/guide-fed-records/groups/513.html (last updated Aug 15, 2016).

300 *See* DEJONG, *supra* note 274, at 157. "[I]f Indians were to be emancipated from federal supervision and services, they first had to be free of disease." *Id.*

301 U.S. DEP'T OF HEALTH, EDUC. & WELFARE, HEALTH SERVICES FOR AMERICAN INDIANS (1957) [hereinafter 1957 IHS GOLD BOOK] (reflecting the report that had a gold cover and became commonly known as the "1957 IHS Gold Book"); *see also* George St. J. Perrot & Margaret D. West, *Health Services for American Indians*, 72 PUB. HEALTH REPS. (1896-1970) 565 (1957).

302 1957 IHS GOLDBOOK, *supra* note 301, at 6; Perrot & West, *supra* note 301, at 570.

303 1957 IHS GOLDBOOK, *supra* note 301, at 174.

statement to Congress, firmly shifting federal relations with tribes into a new era: the Self-Determination and Self-Governance Era.[304] President Nixon emphasized that the federal responsibility to tribes is not "an act of generosity toward a disadvantaged people," but instead the result of "solemn obligations which have been entered into by the United States Government" through treaties and other agreements.[305] He also advanced the concept of tribal "self-determination," proposing that federal programs can be taken over and managed by tribes; the Indian Self-Determination and Education Assistance Act of 1975 established President Nixon's policy in law.[306] The Act authorized IHS to allow tribes to manage health-related programs and services.[307] "Under such agreements—often referred to as 638 contracts and compacts—[t]ribes are able to tailor programs and services to their specific community needs."[308]

The Indian Health Care Improvement Act (IHCIA) is another major law that passed during the Self-Determination and Self-Governance Era in 1976.[309] After the authorizations of appropriations expired in 2000, IHCIA was permanently reauthorized in 2010.[310] The

304 President Richard Nixon, *Special Message to Congress on Indian Affairs*, THE AM. PRESIDENCY PROJECT (July 8, 1970), https://www.presidency.ucsb.edu/documents/special-message-the-congress-indian-affairs. The Self-Determination and Self-Governance Era recognized government-to-government relationships between the federal government and tribes and supported the exercise of tribal sovereignty to be the primary driver of Indian policy. *See e.g.*, COHEN'S HANDBOOK, *supra* note 269, § 1.07.

305 Nixon, *supra* note 304.

306 *Learning from the Past*, *supra* note 270, at 198; *see also* Indian Self-Determination and Education Assistance Act, Pub. L. No. 93-638, 88 Stat. 2203 (1975) (codified as amended at 25 U.S.C. §§ 450-450n, 455-458e, 458aa-458hh, 458aaa-458aaa-18 (2006)).

307 *Learning from the Past*, *supra* note 270, at 198–199; *see also* OFF. OF THE INSPECTOR GEN., DEP'T OF HEALTH & HUM. SERVS., OEI-09-93-00350, TRIBAL CONTRACTING FOR INDIAN HEALTH SERVICES 1, 5 (1996). Notably, the Act authorized the Secretary of Interior, Secretary of Health, Education, and Welfare and other government agencies to enter into agreements with tribes and allow tribal administration of programs formerly administered by these agencies. *See* Indian Self-Determination and Education Assistance Act, *supra* note 306. A major difference between a contract (under Title I) and a compact (under Title V) is the degree of federal oversight. For a comparison of Title I contracting and Title V compacting, *see* INDIAN HEALTH SERV., DIFFERENCES BETWEEN TITLE I CONTRACTING AND TITLE V COMPACTING UNDER THE INDIAN SELF-DETERMINATION EDUCATION ASSISTANCE ACT (ISDEAA).

308 *Learning from the Past*, *supra* note 270, at 198–199.

309 Indian Health Care Improvement Act, 25 U.S.C. §§ 1601–1683.

310 Permanent Authorization of the IHCIA was part of the Patient Protection and

IHCIA set forth two national goals:

> [First,] to provide the resources, processes, and structure that will enable Indian tribes and tribal members to obtain the quantity and quality of health care services and opportunities that will eradicate the health disparities between Indians and the general population of the United States, [and second], to provide the quantity and quality of health services which will permit the health status of Indians to be raised to the highest possible level and to encourage the maximum participation of Indians in the planning and management of those services.[311]

The IHCIA also "confirmed the federal government's responsibility to improve the health of Native Americans, allocated additional resources for health services, and established Urban Indian Health Programs."[312]

IHS remains the primary agency charged with fulfilling the federal treaty and trust responsibility to provide health services to Native Americans.[313] The mission of IHS is "to raise the physical, mental, social, and spiritual health of American Indians and Alaska Natives to the highest level."[314] Based upon a broad definition of health, IHS services go beyond hospital and medical services to also include "preventative services, community and social well-being, and environmental improvements."[315] The present day Native American health care delivery system is called the I/T/U system, representing three means of service: "'I' for IHS; 'T' for Tribal programs under the ISDEAA; and 'U' for urban health centers. For many Native Americans, the I/T/U system is the only source of health care services."[316]

For the most part, the federal government has consistently acknowledged its responsibility to provide health services to Native

---

Affordable Care Act. Patient Protection and Affordable Care Act, Pub. L. No. 111-148, 124 Stat. 119, 935; *see also* U.S. Dep't. of Health and Hum. Servs., *Indian Health Care Improvement Act Made Permanent*, INDIAN HEALTH SERV (Mar. 27, 2010), https://www.ihs.gov/newsroom/pressreleases/2010pressreleases/indianhealthcareimprovementactmadepermanent/.

311 25 U.S.C. § 1601. The IHCIA also included other provisions, such as establishment of a scholarship program to support Native American education and authority to receive reimbursement through Medicare and Medicaid programs for care provided to Native Americans eligible for services under these programs *Id.* §§ 1613, 1641–47.

312 *Learning from the Past*, *supra* note 270, at 199; *see also* 25 U.S.C. §§ 1601, 1651–58.

313 *About IHS*, *supra* note 44.

314 *Id.*

315 Johnson & Rhoades, *supra* note 277, at 76.

316 *Learning from the Past*, *supra* note 270, at 199; BROKEN PROMISES, *supra* note 8, at 64; *see also* Warne & Frizzell, *supra* note 289, at 265 (describing the I/T/U system).

Americans. However, "Congress has historically failed to appropriate sufficient funding to meet the health-related needs of Native Americans."[317] "Indeed, when adjusted for inflation and population growth, the IHS budget has remained static in recent decades, with little additional funding available to target the chronic health disparities facing Native communities."[318] While the life expectancy of Native Americans has increased, rising from 51 in 1954 to 73 in 2019, it has remained stagnant for the past two decades and still remains below that of the general United States population.[319]

### *B. Federal Promises to Provide a Permanent Homeland*

Beyond the laws discussed above, water law also intersects with federal responsibilities to tribes, impacting public health and climate change. In the west, the prior appropriation doctrine governs allocation of scarce water resources, which recognizes water rights based upon the date they are first put to beneficial use.[320] However, tribal water rights are unique.

> Although most water rights in the western United States have a priority based on when they were first put to beneficial use, rights on . . . Indian lands have a priority dating back to at least as early as the reservations were established even if water use begins long after others have appropriated waters from the stream.[321]

Consequently, tribal water rights are not measured by actual use; these rights cannot be lost by nonuse.[322] Additionally, because tribal water rights generally have priority dating back to the reservation's formation,

317 *Learning from the Past*, *supra* note 270, at 199; *see also* BROKEN PROMISES, *supra* note 8, at 66–67.

318 BROKEN PROMISES, *supra* note 8, at 67.

319 DEJONG, *supra* note 274, at 165; GBD U.S. Health Disparities Collaborators, *Life Expectancy by County, Race, and Ethnicity in the USA, 2000-19: A Systematic Analysis of Health Disparities*, 400 LANCET 25, 28 (2022).

320 *See* Shannon M. McNeeley et al., *Anatomy of an Interrupted Irrigation Season: Micro-Drought at the Wind River Indian Reservation*, 19 CLIMATE RISK MGMT. 61, 66 (2018); Suhina Deol, Effects of Water Quantification on Tribal Economies: Evidence from the Western U.S. Reservations 11, 22–23, 32, 62 (Apr. 28, 2017) (M.S. thesis, University of Arizona) (on file with UA Campus Repository, University of Arizona Libraries), https://repository.arizona.edu/bitstream/handle/10150/624150/azu_etd_15583_sip1_m.pdf?sequence=1&isAllowed=

321 TRIBAL WATER RIGHTS, *supra* note 21, at 2 (internal quotations omitted).

322 *Id.*

they typically represent some of the most senior water rights.[323]

The law reflects the history of Native Americans and special relationship between tribes and the federal government. Several tribes formed treaties with the United States in which "the federal government promised to establish a reservation as a permanent homeland for the tribe."[324] As noted by Clement Frost, former Chairman of the Southern Ute Indian Tribe, the federal government has not always upheld its end of the deal:

> When the Ute Bands signed a treaty establishing the Ute Reservation in 1868, the United States promised the Ute people that the Reservation would be our permanent home that would support our people forever. *The key to carrying out that promise is wet water*—a fact that the tribal leadership has always known but what the United States has sometimes forgotten.[325]

Although treaties often did not explicitly address the water-related needs of reservations, a 1908 Supreme Court ruling, *Winters v. United States*, held that "tribes have a reserved right to water sufficient to fulfill the purposes of their reservation, including the residential, economic development, and governmental needs of the tribe."[326] Aside from treaty promises, the federal government also has an underlying trust responsibility "to protect tribal treaty rights, lands, assets, and resources, as well as a duty to carry out the mandates of federal [Indian] law."[327]

323 CHARLES V. STERN, CONG. RSCH. SERV., INDIAN WATER RIGHTS SETTLEMENTS, R44148, 2 (2022) [hereinafter INDIAN WATER RIGHTS SETTLEMENTS], https://crsreports.congress.gov/product/pdf/R/R44148.

324 *See e.g.*, Treaty with the Navajo Tribe of Indians, U.S.-Navajo, art. IX, Sept. 9, 1849, 9 Stat. 974; UNIVERSAL ACCESS, *supra* note 46, at 3.

325 *Colorado Ute Settlement Act Amendments of 1998: Hearing on H.R. 3478 Before the Subcomm. on Water & Power of the H. Comm. On Nat. Res.*, 105th Cong. (1998) (statement of Clements Frost, Chairman, Southern Ute Indian Tribe) (emphasis added).

326 *See* UNIVERSAL ACCESS, *supra* note 46, at 23; *see also* Navajo Nation v. U.S. Dep't of the Interior, 26 F.4th 794, 810 (9th Cir. 2022) *cert. granted sub nom.*, Arizona v. Navajo Nation, 143 S. Ct. 398 (2022) "([W]hile '[t]he specific purposes of an Indian reservation . . . were often unarticulated, '[t]he general purpose, to provide a home for the Indians, is a broad one and must be liberally construed.'") (internal citation omitted). It is clear that the Reservation cannot exist as a viable homeland for the Nation without an adequate water supply.

327 *What Is the Federal Indian Trust Responsibility?*, U.S. DEPT. OF THE INTERIOR, BUREAU OF INDIAN AFFS. (Nov. 8, 2017), https://www.bia.gov/faqs/what-federal-indian-trust-responsibility; *see also Navajo Nation*, 26 F.4th at 812 (holding "that common-law sources of the trust doctrine . . . firmly establish the Federal Appellees' duty to protect and preserve [a tribe's] right to water").

Combined, federal treaty and trust responsibilities create a federal duty to ensure water security in Indian country. Access to a clean, reliable supply of water is necessary in order to fulfill the basic standards of living and ensure a permanent homeland. Accordingly, the *Winters* rights that attach to reservations are sufficient to create an enforceable obligation on the federal government to "secure, protect, and develop adequate water supplies for tribes."[328]

Although tribes are entitled to these federally reserved water rights, quantifying and securing their water rights is a challenging process, often requiring significant expenditures of time and money.[329] Nonetheless, "quantification of water rights is viewed by many as necessary to design and plan adaptation strategies that secure water" for all of the community needs.[330] Tribal water rights may be quantified through either adjudication (litigation) or negotiated settlements.[331] In adjudications, tribes may rely on the federal government to assert and protect their water rights, as trustee for the tribe, or waive their sovereign immunity by intervening as party defendants.[332] Since the *Winters* decision, 46 tribes have quantified their water rights through adjudications.[333] As litigation is a time-consuming process (the average tribal adjudications having taken 22 years to complete) and can carry other disadvantages, settlement may be favored over litigation.[334]

328 *Navajo Nation*, 26 F. 4th at 812–13.

329 *See* Heather Tanana & Elisabeth Parker, *The Unfulfilled Promise of Indian Water Rights Settlements*, 37 NAT. L RES. & ENV'T 12 (forthcoming 2023) (discussing the challenges associated with tribal water rights settlements).

330 U.S. GLOB. RSCH. PROGRAM, *Tribes and Indigenous Peoples*, *in* FOURTH NATIONAL CLIMATE ASSESSMENT, VOLUME II: IMPACTS, RISKS, AND ADAPTATION IN THE UNITED STATES 572, 579 (2018). *See generally* Deol, *supra* note 320; Judith V. Royster, *Climate Change and Tribal Water Rights: Removing Barriers to Adaptation Strategies*, 26 TUL. ENV'T L.J. 197 (2013).

331 *See* COHEN'S HANDBOOK, *supra* note 269, §§ 19.05(1)–(2) (discussing the determination of tribal water rights).

332 *Id.* at § 19.06 (discussing federal protection of tribal water rights). Indeed, in *Navajo Nation*, the Navajo Nation asserted that the United States breached its trust obligation to assert and protect the tribe's unresolved water rights in the Colorado River. 26 F.4th at 799.

333 Leslie Sanchez et al., *Beyond "Paper" Water: The Complexities of Fully Leveraging Tribal Water Rights*, FED. RSRV. BANK OF MINNEAPOLIS (May 3, 2022), https://www.minneapolisfed.org/article/2022/beyond-paper-water-the-complexities-of-fully-leveraging-tribal-water-rights.

334 *Id.* The disadvantages of adjudications are "well-documented" and include a potentially hostile state forum, lack of funding for water development projects or delivery systems and continued use of available water by non-tribal interests from the source under litigation. COHEN'S HANDBOOK, *supra* note 269, § 19.05(2).

Negotiated settlements—also referred to as Indian or tribal water rights settlements—involve four phases: pre-negotiation, negotiation, settlement, and implementation.[335] Similar to adjudications, the federal government participates in negotiations to fulfill its trust responsibility to tribes by assisting them with their reserved water right claims.[336] Once negotiated, settlements typically require congressional authorization to implement the terms.[337] "Since 1978, the federal government has entered into 38 tribal water rights settlements . . . and 34 of these settlements have been congressionally approved."[338]

Even when tribal rights have been quantified, many tribes lack funding to develop their water resources, resulting in what is referred to as "paper," rather than "wet," water rights.[339] "[I]n the water-short West, billions of dollars have been invested, much of it by the Federal Government, in water resource projects benefiting non-Indians but using water in which the Indians have a priority of right if they choose to develop water projects of their own in the future."[340] As previously noted, water infrastructure is aging across the United States and is in particularly poor condition in Indian country. Decaying water infrastructure exacerbates climate risks[341] and contributes to water insecurity,[342] ultimately harming tribal public health. Negotiated settlements can help address these challenges by including funding authorization—or even better, mandatory appropriations—for infrastructure projects to facilitate access and development of tribal water resources.[343] However, settlements also have disadvantages, namely that "[v]irtually all tribes

335 INDIAN WATER RIGHTS SETTLEMENTS, *supra* note 323, at 3–5.

336 *Id.* at 1, 4–5.

337 *Id.* at 5.

338 *Id.* at 6.

339 The concept of "paper" rights refers to when a tribe has quantified water rights, recognized in the law, but is unable to develop and utilize those rights. *Id.* at 2. Water development projects and establishment of delivery systems allow tribes to access their water, turning "paper" rights into "wet" rights. *Id.* "[U]nlike Congress, the courts cannot provide tangible 'wet water' by authorizing new water projects and/or water-transfer infrastructure (including funding for project development) that would allow the tribes to exploit their rights." *Id.* As a result, adjudicated water rights have been more likely to result in "paper" rights than negotiated settlements, which frequently include provisions to construct water infrastructure, increasing access to newly quantified tribal resources. *Id.*

340 NAT'L WATER COMM'N, WATER POLICIES FOR THE FUTURE 476 (1973).

341 NCA4 VOL. 2, *supra* note 2, at 154.

342 UNIVERSAL ACCESS, *supra* note 46, at 17–19.

343 Heather Tanana & Elisabeth Parker, *The Unfulfilled Promise of Indian Water Rights Settlements*, 37 NATURAL RESOURCES & ENVIRONMENT 12, 14 (2022).

agree to a lesser quantity of water than they would claim in litigation."[344]

Congress generally directs either the Bureau of Reclamation or the Bureau of Indian Affairs to oversee federal projects approved in a tribal water settlement.[345] For example, as part of the 2009 Navajo Nation San Juan River Settlement, Congress authorized the Bureau of Reclamation to construct the Navajo Gallup Water Supply Project (NGWSP) to provide water to the Navajo Nation; Jicarilla Apache Nation; and the City of Gallup, New Mexico.[346] Construction on the NGWSP began in 2012 and is projected to be completed by year-end of 2029.[347] Project conception and planning actually began decades earlier, in the 1950s.[348] Many community members were skeptical that the project would ever be realized.[349] But the Bureau of Reclamation was able to establish and maintain a strong working relationship with the community and ultimately partnered with IHS to serve some homes sooner, without the need to complete the rest of the NGWSP first.[350] Aside from demonstrating how a negotiated settlement can include a water infrastructure project, the NGWSP also reveals how collaboration among federal agencies can help achieve water access more quickly. Multiple federal agencies possess unique expertise and statutory authority that can be drawn upon to secure clean water access for tribal communities.[351] Negotiated settlements that include water infrastructure projects should also include consultation requirements with sister agencies to take advantage of the particular expertise and funding sources each agency may bring to a project.[352]

344 COHEN'S HANDBOOK, *supra* note 269, § 19.05(2).

345 INDIAN WATER RIGHTS SETTLEMENTS, *supra* note 323, at 5.

346 Omnibus Public Land Management Act of 2009, Pub. L. No. 111-11, tit. X, pt. III, 123 Stat. 991, 1365.

347 *Navajo-Gallup Water Supply Project, General*, BUREAU OF RECLAMATION, https://www.usbr.gov/projects/index.php?id=580 (last visited Jan.5, 2023). Notably, according to the authorizing legislation, construction was supposed to be completed by 2024. *Id.*

348 WATER & TRIBES INITIATIVE, UNIVERSAL ACCESS TO CLEAN WATER FOR TRIBES: RECOMMENDATIONS FOR OPERATIONAL, ADMINISTRATIVE, POLICY, AND REGULATORY REFORM 17–23 (2021) [hereinafter RECOMMENDATIONS FOR REFORM], https://tribalcleanwater.org/wp-content/uploads/2021/11/Full-Report-11.21-FINAL.pdf.

349 *Energy and Water Dev. Hearing*, *supra* note 51, at 6.

350 RECOMMENDATIONS FOR REFORM, *supra* note 348, at 7.

351 UNIVERSAL ACCESS, *supra* note 46, at 28–43 (discussing the roles and programs of the Indian Health Service, Environmental Protection Agency, U.S. Department of Agriculture, and Bureau of Reclamation related to drinking water in Indian country).

352 *Id.*

Finally, while negotiated water settlements and quantification of tribal water rights can help facilitate much-needed water infrastructure projects, they should not be a pre-condition to obtaining water security in Indian country. The federal government has a responsibility to protect tribal health and ensure that the lands upon which tribes were relegated have the necessary water to be permanent homelands, as promised. Notwithstanding the federal government's failure to uphold treaty promises with tribes in the past, the Supreme Court has affirmed the federal government's continuing obligation to do so. In *McGirt v. Oklahoma*, the Supreme Court upheld treaty promises made to the Muscogee (Creek) Nation to establish a reservation.[353] Writing for the court, Justice Neil Gorsuch stated: "Unlawful acts, performed long enough and with sufficient vigor, are never enough to amend the law. To hold otherwise would be to elevate the most brazen and longstanding injustices over the law, both rewarding wrong and failing those in the right."[354] In short, water security remains a critical issue for tribal communities, and the federal government plays a central role in ensuring clean water access to protect tribal futures.

### *C. Protecting Public Health from Climate Change Through Water Security: The Role of the Indian Health Service*

Several federal agencies have programs available that can be used to assist tribes in responding to climate change and protecting tribal public health. Indeed, there are at least seven different federal agencies comprising at least 23 different programs that afford some type of funding for tribal water and sanitation projects.[355] However, as discussed below, the IHS mission most aligns with this intersection, and IHS is one of the primary agencies involved in supporting tribal drinking water and sanitation infrastructure.

Tribal communities have faced water insecurity for decades. Throughout the 1950s, reservation-wide sanitation surveys were conducted and revealed that "[m]ore than 80% of Indian and Alaska Native families hauled or otherwise imported domestic water supplies, with over 70% of this water coming from contaminated or likely contaminated sources. Less than 20% of Indian homes were equipped with adequate waste disposal, with 12% having no facilities at all."[356] At

353 McGirt v. Oklahoma, 140 S. Ct. 2452, 2459 (2020).
354 *Id.* at 2482.
355 UNIVERSAL ACCESS, *supra* note 46, at 5.
356 DEJONG, *supra* note 274, at 161.

the time, the PHS did not have statutory authority to construct sewage and water supply facilities. And although the Department of Interior possessed authority to construct sanitation facilities, it did not have statutory authority to transfer such projects to state, local, or tribal entities.[357] To address these issues, Congress passed the Indian Sanitation Facilities Act (ISFA) in 1959 to improve sanitation conditions in Indian country by authorizing the use of federal funds to design and construct water, wastewater, and solid waste facilities.[358]

At present, this authority is carried out by IHS through its Sanitation Facilities Construction (SFC) Program.[359] The goal of the SFC Program is:

> To improve the health of the American Indian and Alaska Native people by improving the environment in which they live. The SFC Program accomplishes that goal by providing . . . safe water supplies, adequate means of waste disposal, and other essential sanitation facilities. An additional goal is to build tribal capability to operate and maintain the facilities provided in a safe and effective manner.[360]

As part of the SFC Program, IHS collects sanitation data—information about water supply and sewage disposal—for homes within its service areas.[361] IHS currently has identified 245,802 homes that have some form of water or sanitation deficiency.[362] These deficiencies can range from Level I (where the sanitation system "complies with all applicable water supply and pollution control laws [but requires] routine replacement, repair, or maintenance") to Level V (where there is no safe water supply or sewage disposal system).[363]

357 *Id.* (citing INDIAN SANITATION FACILITIES, S. REP. No. 86-589, at 4 (1959)).

358 Indian Sanitation Facilities Act of 1959, Pub. L. No. 86-121, 73 Stat. 267.

359 *Division of Sanitation Facilities Construction*, *supra* note 45.

360 INDIAN HEALTH SERV. ET AL., CRITERIA FOR THE SANITATION FACILITIES CONSTRUCTION PROGRAM 1-1 (1999) [hereinafter CRITERIA FOR SFC PROGRAM], https://www.ihs.gov/sites/dsfc/themes/responsive2017/display_objects/documents/Criteria_March_2003.pdf.

361 *Id.* at 2–7. IHS is mandated to maintain this inventory and report annually to Congress on existing sanitation deficiencies pursuant to the 1988 amendments to the Indian Health Care Improvement Act. *Id.*

362 INDIAN HEALTH SERV., AMERICAN RESCUE PLAN ACT, INFRASTRUCTURE INVESTMENT AND JOBS ACT, AND BUILD BACK BETTER BILL 20 (2021), https://www.ihs.gov/sites/newsroom/themes/responsive2017/display_objects/documents/2021_Speeches/IHSTribalandUIOUpdateandLearningSession120921.pdf.

363 INDIAN HEALTH SERV., SANITATION DEFICIENCY SYSTEM (SDS): A GUIDE FOR REPORTING SANITATION DEFICIENCIES FOR AMERICAN INDIAN AND ALASKA NATIVE HOMES AND COMMUNITIES 18 (2019), https://www.ihs.gov/sites/dsfc/themes/

As mentioned in Part I, funding has been a persistent challenge for IHS. Historically, the SFC Program has received a fraction of the funds required for the program.[364] For example, the SFC Program end-of-year need in 2020 was over $3 billion, but only $196.6 million was appropriated by Congress for fiscal year 2021.[365] However, due to the Infrastructure, Investment and Jobs Act (IIJA), for the first time in its history, the SFC Program received the full amount of funding for its reported need, plus administrative costs.[366] As part of IIJA, the SFC Program will receive $3.5 billion over five years, or $700 million per year for fiscal years 2022 to 2026.[367] "With the additional IIJA funding, IHS total annual funding for SFC projects is now four times greater than in previous years."[368] This amount is on top of additional funding that IHS received from COVID-19 related legislation, such as the Coronavirus Aid, Relief, and Economic Security Act (CARES Act) and the American Rescue Plan Act.[369]

---

responsive2017/display_objects/documents/Final_SDS_Guide_v2.pdf; INDIAN HEALTH SERVICE, ANNUAL REPORT TO THE CONGRESS OF THE UNITED STATES ON SANITATION DEFICIENCY LEVELS FOR INDIAN HOMES AND COMMUNITIES 4 (2019), https://www.ihs.gov/sites/newsroom/themes/responsive2017/display_objects/documents/FY_2019_RTC_Sanitation_Deficiencies_Report.pdf.

364 "With the additional IIJA [Infrastructure, Investment and Jobs Act] funding, IHS total annual funding for SFC projects is now four times greater than in previous years." SUZANNE MURRIN, OFFICE OF INSPECTOR GENERAL, INITIAL OBSERVATIONS OF IHS CAPACITY TO MANAGE SUPPLEMENTAL $3.5 BILLION APPROPRIATED TO SANITATION FACILITIES CONSTRUCTION PROJECTS 2 (2022), https://oig.hhs.gov/oei/reports/OEI-06-22-00320.pdf. *See also* UNIVERSAL ACCESS, *supra* note 46, at 29 (comparing IHS SFC Program needs to appropriations from 2009-2019).

365 *See* Email from Mark Calkins, Dir., Div. of Sanitation Facilities Const., Indian Health Serv., to author (Mar. 2, 2021) (on file with author) ("[T]he end of year 2020 total cost of SDS projects has been finalized at $3,086,773,153."); *Operating Plan for FY 2021*, INDIAN HEALTH SERV. https://www.ihs.gov/sites/budgetformulation/themes/responsive2017/display_objects/documents/FY2021_OperatingPlan.pdf (last visited Jan. 5, 2023).

366 *FY 2021 Annual Report of Sanitation Deficiency Levels*, INDIAN HEALTH SERV., https://www.ihs.gov/sites/dsfc/themes/responsive2017/display_objects/documents/FY_2021_Appendix_Project_Listing.pdf (last visited Jan. 5, 2023); Infrastructure Investment and Jobs Act, Pub. L. No. 117-58, 135 Stat. 429, 1411 (2021). *See also IHS Allocates $700 Million from President Biden's Bipartisan Infrastructure Law to Improve Tribal Water and Sanitation Systems*, HEALTH AND HUM. SERVS. (May 31, 2022), https://www.hhs.gov/about/news/2022/05/31/ihs-allocates-700-million-dollars-from-president-bidens-bipartisan-infrastructure-law-to-improve-tribal-water-sanitation-systems.html.

367 *IHS Allocates $700 Million from President Biden's Bipartisan Infrastructure Law to Improve Tribal Water and Sanitation Systems*, *supra* note 366.

368 MURRIN, *supra* note 364.

369 The lack of clean water access in Indian country received significant attention

With this unprecedented funding, it is now up to IHS to effectively deploy the funds. There are several changes that IHS can implement to ensure that the SFC Program funding is dispersed in an equitable manner that provides the greatest benefit to tribal communities.[370] These recommendations include improving the SFC Program database, removing unnecessary matching fund requirements, and updating eligibility and criteria positions in consultation with tribes.[371] The IHS database is the most comprehensive inventory of drinking water and sanitation deficiencies in tribal communities.[372] While IHS has made improvements to their database, it does not identify all tribal homes that are eligible to receive funding from IHS.[373] IHS updates the database annually and collaborates with tribes to identify their drinking water and wastewater infrastructure needs; however, it can be difficult to identify where tribal members are residing in communities with a large non-Native population, and some tribes may choose not to provide information to IHS for a variety of reasons.[374] In order to

during the COVID-19 pandemic, both in Congress and in the media. *See, e.g.*, *Energy and Water Dev. Hearing*, *supra* note 51; Nina Lakhani, *Tribes Without Clean Water Demand an End to Decades of US Government Neglect*, THE GUARDIAN (Apr. 28, 2021), https://www.theguardian.com/us-news/2021/apr/28/indigenous-americans-drinking-water-navajo-nation. The CARES Act and American Rescue Plan Act of 2021 included additional funding for IHS and tribal water projects. CARES Act, Pub. L. No. 116-136, 134 Stat. 281, 550 (2020); More specifically, the CARES Act providing funding directly to tribes as well as $10 million to IHS that was used to increase water access in Indian country. *IHS Statement on Allocation of Final $367 Million from CARES Act*, INDIAN HEALTH SERV. (Apr. 23, 2022), https://www.ihs.gov/newsroom/pressreleases/2020-press-releases/ihs-statement-on-allocation-of-final-367-million-from-cares-act/. The American Plan Act authorized $20 million to the Bureau of Indian Affairs to provide and deliver potable water. American Rescue Plan Act of 2021, Pub. L. No. 117-2, 135 Stat. 4, 241 (2021).

370 RECOMMENDATIONS FOR REFORM, *supra* note 348, at 17–23.

371 *Id.*

372 IHS is the only agency with a statutory mandate to maintain a sanitation deficiency database. That database is used to provide a "wide variety of information" to Congress, the Office of Management and Budget, the General Accounting Office, and various other federal entities. CRITERIA FOR SFC PROGRAM, *supra* note 360, at 2–7. Indeed, the Environmental Protection Agency utilizes the IHS database to administer its Clean Water Indian Set-Aside Program, which provides funding to tribes for wastewater infrastructure. *Clean Water Indian Set-Aside Program*, ENVT'L PROTECTION AGENCY, https://www.epa.gov/small-and-rural-wastewater-systems/clean-water-indian-set-aside-program (last visited Jan. 25, 2023).

373 RECOMMENDATIONS FOR REFORM, *supra* note 348, at 17–19.

374 U.S. GOV'T ACCOUNTABILITY OFF., GAO–18–309, DRINKING WATER AND WASTEWATER INFRASTRUCTURE: OPPORTUNITIES EXIST TO ENHANCE FEDERAL AGENCY NEEDS ASSESSMENT AND COORDINATION ON TRIBAL PROJECTS 16–17, 19–20 (2018), https://www.gao.gov/assets/gao-18-309.pdf. *See also* RECOMMENDATIONS FOR REFORM,

enhance transparency, it is important that IHS improve its compilation and dissemination of the most current and up-to-date data and that this information be available to the public, Congress, and tribes. Ongoing tribal consultation is critical to ensure that tribal needs are accurately captured and that tribes have the opportunity to meaningfully comment on prioritized projects.

The ISFA authorized IHS (through the Surgeon General) to provide sanitation facilities to "Indian homes, communities, and lands."[375] Likely due to historically insufficient funding, IHS has adopted a restrictive interpretation of this responsibility, providing funding only to projects that serve Native homes directly and requiring communities to find matching funds for other structures in the community that would be served by water and wastewater infrastructure.[376] Matching funds are required even for structures that are essential to the life of the Native communities and provide indispensable educational, economic, and community services, such as schools, nursing homes, and tribal offices.[377] The matching requirement creates an insurmountable financial obstacle for many tribal communities.[378] With adequate funding now available through IIJA, IHS should remove this unnecessary matching fund requirement and adopt a broad interpretation of its responsibility to provide sanitation facilities, including structures essential to the educational, economic, and health needs of the community.

Additionally, although IHS has established basic eligibility criteria[379] for providing service to "Indian homes, communities, and lands" under ISFA, the agency does not have regulations that define Indian community for this purpose.[380] Under current criteria, IHS assistance depends upon the community size and Native American population.[381] In Indian communities (currently identified as 50% or more federally recognized Native American people), non-Indian persons or organizations must contribute funds to cover the prorated

*supra* note 348, at 18.

375 Indian Sanitation Facilities Act, *supra* note 358.

376 Jojo Phillips, *'Unserviced': Why Some Western Alaska Villages Lack Basic Sanitation Infrastructur*e, ANCHORAGE DAILY NEWS, https://www.adn.com/alaska-news/rural-alaska/2020/05/19/unserviced-why-some-western-alaska-villages-lack-basic-sanitation-infrastructure/ (last updated May 20, 2020).

377 RECOMMENDATIONS FOR REFORM, *supra* note 348, at 18.

378 Phillips, *supra note* 376.

379 CRITERIA FOR SFC PROGRAM, *supra* note 360, at 5–3.

380 RECOMMENDATIONS FOR REFORM, *supra* note 348, at 19.

381 CRITERIA FOR SFC PROGRAM, *supra* note 360, at 5–3.

cost of facilities required to serve them.[382] In non-Indian communities, IHS can only provide funding to improve or replace existing sanitation facilities in communities with less than 10,000 people, and that funding is prorated to cover only the cost to serve tribal homes.[383] In non-Indian communities with more than 10,000 people, IHS is only able to support connecting individual tribal homes to public infrastructure, making these communities entirely reliant on state or other sources of funding for upgrades to existing systems.[384] These community and population distinctions are both unnecessarily complex and confusing, and they create barriers and disadvantages for both Native Americans households that are located within non-Indian communities and non-Native American households that are located within Indian communities.[385] In consultation with tribes, IHS should clarify the definition of an Indian community through new regulations or other agency direction in order to better provide drinking water and sanitation to all tribal members, regardless of the makeup of the communities in which they live. As noted by Senator Murkowski, "[I]t makes sense to provide some incidental benefits to non-Indians in an Indian community in order to get the full sanitation benefits to . . . the folks that are there."[386]

Recognizing that there are statutorily placed limitations on IHS's authorized services, collaboration and coordination through a "whole of government" approach can help eliminate duplication and optimize resources among agencies to create synergies and deliver seamless services.[387] Federal agencies involved include the U.S. Department of Agriculture (USDA), U.S. Department of Housing and Urban Development, U.S. Department of Health and Human Services (DHHS, which includes IHS), U.S. Department of the Interior, and the EPA.[388] For example, the EPA plays a major role in ensuring that water quality standards are met.[389] The USDA has water-focused programs that can be utilized to promote economic development.[390] And most recently, the Bureau of Reclamation received $550 million to assist disadvantaged

382 *Id.* at 5–7.
383 *Id.*
384 RECOMMENDATIONS FOR REFORM, *supra* note 348, at 23.
385 *Id.* at 20.
386 Lisa Murkowski, *Senator Murkowski Speaks on Improving Health Care Outcomes and Sanitation in Indian Country*, YOUTUBE, (Dec. 12, 2019), https://www.youtube.com/watch?v=8--PHorWar0.
387 RECOMMENDATIONS FOR REFORM, *supra* note 348, at 5.
388 *Id.* at 5–6.
389 *See* UNIVERSAL ACCESS, *supra* note 46, at 30–33 (discussing EPA programs).
390 *See id.* at 33–37 (discussing USDA programs).

communities in the planning, design, or construction of water projects that will "provide domestic water supplies to communities or households that do not have reliable access to domestic water supplies."[391] Each of these agencies has their own expertise and federally-funded programs that can help address the water-related needs of tribal communities.[392]

There are a variety of ways to achieve a whole of government approach,[393] however, utilization of the Tribal Infrastructure Task Force established in 2007[394] may be the easiest. This working group "was created to develop and coordinate federal activities in delivering water and wastewater infrastructure . . . to tribal communities."[395] Although the Infrastructure Task Force was dormant for a period of time, the federal agencies entered into a new Memorandum of Understanding (MOU) in 2022.[396] The new MOU is intended to be "a framework for all parties to enhance interagency coordination and to cultivate greater cooperation in carrying out their authorized federal government responsibilities."[397] While the renewed MOU is commendable, it lacks a formal directive for coordination and does not include any metrics to be able to evaluate measurable progress. Achieving a whole of government approach in reality will require a formal directive mandating interagency coordination, clear responsibilities and identified goals, as well as metrics to be used to measure progress and ensure accountability.

Finally, to truly protect the health of tribal communities and achieve water security in Indian country, IHS must incorporate the effects of climate change into its policies and programmatic activities. In the past, federal efforts to provide health services and care were inadequate,

391 The Inflation Reduction Act of 2022, Pub. L. 117-169, 136 Stat. 1818, Section 50231.

392 For a more detailed discussion of the programs related to drinking water, see UNIVERSAL ACCESS, *supra* note 46, at 429–43.

393 *See* RECOMMENDATIONS FOR REFORM, *supra* note 348, at 10–11.

394 *Federal Infrastructure Task Force to Improve Access to Safe Drinking Water and Basic Sanitation to Tribal Communities,* EPA, https://www.epa.gov/tribal/federal-infrastructure-task-force-improve-access-safe-drinking-water-and-basic-sanitation (last updated June 23, 2022).

395 *Id.*

396 EPA, Memorandum of Understanding Among the Department of Agriculture, Department of Housing and Urban Development, Department of Health and Human Services, Department of the Interior, and the Environmental Protection Agency to Better Coordinate the Federal Government Efforts in Providing Infrastructure and Promoting Sustainable Practices to Support the Provision of Safe Drinking Water and Basic Sanitation in American Indian and Alaska Native Communities (Feb. 9, 2022), https://www.epa.gov/system/files/documents/2022-02/2022-approved-itf-mou.pdf.

397 *Id.* at 1.

provided in a sporadic manner through emergency-based services.[398] "While preventative medicine was becoming the norm across the United States, it was slow to materialize in Indian Country, where the emphasis remained curative."[399] History is repeating itself and requires another paradigm shift. The same conditions that made tribal communities susceptible to infection and chronic diseases are those that remain today and make tribal communities susceptible to climate change impacts: inadequate health services, substandard and overcrowded housing, and lack of domestic water and adequate sanitation facilities.

Historically, IHS has not established its own policy related to climate change.[400] However, IHS is an agency within the DHHS, and therefore follows DHHS policy.[401] DHHS recognizes that "[c]limate change poses current and increasing threats to human health."[402] In 2021, DHHS launched the Office of Climate Change and Health Equity (OCCHE).[403] The OCCHE's mission is to protect the population from health threats posed by climate change, "especially those experiencing a higher share of exposures and impacts."[404] These efforts have primarily focused on securing commitments by the health care sector to lowering their greenhouse gas emissions and building more climate resilient infrastructure.[405]

398 DEJONG, *supra* note 274, at 105.

399 *Id.* at 43.

400 Notably, the IHS Indian Health Manual includes a chapter on Environmental Compliance, Stewardship, and Sustainability. *See Indian Health Manual, Chapter 13 – Environmental Compliance, Stewardship, and Sustainability*, INDIAN HEALTH SERV.,https://www.ihs.gov/ihm/pc/part-1/chapter-13-environmental-compliance-stewardship-and-sustainability/ (last visited Jan. 25, 2023). While the chapter does not explicitly mention climate change, it does establish IHS policy, procedures, and responsibilities for reducing the environmental impact of IHS operations (including reduction of greenhouse gas emissions). *Id.* at 1-13.1. The IHS Sustainability Advisory Board supports IHS sustainability efforts, which refers to "the long-term management of IHS facilities and operations in a manner which minimizes our impact on the environment." *Sustainability Advisory Board – Charter*, INDIAN HEALTH SERV. (Mar. 12, 2013), https://www.ihs.gov/IHM/circulars/2013/sustainability-advisory-board-charter/.

401 *About IHS*, *supra* note 44.

402 *Climate Change and Health Equity*, U.S. DEP'T OF HEALTH & HUM. SERV., https://www.hhs.gov/ocche/climate-change-health-equity/index.html (last visited Jan. 5, 2023).

403 *About the Office of Climate Change and Health Equity*, U.S. DEP'T OF HEALTH & HUM. SERV., https://www.hhs.gov/ash/ocche/about/index.html. (last visited Jan. 5, 2023).

404 *Id.*

405 *See Fact Sheet: Health Sector Leaders Join Biden Administration's Pledge to Reduce Greenhouse Gas Emissions 50% by 2030*, THE WHITE HOUSE (June 30, 2022), https://

The success of the OCCHE remains yet to be seen. However, any action seeking to address climate change impacts experienced by tribal communities—particularly impacts on water security—must account for the unique nature of tribal water rights and address the lack of infrastructure in Indian country. Moreover, as discussed further in Part III, tribes must be the drivers of their own future.

## III. Building a Resilient Future

Climate change is threatening tribal public health and the future of tribal communities. Federal treaty and trust responsibilities to promote the health of Native Americans and ensure reservations are permanent homelands must account for climate change impacts to water. As previously noted, although tribes share common experiences of colonization, removal, and assimilation, each of the 574 federally recognized tribes in the United States is unique and has its own individual needs. The federal government will be more likely to achieve demonstrable success if it works in collaboration with individual tribes. Compared to non-Indigenous communities, tribes "have more readily recognized and acknowledged evidence of climate change impacts"; and consequently, they have been "among the first to initiate and actively engage in climate adaptation initiatives."[406] However, the ability to adapt to climate change depends on the availability of data and ability to engage in decision-making. Historically, tribes have not been supported—or even invited—to have a seat at the table.[407] Climate

www.whitehouse.gov/briefing-room/statements-releases/2022/06/30/fact-sheet-health-sector-leaders-join-biden-administrations-pledge-to-reduce-greenhouse-gas-emissions-50-by-2030/.

406 Helen Fillmore & Loretta Singletary, *Climate Data and Information Needs of Indigenous Communities on Reservation Lands: Insights from Stakeholders in the Southwestern United States*, 169 Climatic Change No. 37, 2021, at 1, 11.

407 Bob Gruenig et al., Tribal Climate Change Principles: Responding to Federal Policies and Actions to Address Climate Change 7 (2015), https://atnitribes.org/climatechange/wp-content/uploads/2017/12/Tribal-Climate-Change-Principles_9-23-2015.pdf ("The federal government's various consultation policies with Tribes are not resulting in adequate levels of communication with Tribes on climate change issues."). The exclusion of tribal involvement is particularly apparent when looking at management of the Colorado River. Jason Robison et al., *Community in the Colorado River Basin*, 57 Idaho L. Rev. 1, 34–36 (2021) (discussing the history of the laws and policies governing the Colorado River, known as the "Law of the River," and the intentional disregard of tribal interests and participation). "Modern water policy sits on a 200-year-old foundation of laws written and executed by non-Indigenous politicians." Pauly Denetclaw, *Colorado River, Stolen by Law*, High Country News (Mar. 1, 2022), https://www.hcn.org/

change policy "should respect . . . self-determination in governance and knowledge exchange."[408] Tribes must have a voice in the decisions that impact their land and people. The ability to meaningfully engage on a government-to-government level and to make those decisions requires tribal capacity, which can be built through improved access to information and effective consultation, as discussed further below.

### *A. Access to Information and Funding*

Many tribes "are undertaking efforts to assess climate impacts and develop climate adaptation plans for their communities, lands, and/or resources."[409] In order to be successful, access to information and funding is critical. In a recent survey, tribes reported that increasing the amount of information on "climate change impacts on tribal lands, water, and economies" was their top priority.[410] Climate data can help tribes assess their climate adaptation needs and engage in resiliency planning for their communities. The same goes for water quality data. Many tribes have identified water quality as a critical environmental issue for their community, however, water quality data is not easily accessible.[411] "[W]ater quality data collection and analysis are labor intensive," and some tribes may not have the capacity to generate the data on their own.[412] Relevant water quality data is also not easily accessible through federal sites (e.g., USGS's online data portal) or is "too limited in scope to inform tribal water management decisions" (e.g., EPA's water quality data).[413] To fill the data gap and obtain the sought-after data, tribes have begun partnering with third parties, including academic institutions.[414] While tribes have been sensitive to participating in research due to historic ethical abuses,[415] these partnerships have been successful because the tribe is in charge of initiating the work and can

issues/54.3/indigenous-affairs-colorado-river-stolen-by-law (discussing history and current efforts to promote tribal inclusion). Tribes are calling for the law of the river to change, this time with tribal input and leadership. *Id.*

408 *See Advancing Environmental Justice Through Climate Action: Hearing Before the H. Select Comm. on the Climate Crisis*, 117th Cong. (2021) (statement of Nikki Cooley, Co-Manager and Interim Ass. Dir., Inst. For Tribal Env't Pros).

409 Fillmore & Singletary, *supra* note 406, at 11.

410 *Id.* at 9.

411 *Id.* at 15.

412 *Id.*

413 *Id.*

414 *Id.* at 17.

415 *See* Christina M. Pacheco et al., *Moving Forward: Breaking the Cycle of Mistrust Between American Indians and Researchers*, 103 AM. J. PUB. HEALTH 2152, 2155 (2013).

then use the resulting data and research to help solve a tribe-identified problem.[416] Data collection and reporting are particularly important because IHS relies upon its SFC program database to identify and fund water projects in Indian country. It is therefore critical that tribes work with IHS to ensure that their community needs are accurately identified in the database.

Overall, improvements are needed to making data more relevant to tribal communities. However, any future research must ensure that it protects tribal data sovereignty. To do so, future research should include protocols when working with tribes to ensure voluntary participation and to protect "sensitive traditional knowledge from misuse that could inadvertently harm tribal nations."[417] Such efforts "should aim to support locally led community-based adaptation efforts rather than extract knowledge or resources from historically marginalized populations, including Indigenous communities."[418]

Furthermore, for any efforts to be successful, tribes must be able to easily access and understand the resources available to them. Currently, tribes have access to federal programs and funding that can assist with planning and implementing climate change adaptation actions.[419] While these programs have been severely underfunded for decades,[420] the IIJA and other recent legislation represent historic investments in tribal water infrastructure and climate change initiatives. Even so, tribes continue to face various hurdles accessing these resources. For one, given the extensive number of federal programs, each with their own requirements and deadlines,[421] it can be difficult for tribes to navigate the system. In addition, many programs require submission of

416 *See e.g.*, Crescentia Cummins et al., *Community-Based Participatory Research in Indian Country: Improving Health Through Water Quality Research and Awareness*, 33 FAM. COMTY. HEALTH 166, 167, 171 (2011) (describing a project initiated by tribal community members, and using community-based participatory research, to evaluate water quality).

417 Fillmore and Singletary, *supra* note 406, at 18.

418 *Id.*

419 *Tribal Climate Change Guide: Funding*, UNIVERSITY OF OREGON, https://tribalclimateguide.uoregon.edu/ (last visited Jan. 10, 2023) (providing information on grants, programs and plans available for tribes to address climate change).

420 GRUENIG ET AL., *supra* note 407, at 15.

421 *See generally* JACOB BERNAL, FUNDING OPPORTUNITIES FOR TRIBAL WATER PRIORITIES: A GUIDEBOOK FOR INDIGENOUS COMMUNITIES IN THE COLORADO RIVER BASIN, WESTERN RESOURCE ADVOCATES (Aug. 2022), https://westernresourceadvocates.org/wp-content/uploads/2022/08/2022_0823_WRA_Tribal_-Funding_Guidebook_Final.pdf (identifying federal funding programs related to water, eligibility criteria, and period of availability).

a grant proposal.[422] Not all tribes may have an experienced grant writer capable of submitting a competitive application. Therefore, a one-stop-shop website with information about all the funding opportunities available to tribes would help ensure that tribes are aware of all the different federal programs.[423] Since projects that are "shovel-ready" [424] are more likely to be prioritized and funded by federal agencies, federal assistance, when utilized to the fullest, can help tribes move projects from shovel-worthy to shovel-ready.

### *B. Consultation and Integration of Traditional Knowledge*

Tribes know their communities best—their needs and strengths. As such, any future effort to promote tribal health and respond to climate change should be guided by the tribe through consultation, accounting for Indigenous knowledge and innovation. "Tribal consultation is essential for effective Indian health policy."[425] Since 2000, Executive Order 13,175 has required agencies to have a process to ensure impactful and timely input by tribal officials in the development of policies that have tribal ramifications.[426] Tribal consultation requirements stem from the federal government's trust responsibility. [427] In order to fulfill the federal obligation to protect tribal rights, it is necessary for the federal government to initiate meaningful consultation with tribal sovereigns "to determine what services are most needed for tribal members, to understand how federal and state actions may be encroaching on tribal sovereignty, and to analyze whether a federal project will have an adverse effect on tribal resources."[428] Yet meaningful consultation has remained largely undefined by the statutes, executive orders, and presidential

422 *Id.*

423 UNIVERSAL ACCESS, *supra* note 46, at 11.

424 "Shovel-ready" refers to the stage when the necessary engineering reports and environmental review are completed, and construction can begin. *See generally* EPA ET AL., OVERVIEW OF TRIBAL INFRASTRUCTURE FUNDING APPLICATION PROCESSES AND RECOMMENDED STREAMLINING OPPORTUNITIES 4, 7 (2011), https://www.epa.gov/sites/default/files/2015-07/documents/application-processes-recommended-paperwork-streamlining-opportunities.pdf. (discussing the application and selection process for tribal infrastructure projects).

425 Aila Hoss, *Securing Tribal Sovereignty to Support Tribal Health Sovereignty*, 14 NE. UNIV. L. REV. 155, 160 (2022).

426 Exec. Order No. 13,175, 65 Fed. Reg. 67,249 (Nov. 6, 2000).

427 Elizabeth Kronk Warner et al., *Changing Consultation*, 54 U.C. DAVIS L. REV 1127, 1137 (2020) [hereinafter *Changing Consultation*].

428 *Id.* at 1139.

memoranda that have required such tribal consultation.[429] Although Executive Order 13,175 requires the creation of an internal consultation process, and subsequent presidential administrations have reaffirmed the need to consult with tribes in the decision-making processes of federal agencies, "consultation policies remain vague and ineffective."[430]

On January 26, 2021, the Biden Administration issued a memorandum on "Tribal Consultation and Strengthening Nation-to-Nation Relationships."[431] The memorandum requires the head of each federal agency to submit "a detailed plan of actions the agency will take to implement the policies and directives of Executive Order 13175."[432] The plan must be developed "after consultation by the agency with Tribal Nations and Tribal officials" in accordance with Executive Order 13,175.[433] Various federal agencies, including IHS, are in the process of reviewing and updating their tribal consultation policy and procedures.[434] Meanwhile, IHS conducted several tribal consultation sessions and solicited written comments with respect to allocation of IIJA and other IHS funding.[435]

Despite the tribal consultation requirements, the current consultation process is procedural rather than substantive.[436] The National Congress of American Indians has argued that such a process does not "focus on the goals of tribal self-government and fulfillment of the federal trust responsibility."[437] Additionally, there are "no mechanisms for accountability" when "federal agencies ignore or refuse to carry out

429 *Id.* at 1154–56.

430 *Id.*

431 Memorandum on Tribal Consultation and Strengthening Nation-to-Nation Relationships, 2021 DAILY COMP. PRES. DOC. (Jan. 26, 2021) https://www.whitehouse.gov/briefing-room/presidential-actions/2021/01/26/memorandum-on-tribal-consultation-and-strengthening-nation-to-nation-relationships/.

432 *Id.*

433 *Id.*

434 Letter from Elizabeth A. Fowler, Acting Dir., U.S. Dep't of Health and Hum. Serv., to Tribal Leader (May 6, 2022), https://www.ihs.gov/sites/newsroom/themes/responsive2017/display_objects/documents/2022_Letters/DTLL-05062022.pdf (providing an update on IHS Tribal Consultation Policy and process).

435 Letter from Elizabeth A. Fowler, Acting Dir., U.S. Dep't of Health and Hum. Serv., to Tribal Leader (May 31, 2022), https://www.ihs.gov/sites/newsroom/themes/responsive2017/display_objects/documents/2022_Letters/DTLL-05312022.pdf) (announcing allocation decisions for IIJA funding).

436 *Changing Consultation*, *supra* note 427, at 1139, 1162.

437 *Id.* at 1162 (citing NAT'L CONG. OF AM. INDIANS, WHITE HOUSE MEETING WITH TRIBAL LEADERS: BACKGROUND PAPER ON TRIBAL CONSULTATION AND TRIBAL SOVEREIGNTY 2 (2009)).

their responsibilities" under consultation policies.[438] Federal agencies still have discretion to proceed as they wish as long as the agency has completed the consultation step. Because the consultation process is an extension of the government's trust relationship with tribes, there are potential remedies for a breach of fiduciary duty.[439] Further, because federal agencies are carrying out the requirements of Executive Order 13,175, tribes have a remedy under the Administrative Procedure Act (APA) in a similar manner to agency actions under Executive Order 12,898, which requires environmental justice impacts to be considered.[440]

Effective tribal consultation is particularly important because tribes have historically been denied a seat at the table and the opportunity to be involved in the decisions governing their environment. Effective consultation recognizes tribal sovereignty and the right to self-determination and empowers tribes to have greater control over their future.[441] However, tribal capacity is a necessary component of effective consultation. Tribes must have the capacity (i.e., information and expertise) to meaningfully engage on an issue and to protect their interests.

Finally, as stewards of the land since time immemorial, tribes have traditional knowledge systems that can be integrated into health services and support comprehensive climate adaptation and response strategies. "Traditional knowledge is knowledge, know-how, skills, and practices developed, sustained, and passed on from generation to generation within a community, often forming part of its cultural identity."[442] Even for tribes that have been removed from their traditional homelands, certain tribal members (e.g., leaders, elders, and healers) hold special cultural knowledge that can be used to protect the tribal community.[443] Such knowledge generally incorporates a more holistic view of environmental health and recognizes that all

438 *Id.*

439 *Id.* at 1139.

440 Exec. Order No. 13,175, 65 Fed. Reg. 67,249, (Nov. 6, 2000); *see also* Exec. Order No. 12,898, 59 Fed. Reg. 7,629 (Feb. 11, 1994).

441 *See Changing Consultation*, *supra* note 427, at 1179–83 (providing recommendations to realize effective tribal consultation, which occurs on a government-to-government level and increases opportunities for tribal management).

442 UCLA SCH. OF L., NATIVE NATIONS L. & POL'Y CTR., THE NEED FOR CONFIDENTIALITY WITHIN TRIBAL CULTURAL RESOURCE PROTECTION 4 (2020).

443 OFF. OF SCI. AND TECH. POL'Y & COUNCIL ON ENV'T QUALITY, MEMORANDUM FOR HEADS OF FEDERAL DEPARTMENTS AND AGENCIES, GUIDANCE FOR FEDERAL DEPARTMENTS AND AGENCIES ON INDIGENOUS KNOWLEDGE 11 (2022), https://www.whitehouse.gov/wp-content/uploads/2022/12/OSTP-CEQ-IK-Guidance.pdf.

things are connected, emphasizing the need to be in balance with our surroundings.[444] For example: "To be Hopi is to embrace peace and cooperation, to care for the Earth and all of its inhabitants, to live within the sacred balance."[445] Similarly, Navajo traditional teachings embrace this concept through *hózhó*, which roughly translates to balance and beauty, or living in harmony.[446]

Within the health field, IHS has recognized the importance of Native healers in improving community health. Following passage of the American Indian Religious Freedom Act in 1978, IHS issued its first formal policy affirming the importance of traditional healing practices in 1979.[447] Since then, IHS has supported training programs for traditional medicine men and has incorporated Native health structures into IHS facilities, among other actions.[448] As part of its policy, IHS recognizes the value of traditional beliefs and "encourages a climate of respect and acceptance in which traditional beliefs are honored as a healing and harmonizing force within individual lives, a vital support for purposeful living, and an integral component of the healing process."[449] There is increased impetus to involve Indigenous communities with their traditional knowledge in climate adaptation research. For example, traditional ecological knowledge may be able to extend the environmental record in data sparse regions and improve monitoring design.[450] However, climate adaptation research involving tribes has predominantly focused on "environmental observations, environmental uses, governance, and cultural perspectives, rather than capacity-building."[451] As noted above, increasing tribal capacity is critical to ensuring that tribes are equal collaborators, if not leaders, on matters

444 *Id.* at 4; *Traditional Ecological Knowledge*, NAT'L PARK SERVICE, https://www.nps.gov/subjects/tek/description.htm (last updated Aug. 5, 2020).

445 Dennis Wall & Virgin Masayesva, *People of the Corn: Teachings in Hopi Traditional Agriculture, Spirituality, and Sustainability*, 28 AM. INDIAN Q. 435, 436 (2004).

446 Dana E. Powell & Andrew Curley, *K'e, Hozhó, and Non-governmental Politics on the Navajo Nation: Ontologies of Difference Manifest in Environmental Activism*, 81 ANTHROPOLOGICAL Q. 109, 123 (2008).

447 Johnson & Rhoades, *supra* note 277, at 82; Everett R. Rhoades & Dorothy A. Rhoades, *Traditional Indian and Modern Western Medicine Services, in* AMERICAN INDIAN HEALTH: INNOVATIONS IN HEALTH CARE PROMOTION, AND POLICY at 408–09 (discussing IHS and its initial efforts to support traditional medicine).

448 Johnson & Rhoades, *supra* note 277, at 82.

449 *Traditional Cultural Advocacy Program Policy Statement*, INDIAN HEALTH SERVS. (July 29, 1994), https://www.ihs.gov/ihm/sgm/1994/sgm-9408/.

450 Fillmore & Singletary, *supra* note 406, at 6, 11, 16; *see also* Cozzetto et al., *supra* note 116, at 574–75.

451 Fillmore & Singletary, *supra* note 406, at 2.

impacting their community.

Because traditional knowledge is often central to tribal identities, in some instances, tribes may want to keep that information confidential; particularly when it relates to cultural resource protection or is considered sensitive because of internal tribal considerations.[452] "For some tribes, centuries of forced assimilation and criminalization of their religious practices mandated the adoption of internal confidentiality protocols," to safeguard their traditions, customs, and ways of life.[453] With few legal safeguards to protect sensitive tribal information,[454] tribes must take affirmative steps to retain tribal ownership and control of traditional knowledge. As such, tribes are increasingly seeking research ethics protocols that protect traditional knowledge from misappropriation.[455]

As more tribes complete climate change assessments and adaptation plans, they are incorporating their traditional knowledge and utilizing Indigenous health indicators specific to their community.[456] In doing so, Tribes are also able to dismantle colonial power structures through tribally-driven strategies. While the federal government retains a legal obligation to protect tribes and ensure their future, efforts to address climate-related impacts will be more successful if they are done in consultation with tribes to accurately identify tribal needs and incorporate tribal strengths, including traditional knowledge.

## CONCLUSION

Across the United States, climate change is jeopardizing human health and the environment. As a result of past federal policies, tribal communities are being disproportionately impacted by climate change. These impacts are affecting water in ways that are threatening tribal public health. In the West, droughts are causing historic declines in available water supplies. On the coast, sea-level rise is causing increased floodings, and in some cases, displacing entire communities. Water quality is also impacted, making it unsafe for consumption. Water is necessary to sustain life. However, for many tribes, water also carries

452 *See generally* UCLA SCH. OF L., NATIVE NATIONS L. & POL'Y CTR., *supra* note 442 (emphasizing the need to protect the confidentiality of tribal knowledge and detailing strategies for doing so).

453 *Id.* at 6.

454 *See id.* at 7–12.

455 *See id.* at 13–17.

456 *See e.g.*, *Climate Change is Here in Blackfeet Country*, BLACKFEET COUNTRY AND CLIMATE CHANGE, https://blackfeetclimatechange.com/ (last visited Nov. 19, 2022).

spiritual or cultural significance. As water sources dwindle or become contaminated, tribes are unable to continue with their traditional way of life. The loss of certain traditional practices further perpetuates the historical trauma experienced by Native Americans from colonization, removal, and assimilation.

The COVID-19 pandemic has helped bring national attention to these historic inequities. Recent actions by the federal government, specifically the Biden Administration and Congress, indicate that we are entering a new era of federal-tribal relations—one where the federal government delivers on its promises. However, the federal government has a fraught history with Native Americans. Despite having treaty and trust responsibilities to tribes, the federal government has failed to protect tribal communities. While the federal government helped build infrastructure across the United States, it largely ignored Indian country. As a result, many tribes do not have adequate infrastructure to support their growing communities. The primary factor determining whether a household has access to clean drinking water is race, with Native American households 19 times more likely to lack clean water access than white households.[457] Native Americans also experience significant health disparities compared to the general population. The federal government retains treaty and trust responsibilities to provide health services to Native Americans and ensure that they have a permanent homeland on which they can prosper. As climate change further threatens tribal health and culture, it has become increasingly important that the federal government fulfill its promises to tribes.

Historically, federal tribal programs have been chronically underfunded. However, IIJA has appropriated significant funds to help obtain water security for tribal communities, primarily through the IHS SFC Program. To ensure these funds are deployed in an efficient manner, IHS must work with sister agencies to combine their expertise and program authorities to better ensure that projects meet all the tribal community needs and are not restricted by one program's limitations. IHS can also take steps to make the SFC Program more accessible to tribes and more effective in its implementation.

In this new era, the federal government must build off the current momentum to protect future generations through tribal capacity building, effective tribal consultation, and utilization of traditional knowledge. To truly avoid mistakes of the past, tribes must be part of the process on decisions impacting their communities. Not only do

457 CLOSING THE WATER ACCESS GAP, *supra* note 178, at 22.

tribes know their community needs best, but they also have specialized knowledge to contribute. If true partnership is achieved, the federal government may finally reach its goal of raising the physical, mental, social, and spiritual health of American Indians and Alaska Natives to the highest level.

# FISHING WITH A PORPOISE: ECONOMIC INCENTIVES AND HUMAN DIMENSIONS OF CONSERVATION MUST ALIGN WITH REGULATORY EFFORTS TO SAVE THE VAQUITA

NOTE

*By Marissa Christine Grenon**

* J.D., 2022, Northeastern University School of Law; M.E.M, 2022 Yale School of the Environment; Vice Chair of the American Bar Association's Section of Environment, Energy, and Resources (SEER) Marine Resources Committee. I am grateful to my mother, who read an early draft of this Note and provided encouraging feedback; my fiancé, who not only provided emotional support, but also listened to me talk about these issues for hours on end, month after month; Professor John Nann, who assisted me in tracking down elusive sources and whose patience and Advanced Legal Research class made this Note possible; and last but not least, the incredibly diligent *Northeastern University Law Review* leadership and staff.

## TABLE OF CONTENTS

## ABSTRACT

*Fondly nicknamed the "panda of the sea" for its prominent eye markings, the vaquita is the world's most critically endangered marine mammal. Fishing nets illegally placed in its habitat strangle and drown the small porpoise. For decades, the global community has been aware of the vaquita's plight; yet, despite knowing precisely where vaquitas live and what is killing them, efforts to save the species have resoundingly failed. This Note explores what has gone wrong in legal, policy, and programmatic efforts to save the vaquita. After tracing key dynamics that contributed to the failure of previous efforts, the Note synthesizes lessons from deterrence theory, fisheries economics, and successful endangered species campaigns to suggest approaches and legal opportunities that could bring this vulnerable species back from the brink of extinction.*

## INTRODUCTION

The vaquita (*Phocoena sinus*), a small porpoise endemic to Mexico, is on the verge of extinction.[1] Vaquitas have the smallest geographic range of any cetacean.[2] These marine mammals inhabit an area roughly 7 by 15 miles[3] in Mexico's Upper Gulf of California (UGC)—less than half the size of Chicago.[4] Despite longstanding recognition of the species' endangered status, as well as the relatively small area they inhabit, efforts to protect vaquitas from the sole threat driving their extinction—gillnet fishing[5]—have been unsuccessful.[6] Only eight individual vaquitas are estimated to remain.[7] Notwithstanding this critically low number, and the previously held view that the species "is doomed to extinction by genetic factors," recent studies indicate that the remaining vaquita population is genetically viable—they could survive in the wild if the environment allowed them to.[8] If gillnets were immediately removed

1 Enrique Sanjurjo-Rivera et al., *An Economic Perspective on Policies to Save the Vaquita: Conservation Actions, Wildlife Trafficking, and the Structure of Incentives*, FRONTIERS IN MARINE SCI., Aug. 12, 2021, at 1.

2 *Id.* at 5.

3 *Id.*

4 Chicago's area is 228 square miles, compared to the 111 square miles of the UGC that comprise vaquita habitat. Perry R. Duis, *Chicago*, BRITANNICA, https://www.britannica.com/place/Chicago (last visited Nov. 2, 2022).

5 A gillnet is a "wall of netting" designed to hang vertically in the water column and allow just the head of a fish to pass through. *See Fishing Gear: Gillnets*, NOAA FISHERIES, https://www.fisheries.noaa.gov/national/bycatch/fishing-gear-gillnets (Feb. 22, 2021). The fish's gills get caught in the net when it tries to back out, and the ensuing struggle entangles the panicked animal more. *Id.* Marine mammals like the vaquita, which need air to breathe, eventually drown. *Id.*

6 Sanjurjo-Rivera et. al., *supra* note 1, at 1–2. *See also* Marissa Grenon, *Saving the 'Panda of the Sea': Aligning Economic Incentives with Regulations to Save the Critically Endangered Vaquita*, YALE ENV'T R. (Nov. 7, 2022), https://environment-review.yale.edu/saving-panda-sea-aligning-economic-incentives-regulations-save-critically-endangered-vaquita.

7 Associated Press, *Only 8 Critically Endangered Porpoises Remain, Scientists Say*, WASH. POST (Apr. 6, 2022), https://www.washingtonpost.com/kidspost/2022/04/06/only-8-critically-endangered-porpoises-remain-scientists-say/.

8 *See* Miguel A. Cisneros-Mata et al., *Viability of the Vaquita,* Phocoena sinus *(Cetacea: Phocoenidae) Population, Threatened by Poaching of* Totoaba macdonaldi *(Perciformes: Sciaenidae)*, 69 REV. DE BIOLOGÍA TROPICAL 588, 588, 596 (2021) (explaining that demographically, vaquita population is likely viable at low numbers, so genetic makeup will govern species' long-term survival; further, citing "encouraging" recent genetics research indicating that despite present diminished population size, "the vaquita maintains the genetic diversity of a healthy population"); Jacqueline A. Robinson et al., *The Critically Endangered Vaquita Is Not Doomed to Extinction by Inbreeding Depression*, 376 SCI. 365, 368 (2022) (integrating genomic

from their habitat, the vaquita could recover.[9]

In response to the extinction crisis, Mexico imposed an emergency gillnet ban in 2015 that extends over the species' entire known habitat in the UGC.[10] However, increasing compliance with Mexico's existing gillnet ban in vaquita habitat will require more than simply strengthening enforcement efforts. A participatory, rights-based fishery management scheme must be implemented to align economic incentives with vaquita conservation.[11] Such an approach would likely improve regulatory compliance and community support for conservation in the UGC, which could benefit both vaquitas and local residents if combined with appropriate government and private-sector actions.

At the regional level, the approaches most likely to keep vaquita alive for another year include the adoption of rights-based fishery management and the implementation of systematic enforcement efforts optimized to deter illegal fishing.[12] For long-term species recovery, however, additional policies are needed to create a sustainable coastal economy and address the social, political, and institutional underpinnings of the current crisis.[13] Although the burden of taking immediate action to save the vaquita falls primarily on the Mexican government and coastal communities of the UGC, there are actions that individuals, politicians, and companies can and should take to aid conservation efforts.[14] With coordinated local action and international collaboration, efforts to conserve the vaquita could help not just one but two endangered marine species battle back to sustainable population levels: the vaquita and the totoaba.

---

information in population viability analysis to quantitatively analyze inbreeding depression and recovery potential and concluding "that there is a high potential for vaquita recovery in the absence of gillnet mortality, refuting the view that the species is doomed to extinction by genetic factors").

9 *See* Cisneros-Mata et al., *supra* note 8, at 588, 596; *see* Robinson et al., *supra* note 8, at 1.

10 Sanjurjo-Rivera et al., *supra* note 1, at 5, 10; *What Efforts Have Been Made to Save the Vaquita?*, PORPOISE.ORG: KNOWLEDGE BASE, https://porpoise.org/knowledge-base/efforts-made-save-vaquita/ (last visited July 27, 2022).

11 Sanjurjo-Rivera et al., *supra* note 1, at 12, 14.

12 *See id*. at 14.

13 *See id*. at 14–15.

14 *See*, Section II.B, discussing the individual, legal, and market-based actions the international community should implement to promote conservation and save the vaquitas.

## I. BACKGROUND

### *A. Despite Critically Low Numbers, the Vaquita Could Recover if Gillnets Were Immediately and Permanently Removed from Their Habitat*

Recent scientific research suggests that if gillnets were immediately and permanently removed from their habitat, vaquitas could recover to a sustainable population.[15] The few remaining individuals appear to be healthy,[16] and a recent analysis of the species' reproductive biology indicates a high likelihood that annual calving might be possible.[17] Genetic sequencing has revealed that vaquitas have the lowest genomic-wide diversity observed among all mammalian species to date—a characteristic that would typically indicate poor viability—but research has also shown that the species has existed at low population counts with attendant low genomic diversity for hundreds of thousands of years.[18] Moreover, an examination of the bodies of vaquitas that perished between 2016 and 2018 indicated that the cause of each of these deaths was gillnet entanglement, not pollution.[19] Taken together, these findings demonstrate individual animal health, demographic stability, and adequate environmental quality. Thus, if unintentional gillnet drownings were stopped, the vaquita population could not only survive, but expand.

While genetic, demographic, and environmental analyses provide hope that vaquitas could return from the brink of extinction,

15 *See* Cisneros-Mata et al., *supra* note 8, at 588, 595; Robinson et al., *supra* note 8; Phillip A. Morin et al., *Reference Genome and Demographic History of the Most Endangered Marine Mammal, the Vaquita*, 21 MOLECULAR ECOLOGY RES. 1008, 1016 (2020); Grenon, *supra* note 6.

16 Morin et al., *supra* note 15.

17 *See generally* Barbara L. Taylor et al., *Likely Annual Calving in the Vaquita,* Phocoena sinus*: A New Hope?* 35 MARINE MAMMAL SCI. 1603, 1603–12 (2019) (examining photographic evidence to conclude that "annual calf production in vaquitas is possible").

18 Morin et al., *supra* note 15, at 1009.

19 Francis Gulland et al., *Vaquitas (*Phocoena sinus*) Continue to Die from Bycatch Not Pollutants*, VETERINARY REC., Oct. 2020, at 1, 2, 4 (finding deceased vaquitas in "good nutritional status," with no evidence of toxins naturally produced by algae (i.e., saxitoxin, domoic acid) and relatively low levels of organochlorine pesticides (e.g., DDTs) and endocrine-disrupting chemicals (i.e., polychlorinated biphenyls (PCBs), polybrominated diphenyl ethers (PBDEs) present). The absence of toxicological and nutritional risk factors, along with distinct bruising, cuts, and lesions consistent with monofilament cross-hatching, indicates death from net entrapment. *Id.*

it is important not to interpret these results as reason for complacency or inaction. The vaquitas' perilously low population count makes them particularly vulnerable to stochastic (i.e., chance) events.[20] An unpredictable illness, injury, or extreme weather occurrence could trigger the collapse of the remaining population by affecting a single individual.[21] Moreover, recovery of the vaquita population hinges on the survival of juveniles,[22] which take at least three years to reach reproductive age.[23] Because there is no evidence indicating that other adult females will care for orphaned calves, protection of adult females is integral to prevent death from starvation during the first year of a vaquita's life.[24] These unique vulnerabilities underscore the importance of taking urgent action to protect and conserve vaquitas, particularly where the key threat causing their extinction is controllable. Because recovery of the species is expected to take decades,[25] a dual conservation approach is needed: first, immediate steps must be taken to protect the few remaining individuals and prevent imminent extinction; and second, longer-term efforts must be designed and implemented to sustainably transition UGC fisheries away from gillnets and toward vaquita-safe equipment and methods.[26]

### *B. Vaquita Extinction Is Driven by Pressure from International Markets and Entwined with the Plight of an Endangered Fish: Totoaba Macdonaldi*

The path to vaquita extinction has largely been paved by economic pressures from markets outside of Mexico. Despite their illegality, gillnets continue to be used in the UGC for both shellfish (e.g., shrimp) and finfish (e.g., corvina, sierra, chano, and totoaba).[27] Although gillnet fishing for corvina and sierra within the vaquita's range

20 *See* Cisneros-Mata et al., *supra* note 8, at 589.

21 *See id.*

22 *Id.* at 588.

23 *Vaquita*, NOAA FISHERIES, https://www.fisheries.noaa.gov/species/vaquita (Dec. 29, 2021).

24 Cisneros-Mata et al., *supra* note 8, at 590, 595 (noting death of nursing mothers may result in a "double death").

25 Sanjurjo-Rivera et al., *supra* note 1, at 5.

26 *Id.*

27 *Id.* at 3; Victoria Dunch, *Saving the Vaquita One Bite at a Time: The Missing Role of the Shrimp Consumer in Vaquita Conservation*, 145 MARINE POLLUTION BULL. 583, 583 (2019); Nat. Res. Def. Council, Inc. v. Ross (*Ross I*), 331 F. Supp. 3d 1338, 1348–49 (Ct. Int'l Trade 2018).

is permitted, gillnet use for shrimp, chano, and totoaba in the UGC is illegal, yet continues anyway.[28] For vaquitas, gillnets set for totoaba (*Totoaba macdonaldi*) present the greatest threat to vaquitas because of the intense fishing for totoaba, the spatial overlap between totoaba and vaquita habitats, and the use of gillnets with larger mesh sizes.[29] In fact, catching totoaba by any means is illegal because the species is itself endangered from years of intensive fishing.[30]

Totoaba demand emanates from its use in traditional Chinese medicine: a soup prepared with the fish's swim bladder is believed to provide various health benefits.[31] Such benefits include the alleviation of pregnancy discomfort to alleged aphrodisiac and anti-aging beauty effects.[32] Totoaba swim bladders fetch such an exorbitant price by weight on the Chinese black market that they have been dubbed "aquatic cocaine."[33] Depending on size and quality, swim bladder value can range from $5,000 to $255,000.[34] The illicit trade in totoaba swim bladders is so lucrative that cartels now dominate the poaching scheme in the UGC,

28 *Ross I*, *supra* note 27, at 13.

29 Sanjurjo-Rivera et al., *supra* note 1, at 4.

30 *See id.*; Sarah Uhlemann & Brendan Cummings, *Petition for Certification of Mexico Pursuant to the Pelly Amendment for Trade in Violation of the Convention on International Trade in Endangered Species*, CTR. FOR BIOLOGICAL DIVERSITY, (Sept. 29, 2014), https://www.biologicaldiversity.org/species/mammals/vaquita/pdfs/Totoaba_Pelly_Petition_9_29_14.pdf; *See* Grenon, *supra* note 6.

31 Priyanka Sundareshan, *Prosecution for a Porpoise: Strengthen U.S. Enforcement Against Criminal Networks to Address International Trafficking of Endangered Species*, 10 ARIZ. J. ENV'T. L. & POL'Y 216, 221 (2020). *See* Grenon, *supra* note 6.

32 Lucy Pasha-Robinson, *China's Demand for Rare $50,000 'Aquatic Cocaine' Fish Bladder Pushing Species to Extinction*, INDEPENDENT (Sept. 20, 2016), https://www.independent.co.uk/news/world/americas/china-totoaba-fish-bladder-trade-aquatic-cocaine-money-maw-endangered-species-report-a7317256.html; Kyung Lah & Alberto Moya, *'Aquatic Cocaine': Fish Bladders Are Latest Mexican Smuggling Commodity*, CNN (May 23, 2016) (updated 12:13 PM), https://www.cnn.com/2016/05/23/health/aquatic-cocaine-totoaba-bass-smuggling/index.html; Conor Grant, *Border Authorities Struggle to Get a Grip on the Slimy Business of 'Aquatic Cocaine'*, THE HUSTLE (June 19, 2019), https://thehustle.co/border-authorities-smugglers-cartel-totoaba-fish-bladders/; Gwynn Guilford, *How China's Fish Bladder Investment Craze Is Wiping Out Species on the Other Side of the Planet*, QUARTZ (Aug. 25, 2015), https://qz.com/468358/how-chinas-fish-bladder-investment-craze-is-wiping-out-species-on-the-other-side-of-the-planet/.

33 Grant, *supra* note 32; Pasha-Robinson, *supra* note 32; Mark Stevenson, *China Bladder Trade Sending Porpoise to Extinction*, SAN DIEGO UNION-TRIBUNE (Aug. 1, 2014) https://www.sandiegouniontribune.com/sdut-china-bladder-trade-sending-porpoise-to-extinction-2014aug01-story.html.

34 C4ADS, HOOKED: HOW DEMAND FOR A PROTECTED FISH LINED THE POCKETS OF MEXICAN CARTELS AND SUNK THE FUTURE OF AN ENDANGERED PORPOISE 62 (2017).

taking advantage of dependable trafficking routes to get the product out of Mexico and relying on intimidation tactics to prevent interference from community members and authorities.[35]

Demand for totoaba has increased over recent decades for several reasons. Yellow croaker, a species endemic to China, is the only species whose swim bladder is considered to have comparable medicinal properties.[36] Decimation of that population from overfishing consequently shifted demand to totoaba, which—like the vaquita—are found only in the UGC.[37] In the wake of the 2008 global financial crisis, many individuals sought the valuable species as a relatively stable investment.[38] A compilation of research shows that there is a clear link between rising totoaba demand and vaquita extinction: following a resurgence of demand in the early 2010s for totoaba bladders in China, vaquitas began experiencing their "most precipitous population decline on record"—a loss of approximately 50 percent of the population each year.[39]

## II. EFFORTS TO SAVE THE VAQUITA HAVE BEEN UNDERMINED BY ECONOMIC INCENTIVES, POLITICAL AND INSTITUTIONAL SHORTCOMINGS, AND THE CONSTRAINTS OF INTERNATIONAL LAW

### *A. Mexico's Efforts to Conserve the Vaquita Have Failed Due to Lack of Systematic Enforcement and Misalignment of Economic Incentives*

Located between the Baja California peninsula and the western coast of mainland Mexico, the UGC lies within the sole jurisdiction of the Mexican government.[40] As international pressure has mounted

35 *See* Sundareshan, *supra* note 31, at 222–24 (discussing trafficking routes and the "great personal risk" required to defy cartels).

36 *Id.* at 221.

37 *Id.* at 220–21.

38 *Id.* at 221.

39 Grenon, *supra* note 6 (citing Sanjurjo-Rivera et al., *supra* note 1, at 2, 5).

40 *See* Jorge A. Vargas, *Mexico's Legal Regime Over Its Marine Spaces: A Proposal for the Delimitation of the Continental Shelf in the Deepest Part of the Gulf of Mexico*, 26 U. OF MIA. INTER-AM. L. REV. 189, 205 (1995) (noting northern portion of Gulf of California considered "internal waters" of Mexico). The significance of this designation is that, under the U.N. Convention on the Law of the Sea—to which Mexico is a party and the United States abides as customary international law—other nations cannot lawfully enter the UGC to enforce the gillnet ban or otherwise protect vaquitas. *See generally*, FLETCHER SCH. L. & DIPL., LAW OF THE SEA: A POLICY PRIMER 12 (John Burgess et. al., eds. 2017), https://sites.tufts.edu/lawofthesea/files/2017/07/LawoftheSeaPrimer.pdf.

over the past two decades, Mexico has deployed various policies and programs intended to protect vaquita from gillnets while supporting local fishers, spending more than $145 million from 2007 to 2018 alone.[41]

At first glance, it appears that Mexico has exhausted every conceivable approach to save the vaquita. Spatial and regulatory protections for the vaquita's habitat have been repeatedly expanded.[42] Following designation of a vaquita refuge in 2005, Mexico elevated the status to a "no take zone" (NTZ) in 2008,[43] expanded the NTZ tenfold,[44] and instated an emergency gillnet ban encompassing and extending *beyond* the NTZ in 2015.[45] They declared the ban permanent in 2017.[46]

Commercial and sport fishing for totoaba has been banned since 1975, and both species have been listed as endangered on multiple domestic and international wildlife conservation lists for decades.[47] In April 2017, Mexico raised "extraction of endangered species" from a minor offense to a felony on par with organized crime.[48] Other efforts have included a fishing license buyout program with seed grants for alternative livelihood development; payments to fishers for ecosystem services gained by their abstention from fishing in the NTZ; a voluntary exchange of gillnets for vaquita-friendly gear; and programs in which fishers were paid to develop and test alternative gear.[49]

Although some of these initiatives have achieved varying degrees of fleeting success, Mexico's efforts have ultimately failed to protect the dwindling vaquita population. In August 2021, a panel of

41 Sanjurjo-Rivera et al., *supra* note 1, at 5, 7, 20. *See* Grenon, *supra* note 6.

42 Sanjurjo-Rivera et al., *supra* note 1, at 5–8.

43 The No Take Zone (NTZ) is outlined in aqua blue (B) in Figure 1, p. 174. Sanjurjo-Rivera et al., *supra* note 1, at 9–10. Figure 1 is used with permission from Sanjurjo-Rivera. *Id.* at 5; email from Sarah L. Mesnick, Ecologist/Sci. Liaison, Sw. Fisheries Sci. Ctr., NOAA Fisheries and U.S. Dep't of Com., to author (June 11, 2022) (on file with author).

44 *Id.* at 10.

45 *Id.* at 5–6 (the gillnet exclusion zone is outlined in a dotted white line (C) in Figure 1, p. 174).

46 *Id.* at 7.

47 *Id.* at 4, 6. Vaquita have been listed under the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) Appendix I since 1979; under the U.S. Endangered Species Act since 1985; on the Mexican List of Species at Risk of Extinction since 1994; and on the International Union for Conservation of Nature (IUCN) "Critically Endangered" list since 1996. *Id.* at 4. Totoaba were listed on the CITES Appendix I in 1977; added to the U.S. Endangered Species List in 1979; added to the Mexican List of Endangered Species in 1994; and listed as "Critically Endangered" by the IUCN in 1996. *Id.*

48 *Id.* at 6. *See* Grenon, *supra* note 6.

49 Sanjurjo-Rivera et al., *supra* note 1, at 6, 8, 10.

experts affiliated with the North American Association of Fisheries Economists published an analysis of Mexico's conservation actions from 2007 to 2018, evaluating their impact on the vaquita and the UGC coastal communities that may have contributed to this failure.[50] These multidisciplinary experts found that a myriad of social, institutional, and economic factors in the UGC continue to incentivize gillnet use, and previous policies intended to conserve vaquitas have failed to meaningfully reorder these incentives.[51] Specific shortcomings of five policy approaches that were implemented in the UGC are explored in more detail below.

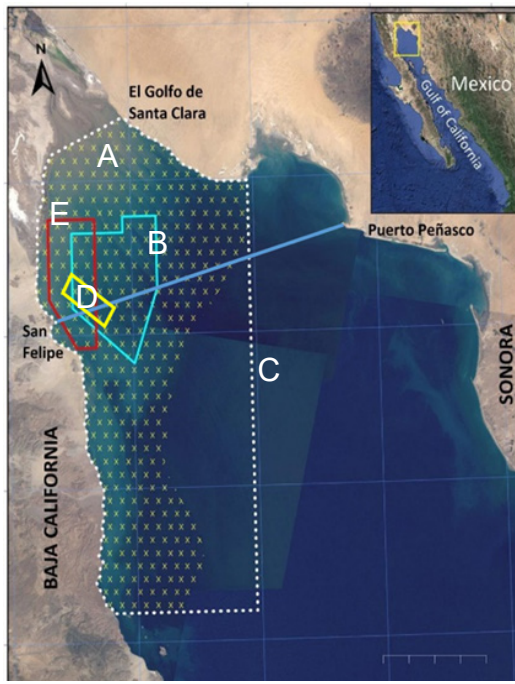


*Figure 1.*[43] A map of the UGC, including the regulatory protections for the vaquita within the region. The historical distribution of vaquitas in the UGC is marked by the yellow hatched area (A). The NTZ is outlined in aqua blue (B). The gillnet exclusion zone is outlined in a dotted white line (C). The Zero Tolerance Area (ZTA) is outlined in yellow (D). An additional enhanced enforcement zone (recommended by CIRVA to protect against frequent illegal totoaba fishing) is outlined in red (E). *[Editor's Note: Letters have been superimposed on this map for publishing purposes and are not a part of the original image.]*

50 *See id.* at 1.
51 *Id.* at 8–11.

### 1. Spatial Protections Are Ineffective When Not Enforced

Iterative expansion of spatial protections for vaquitas in the UGC has been ineffective because restrictions have not been consistently and systematically enforced.[52] Many factors determine the effectiveness of Marine Protected Areas (MPAs). For example, their shape plays a key role in facilitating both compliance and enforcement.[53] MPAs with simpler shapes—delineated, for example, by lines of latitude and longitude—are easier to recognize, comply with, and enforce.[54] Although the NTZ is irregularly shaped, Mexico's gillnet exclusion zone in the UGC is delineated by a single line of latitude and longitude, consistent with best practice.[55] However, effective enforcement of MPAs takes precedence over design in determining a species's recovery.[56] While enactment of spatial protections in the UGC has been accompanied by significant investments in surveillance technology (e.g., "personnel, high speed military-style boats, drones, and special cameras"), the Mexican government has lacked a coordinated strategy on how to systematically deploy these assets.[57] Consequently, enforcement has been haphazard and inconsistent.[58] This problem has been exacerbated by corruption, bribery, and a lack of political will to enforce spatial and regulatory protections.[59] Any benefits to vaquita from banning legal shrimp and finfish fisheries in the NTZ have likely been offset by increased totoaba poaching.[60]

A 2019 report by the Comité Internacional para la Recuperación de la Vaquita (International Committee for the Recovery of the Vaquita,

52 *See id.* at 5–7.

53 *Connectivity*, REEF RESILIENCE NETWORK, https://reefresilience.org/management-strategies/marine-protected-areas-2/resilient-mpa-design/connectivity/ (last visited Jan. 11, 2023) (recommending use of compact shapes for MPAs and stating that "[t]he shape of an MPA is a critical factor in effective delineation and enforcement").

54 *Id.;* INT'L UNION FOR CONSERVATION OF NATURE WORLD COMM'N ON PROTECTED AREAS, ESTABLISHING MARINE PROTECTED AREA NETWORKS—MAKING IT HAPPEN 59 (2008).

55 *See* Sanjurjo-Rivera et al., *supra* note 1, at 5 (Figure 1, p. 174).

56 *See* Mary Gleason et al., *Designing a Network of Marine Protected Areas in California: Achievements, Costs, Lessons Learned, and Challenges Ahead*, 74 OCEAN & COASTAL MGMT. 90, 100 (2013) (noting importance of effective management, enforcement, and monitoring of MPAs "cannot be underestimated").

57 Sanjurjo-Rivera et al., *supra* note 1, at 12.

58 *Id.* at 12–14.

59 *Id.* at 12–14.

60 *Id.* at 10.

or CIRVA)[61] called on the Mexican government to "fully mobilize" its enforcement resources in the Zero Tolerance Area (ZTA).[62] The ZTA, which comprises a portion of the NTZ, has been designated by CIRVA as an enhanced enforcement zone because surviving vaquitas are believed to frequent the area and illegal totoaba fishing activity is high.[63] CIRVA has stated that the enforcement goal within the ZTA should be for enforcement agents to identify and remove any illegal net within hours of its placement.[64] In its 2019 report, CIRVA recommended that the Mexican government immediately improve enforcement within the ZTA by taking four actions, particularly during peak totoaba poaching season (March and April):

1. Fully fund and expand net removal efforts to maintain the area as a net-free zone;
2. Provide 24-hour surveillance and monitoring;
3. Take all necessary measures to protect net removal teams; and
4. Arrest and prosecute illegal fishermen by, for example, placing a law enforcement agent on net removal ships and Navy vessels to facilitate arrest.[65]

These monitoring and enforcement recommendations have not, to date, been implemented.[66]

61 CIRVA is an international team of scientists assembled by the Mexican government to develop a recovery plan for the vaquita based on the best available scientific evidence. *CIRVA*, PORPOISE.ORG: KNOWLEDGE BASE, https://porpoise.org/knowledge-base/cirva/ (last visited July 27, 2022).

62 SW. FISHERIES SCI. CTR., REPORT OF THE ELEVENTH MEETING OF THE COMITÉ INTERNACIONAL PARA LA RECUPERACIÓN DE LA VAQUITA (CIRVA) 1, 2 (2019) [hereinafter CIRVA 2019 Report].

63 Sanjurjo-Rivera et al., *supra* note 1, at 5 (Figure 1, p. 174).

64 CIRVA 2019 Report, *supra* note 62, at 2.

65 *Id.* at 2. CIRVA also strongly recommended acoustical monitoring to refine data on vaquita distribution and movement patterns. *See id.* at 7.

66 *See Vaquita Update I: A New Totoaba Season Begins with no Assurance that Mexico Will Enforce the Gillnet Fishing Ban to Protect the Vaquita*, IUCN – SSC CETACEAN SPECIALIST GROUP (Dec. 5, 2022), https://iucn-csg.org/vaquita-update-i-a-new-totoaba-season-begins-with-no-assurance-that-mexico-will-enforce-the-gillnet-fishing-ban-to-protect-the-vaquita/; Barb Taylor & Jay Barlow, *Vaquita Update II: Illegal Fishing Continues with Impunity in the Area Where the Last Vaquitas Survive*, IUCN – SSC CETACEAN SPECIALIST GROUP (Dec. 5, 2022), https://iucn-csg.org/vaquita-update-ii-illegal-fishing-continues-with-impunity-in-the-area-where-the-last-vaquitas-survive/.

### 2. Regulations Are Not Optimized to Achieve Deterrence

There is a long history of corruption and tacit acquiescence to illegal activity in UGC fisheries.[67] Corruption plays a central role in empowering the illegal totoaba trade, as it erodes the ability of law enforcement to combat poaching and organized criminal networks.[68] Moreover, "many fishers are willing participants in poaching . . . [and] view regulations as illegitimate or an imposition of conservation values that contradict their economic interests," further disintegrating respect for the rule of law.[69] Enforcement of laws preventing fishing in the NTZ and prohibiting the use of gillnets in the gillnet exclusion zone has thus become both practically and politically untenable.[70]

Inconsistent enforcement undermines the deterrent effect of legal penalties. Under an economic framework, an individual's propensity to break controlling law can be understood by analyzing three factors: (1) the expected gain; (2) the severity of the sanction if caught; and (3) the likelihood of being not only caught, but also prosecuted and convicted.[71] A fisher's choice boils down to a comparison of expected profit from illegal fishing (revenue minus anticipated "costs" if caught) and expected income from legal activity.[72] In the UGC, expected gains from illegal fishing (particularly for totoaba) far outweigh anticipated costs.[73] The extremely high sum fetched by swim bladders and low chance of being caught and convicted skews economic incentives strongly toward illegal fishing.[74] This leaves fishers with little motivation to use different gear, fish elsewhere, or find work outside of the fishing sector.[75]

In September 2020, new regulatory guidelines were published following a change in Mexico's political administration.[76] The new

67 Sanjurjo-Rivera et al., *supra* note 1, at 13.
68 *Id.*
69 *See id.*
70 *See id.*
71 *Id.* at 12.
72 *Id.*
73 *See id.*
74 *See id. See also* Sundareshan, *supra* note 31, at 229 n.98.
75 *See* Sanjurjo-Rivera et al., *supra* note 1, at 12. *See also* Sundareshan, *supra* note 31, at 229 n.98.
76 *See* Sanjurjo-Rivera et al., *supra* note 1, at 12.

guidelines,[77] which became effective in July 2021,[78] create a system in which different degrees of surveillance, monitoring, and spatial protection are triggered in response to the level of illegal fishing detected in a given area.[79] Although the official government statement on the new rules claims they do not "undermine or diminish" the degree of protection in the ZTA, but rather "strengthen" protections by making them more flexible,[80] environmental advocacy groups vehemently disagree.[81] Rather than maintaining the clarity that the former "zero tolerance" approach implies and focusing resources on improving enforcement consistency, advocacy groups argue that the new guidelines will serve only to muddy the water and, in effect, roll back protections for the vaquita.[82] Based on observations reported from volunteer conservation groups, it appears that this bleak outlook on the new regulations is warranted. During a mere two months of the 2021 shrimp season, 117 fishing vessels were documented in the ZTA, with a combined total length of gillnets that could have stretched the entire span of the ZTA five times.[83] Moreover,

77 Agreement that Regulates Gear, Symbols, Methods, Techniques and Schedules for Carrying Out Fishing Activities with Smaller and Larger Vessels in Mexican Maritime Zones in the North of the Gulf of California and Establishes Landing Sites, As Well As the Use of Monitoring Such Systems, Diario Oficial de la Federación [DOF] [Official Journal of the Federation] 24-09-2020 (Mex.).

78 Press Release, Secretaría de Agricultura y Desarrollo Rural, Establece el Gobierno de México Esquemas para Determinar Cierres de Zonas de Pesca para Proteger a la Vaquita Marina [Secretary of Agriculture and Rural Development, The Government of Mexico Establishes Schemes to Determine Closings of Fishing Zones in Order to Protect the Vaquita] (July 14, 2021), https://www.gob.mx/agricultura/prensa/establece-el-gobierno-de-mexico-esquemas-para-determinar-cierres-de-zonas-de-pesca-para-proteger-a-la-vaquita-marina-en-el-alto-golfo-de-california?idiom=es.

79 Kari Birdseye, *Mexico Drastically Eases Enforcement in Vaquita "Zero Tolerance" Area*, NRDC (July 16, 2021), https://www.nrdc.org/media/2021/210716-1.

80 *Gobierno Mexicano Refuerza Medidas para Proteger a la Vaquita Marina [Mexican Government Strengthens Measures to Protect the Vaquita]*, SAN DIEGO TRIBUNE (July 17, 2021), https://www.sandiegouniontribune.com/en-espanol/noticias/mexico/articulo/2021-07-17/gobierno-mexicano-refuerza-medidas-para-proteger-a-la-vaquita-marina ("Es importante señalar que con estas acciones no se mina ni se disminuye la protección en la zona de tolerancia cero, establecida en el acuerdo marco. Por el contrario, se fortalece al posibilitar nuevas medidas de protección, más eficientes." ["It is important to point out that these actions do not undermine nor diminish the protections in the zero tolerance zone, established in the agreement's framework. On the contrary, it is strengthened by enabling new, more efficient protection measures."]). *See also* Sanjurjo-Rivera, *supra* note 1, at 7. The Zero Tolerance Area (ZTA) is outlined in yellow (D) in Figure 1, p. 174. *Id.* at 5.

81 *See, e.g.*, Birdseye, *supra* note 79.

82 *See id.*

83 *Illegal Fishing Remains the Sole Immediate Threat to Vaquitas*, IUCN CETACEAN

from October 2021 to May 2022, fishing vessels were observed unlawfully present inside the ZTA 88 percent of the time (120 out of 147 days), with no apparent enforcement response.[84]

### 3. License Buyouts Can Backfire if Not Combined with Enforcement

In an attempt to reduce total fishing efforts,[85] the Mexican government employed a "buyout program" between 2007 and 2015, offering to repurchase its previously issued fishing licenses.[86] Local fishers participating in the vaquita conservation effort were financially incentivized to exchange their gillnets for funds that could then be invested in alternative livelihoods.[87] Unfortunately, buyouts can—and did, in this case—backfire by triggering a phenomenon called "capital stuffing," in which funds received for reducing a restricted input are invested in bolstering the capacity of non-restricted inputs.[88] In the UGC, this phenomenon took the form of fishers trading in one of multiple fishing licenses and then compensating for that loss by using bigger nets under their remaining licenses.[89] Consequently, Mexico's buyback efforts resulted in an average doubling of net length, increasing the fishing capacity per legal unit (i.e., an increase in licenses).[90] Because gillnet length prior to this doubling was *already* double the legally permissible length,[91] this attempted solution only worsened the problem of extensive netting in vaquita habitat.

---

SPECIALIST GROUP (Apr. 20, 2022), https://iucn-csg.org/illegal-fishing-remains-the-sole-immediate-threat-to-vaquitas/.

84 *Strong Evidence of Violations of Vaquita Zero Tolerance Area (ZTA)*, IUCN CETACEAN SPECIALIST GROUP (June 8, 2022), https://iucn-csg.org/strong-evidence-of-violations-of-vaquita-zero-tolerance-area-zta/.

85 "Fishing effort" is a measure of the amount of fishing that takes place within a defined spatial area. *Fishing Effort*, OECD GLOSSARY OF STATISTICAL TERMS, https://stats.oecd.org/glossary/detail.asp?ID=994 (Mar. 5, 2003). It is normally expressed in terms of "inputs" into the fishing activity (e.g., hours or days spent fishing, number of nets in the water or kilometers of nets). *Id.*

86 Sanjurjo-Rivera et. al., *supra* note 1, at 8.

87 *Id.*

88 *Id.* at 9.

89 *See id.*

90 *Id.*

91 *Id.*

### 4. Payments for Ecosystem Services Are a Short-Term Fix, Not a Sustainable Solution

Paying UGC fishers to refrain from fishing in the NTZ was another attempt to induce compliance that had counterproductive, unintended consequences. Payments through the program were disbursed only to license-holders, who lacked any incentive to share these funds with their crew.[92] This initiative thus inadvertently widened pre-existing economic disparities in affected communities and led many fishers to resort to totoaba poaching out of financial necessity.[93] Moreover, while the payments were intended as an emergency measure to buy the vaquita time and tie fishers over until alternative gear and livelihoods could be developed, spending on this initiative far eclipsed spending on longer-term solutions.[94] Lump-sum payments were made regularly for the duration of the program without any requirement that participating fishers invest in vaquita-friendly gear, switch to vaquita-friendly fisheries, or explore economic opportunities beyond the fishing sector.[95] This resulted in a missed opportunity to transition UGC fishers to vaquita-friendly livelihoods and amounted instead to a financially unsustainable short-term fix.[96]

### 5. Alternative Gear and Livelihoods Have Not Been Prioritized

Mexico's failure to prioritize and consistently support alternative fishing methods and gear has been identified as a key shortcoming in vaquita conservation attempts to date.[97] Previous efforts by the Mexican government, academics, and conservation organizations have included testing suripera[98] nets for shrimp and alternative techniques and gear

92 *Id.*

93 *Id.* at 6, 9. *See* Grenon, *supra* note 6.

94 *Supra* note 1.

95 *See id.* at 6, 10.

96 *See id.* at 6. For comparison, $122 million were spent on compensatory payments to fishers for not fishing, while only $23.1 million were invested in the development of alternative fishing methods, gear, and livelihoods. *Id.*

97 *Id.* at 12.

98 Suripera nets are considered "vaquita-safe" fishing gear, and conservationists have advocated for replacing gillnets with this alternative gear. *See* Vanda Felbab-Brown & Alejandro Castillo López, *Restore US-Mexico Seafood Trade and Save the Vaquita*, BROOKINGS INST. (May 7, 2021), https://www.brookings.edu/articles/restore-us-mexico-seafood-trade-and-save-the-vaquita/; *What is Suripera Shrimp?*, BLUE TURTLE SUSTAINABLE, (May 25, 2021), https://www.blueturtlesustainable.org/blog/suripera-shrimp.

(like encircling or using fish traps) for finfish species like corvina.[99] Obstacles including government delay in furnishing the necessary experimental permits, physical obstruction from illegally placed gillnets, and a lack of continued financial support have thwarted these efforts.[100] Although fishers who participated in testing alternative gear were initially paid to do so, participation fizzled out soon after funding evaporated.[101] The most recent initiative for alternative gear and market development ended in 2015, and sporadic efforts since then have not attained the degree of investment and scale necessary to achieve meaningful impact.[102]

### 6. Additional Efforts Have Fallen Short or Made Matters Worse

Additional campaigns to save the vaquita include efforts by conservation groups—assisted by local fishers and the Mexican Navy—to remove both recently placed ("active") and long-abandoned ("ghost") gillnets in vaquita habitat.[103] From October 2016 to March 2020, around 1,600 gillnets were removed from the UGC,[104] undoubtedly saving lives. However, without adequate enforcement to prevent the placement of new nets, these efforts amount to fighting the tide. Moreover, as the presence of organized crime has increased in the region over recent years, reports of violence against net-removers have become more frequent,[105] which may deter continued civilian participation in these efforts.

Perhaps saddest of all was the failed attempt by the Mexican government, aided by conservation groups and four U.S. Navy dolphins, to "rescue" as many vaquitas as possible and hold them in captivity until illegal gillnet use in the UGC was brought under control.[106] Although vaquitas resemble dolphins physically, they are far shyer and more averse

99 *See* Sanjurjo-Rivera et. al., *supra* note 1, at 10.
100 *Id.*
101 *Id.* at 6.
102 *Id.* at 10.
103 *Id.* at 7; *See Mexico and Sea Shepherd Partner to Save Vaquita Porpoise*, SEA SHEPHERD, (Sept. 23, 2021), https://seashepherd.org/2021/09/23/mexico-and-sea-shepherd-partner-to-save-vaquita-porpoise/.
104 Sanjurjo-Rivera et. al., *supra* note 1, at 7.
105 *See id.* at 2, 4, 8, 12.
106 *See* Elizabeth Pennisi, *Update: After Death of Captured Vaquita, Conservationists Call off Rescue Effort*, SCIENCE (Nov. 9, 2017), https://www.science.org/content/article/update-after-death-captured-vaquita-conservationists-call-rescue-effort.

to human interaction.[107] The team captured two vaquitas, but one (a calf) was so stressed that it had to be released almost immediately, and the other (an adult female) suffered a fatal heart-attack within seven hours of capture.[108] Attempts to remove vaquitas from the UGC were abandoned after this drastic, "last-ditch" effort so tragically backfired.[109] Because vaquitas are too fragile to be removed from their ecosystem, their only hope of survival is making their habitat safe for them once more.

### *B. International Conservation Efforts Are Constrained in Scope and Enforcement Mechanisms*

There are a handful of legal and policy instruments that the United States can use to promote the protection of endangered species and prevent the trafficking of wildlife body parts outside of its jurisdiction. These include the Pelly Amendment;[110] the Marine Mammal Protection Act (MMPA);[111] the Eliminate, Neutralize, and Disrupt (END) Wildlife Trafficking Act of 2016;[112] and the Lacey Act.[113] At the global scale, the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), an international agreement intended to prevent trade in wildlife in jeopardy of survival,[114] is a key legal tool for endangered species protection.[115] The trade of vaquitas has been regulated under CITES since 1979.[116] However, use of these tools to conserve the vaquita by eliminating the illicit totoaba trade—and gillnet fishing in the UGC more generally—have been unsuccessful due to restricted scope, weak enforcement measures, and procedural delays.[117]

107 *Vaquita*, ANIMALS NETWORK, https://animals.net/vaquita/ (last visited Mar. 13, 2021); *Vaquita*, ONEKIND PLANET, https://onekindplanet.org/animal/vaquita/ (last visited Nov. 6, 2022).

108 Morin et al., *supra* note 15, at 1009; Pennisi, *supra* note 106.

109 Pennisi, *supra* note 106.

110 22 U.S.C. § 1978.

111 16 U.S.C. §§ 1361–1423h.

112 Eliminate, Neutralize, and Disrupt (END) Wildlife Trafficking Act of 2016, 16 U.S.C. §§ 7601–7644 (2016).

113 16 U.S.C. § 3372(a)(2)(A)

114 Convention on International Trade in Endangered Species of Fauna and Flora, Mar. 3, 1973, 27 U.S.T. 1087, 993 U.N.T.S. 243 (entered into force July 1, 1975).

115 *See CITES*, U.S. FISH & WILDLIFE SERVS., https://www.fws.gov/program/cites (last visited Nov. 6, 2022) (noting CITES is the only treaty ensuring international trade in plants and animals does not threaten their survival in the wild).

116 Sundareshan, *supra* note 31, at 219.

117 *See* discussion *infra* Section II.B.ii.

### 1. Attempts to Conserve the Vaquita Using U.S. Laws Have Not Changed Behavior

The Pelly Amendment to the Fishermen's Protective Act of 1967[118] is often considered "the strongest U.S. law that allows for imposing trade measures on other nations as a punishment for their environmental violations."[119] The statutory provision authorizes a discretionary ban on importing fish products from another country when those products hinder conservation efforts.[120] The import ban occurs when the Secretary of Commerce certifies that nationals of an export country are directly or indirectly conducting fishing operations that "diminish the effectiveness" of international conservation efforts of threatened or endangered species.[121] In 2014, U.S. environmental organizations petitioned the Secretary of Commerce to certify that Mexico's failure to curb the trade and export of totoaba both "diminishes the effectiveness" of CITES and drives the vaquita to extinction.[122]

Following the agency's failure to respond, the organizations filed a notice of intent to sue in 2017[123] and subsequently filed suit in June 2020 in the U.S. District Court for the District of Columbia (D.C. District Court),[124] alleging that agency action had been "unlawfully withheld or unreasonably delayed" in violation of the Administrative Procedure Act (APA).[125] However, the Department of Justice moved to dismiss the case for lack of subject matter jurisdiction and improper venue, arguing that the U.S. Court of International Trade (CIT) held exclusive jurisdiction,[126]

118 22 U.S.C. § 1978.

119 *See, e.g.*, Charles R. Taylor, *Fishing with a Bulldozer: Options for Unilateral Action by the United States Under Domestic and International Law to Halt Destructive Bottom Trawling Practices on the High Seas*, 34 ENVIRONS: ENV'T. L. & POL'Y J. 121, 143 (2010).

120 22 U.S.C. §§ **1978(a)(1)**–(2) (2017).

121 22 U.S.C. §§ **1978(a)(1)**–(2) (2017).

122 *See* Letter from Sarah Uhlemann, Senior Attorney & Brendan Cummings, Senior Couns., Ctr. for Biological Diversity, to Penny Pritzker, Sec. of Com. et al. (Sept. 29, 2014), https://www.biologicaldiversity.org/species/mammals/vaquita/pdfs/Totoaba_Pelly_Petition_9_29_14.pdf.

123 *See* Letter from Sarah Uhlemann, Senior Attorney & Brendan Cummings, Senior Couns., Ctr. for Biological Diversity, to Penny Pritzker, Sec. of Com. et al. (Jan. 5, 2017), https://www.biologicaldiversity.org/species/mammals/vaquita/pdfs/Center_NOI_re_Totoaba_Pelly_Petition_1_5_17.pdf.

124 *See* Compl., Ctr. for Biological Diversity v. Bernhardt, No. 1:20-cv-1532 (D.D.C. June 11, 2020).

125 *Id.* at 18; 5 U.S.C. § 706(1).

126 *See* Def. Mot. to Dismiss, Ctr. for Biological Diversity v. Bernhardt, No. 1:20-cv-1532-DLF (D.D.C. Aug. 24, 2020) (citing FED. R. CIV. P. 12(b)(1), (3) as grounds for

and the case was soon after voluntarily dismissed.[127]

In 2020, another lawsuit—brought in the CIT by the same two environmental organizations (plus a third)—was voluntarily dismissed.[128] The organizations sued the federal government pursuant to MMPA Section 101(a)(2), which authorizes the Secretary of the Treasury to ban the importation of fish and fish products caught using commercial fishing gear that causes incidental mortality or serious injury to marine mammals in excess of U.S. standards.[129] In 2018, the organizations' motion for a preliminary injunction was granted to prevent irreparable harm to the vaquita, resulting in a ban on importation of shrimp—as well as chano, corvina, and sierra—from the northern Gulf of California.[130]

Although the U.S. government initially contested the case on its merits, its position abruptly pivoted in March 2020, after the National Oceanic and Atmospheric Administration (NOAA), through the National Marine Fisheries Service (NMFS), revoked its comparability finding for certain Mexican fisheries in the UGC—a move effectively banning the U.S. from importing fish and fish products from UGC fisheries using gillnets.[131] NOAA's decision largely banned the importation of fish caught directly inside the vaquita's range and also expanded restrictions to include other products from the UGC that are likely contributing to vaquita bycatch.[132] Accordingly, the case was voluntarily dismissed

---

dismissal).

127 *See* Notice of Voluntary Dismissal, Ctr. for Biological Diversity v. Bernhard, No. 1:20-cv-1532-DLF (D.D.C. Sep. 2, 2020).

128 Nat. Res. Def. Council v. Ross, (*Ross II*) No. 18-00055-GSK, slip op. at 1 (Ct. Int'l. Trade Apr. 22, 2020).

129 *Id.* at 2; 16 U.S.C. § 1371(a)(2).

130 *Ross I*, *supra* note 27, at 3, 5, 9–10, 48. As explained in the opinion, gillnet fishing for curvina (interchangeably spelled "corvina") and sierra is legal, while gillnet use to catch shrimp and chano within the vaquita's range is illegal. *Id.* at 13.

131 *See* Notice of Revocation of Comparability Findings and Import Restrictions on Certain Fish Products from Mexico, 85 Fed. Reg. 13,626, 13,627–28 (Mar. 9, 2020) (to be codified at 50 C.F.R. pt. 216). To import certain fish or fish products into the U.S., a foreign fishery must receive a NMFS-issued comparability finding—which is used to ensure that a country harvesting fish meets the same standards as U.S. commercial fishing operations by satisfactorily demonstrating "a regulatory program comparable in effectiveness" to U.S. standards for reducing marine mammal bycatch. *Id.* at 13,627. As of January 1, 2022, "all fisheries must have a comparability finding in order to export fish and fish products from those fisheries to the United States." *Id.* at 13,628.

132 *See id.* at 13,627 (stipulating "requirements that all other fish and fish products not within the scope of the import restrictions but imported under the Harmonized Tariff Schedule (HTS) codes associated with the prohibited fish and fish products be accompanied by a Certification of Admissibility . . ."). *Id.*

as moot in April 2020.[133] However, experts claim that this importation ban has not sufficiently altered fishing behavior because UGC fishers—particularly those who harvest shrimp—either launder their catch and sell to U.S. buyers or sell within Mexico's domestic market.[134]

The Lacey Act of 1900 is one of the oldest U.S. laws protecting wildlife.[135] The Lacey Act makes it illegal to "import, export, transport, sell, receive, acquire, or purchase in interstate or foreign commerce" any wildlife (including parts of wildlife) "taken, possessed, transported, or sold in violation of any" federal, state, Tribal, or foreign law.[136] The Act provides for civil and criminal penalties, forfeiture of the prohibited animal or specimens, and criminal charges.[137] However, as recently noted by legal scholar Priyanka Sundareshan, the Lacey Act does not contain sufficient monetary penalties to deter highly profitable wildlife trafficking, such as that of totoaba.[138] The slim chance of getting caught—and then actually prosecuted—for a violation of the Lacey Act, plus the modest penalties that would be assessed if convicted, are easily outweighed by the substantial profitability of totoaba poaching.[139] Since the economic imbalance between profit and penalty is a common driver of wildlife trafficking, Sundareshan has suggested prosecuting financial crimes simultaneously with wildlife trafficking; the two often go hand-in-hand, and financial crimes carry higher penal and monetary sanctions, which could help tip the scales.[140]

The END Wildlife Trafficking Act of 2016 focuses on building international cooperation and capacity to reduce demand and strengthen enforcement efforts to combat wildlife trafficking.[141] In expert testimony presented during the legislative process of passing the Act, the role of organized crime syndicates and wildlife poaching in fueling

133 *Ross II*, *supra* note 128.

134 Sanjurjo-Rivera et al., *supra* note 1, at 11.

135 *History of the U.S. Fish and Wildlife Service*, U.S. FISH AND WILDLIFE SERV. https://www.fws.gov/history-of-fws#:~:text=The%20Lacey%20Act%20becomes%20the,and%20importation%20of%20injurious%20species (last visited Jan. 11, 2023) ("1900: The Lacey Act becomes the first Federal law protecting wildlife").

136 16 U.S.C. § 3372(a)(2)(A); *see also* KRISTINA ALEXANDER, CONG. RSCH. SERV. R42067, THE LACEY ACT: PROTECTING THE ENVIRONMENT BY RESTRICTING TRADE (2014) [hereinafter CRS Report] (explaining the Lacey Act's prohibitions and penalties).

137 CRS Report, *supra* note 136, at 9.

138 *See* Sundareshan, *supra* note 31, at 234.

139 *See, e.g.*, Sanjurjo-Rivera et. al., *supra* note 1, at 12.

140 *See* Sundareshan, *supra* note 31, at 233, 235.

141 Olonyi Bosire, *Risk Regulation and Management Against Illegal Wildlife Trade: Europe and America*, 21 SUSTAINABLE DEV. L. & POL'Y 17, 24 (2021).

the extinction of vaquitas, among other species, was specifically cited.[142] Although Mexico has been listed as a "Focus Country" in every annual END Wildlife Trafficking Report since the law's inception,[143] continued decline of the vaquita population suggests that actions taken pursuant to this Act have not substantially enhanced Mexico's capacity to counter the organized criminal networks that facilitate totoaba trafficking.

### 2. Attempts to Conserve the Vaquita Using CITES Lack Compliance Assurances and May Exacerbate Poaching

Vaquita are listed as a species threatened with extinction under CITES Appendix 1—the designation affording the highest level of protection.[144] Trade in Appendix 1 species is prohibited under the Convention with limited exceptions.[145] As an instrument that seeks to balance conservation goals with economic development through sustainable trade, CITES has been hailed as one of the most successful international environmental treaties in the world.[146] Rather than neglecting trade interests in wild flora and fauna by adopting a strictly preservationist framework (largely to the disadvantage of the Global South), the Convention aspires to organize trade in species that may become endangered in such a way that ensures the species' persistence while also generating revenue for investment in sustainable development and biodiversity conservation.[147] However, CITES lacks strong enforcement mechanisms: the Convention largely relies on self-enforcement by parties, and its leadership is mainly limited to a support

142 *See Wildlife Poaching: Hearing on H.R. 2494 Before the S. Subcomm. on Africa and Glob. Health Pol'y of the S. Comm. on Foreign Relations*, 114th Cong. 10 (2015) (prepared statement of Ginette Hemley).

143 *See, e.g.*, Bureau of Oceans and Int'l Env't and Sci. Aff., *2017 END Wildlife Trafficking Report*, U.S. DEP'T OF STATE (Nov. 16, 2017), https://www.state.gov/remarks-and-releases-bureau-of-oceans-and-international-environmental-and-scientific-affairs/2017-end-wildlife-trafficking-report/; Bureau of Oceans and Int'l Env't and Sci. Aff., *2021 END Wildlife Trafficking Report*, U.S. DEP'T OF STATE (Nov. 4, 2021), https://www.state.gov/2021-end-wildlife-trafficking-strategic-review/.

144 Convention on International Trade in Endagered Species, app. I, July 1, 2015, 993 U.N.T.S. 257.

145 Int'l Union for the Conservation of Nature, *How CITES Works*, http://www.catsg.org/fileadmin/filesharing/3.Conservation_Center/3.5._CITES/3.5.1._How_it_works/How_CITES_works.pdf (last visited Mar. 13, 2022).

146 Christine Fuchs, *Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) – Conservation Efforts Undermine the Legality Principle*, 9 GERMAN L.J. 1565, 1565 (2008).

147 *See id.* at 1566, 1567–68.

and advisory role.[148]

Since 2019,[149] Mexico has been urged to report its efforts to curb the totoaba trade every six months.[150] However, the Secretariat report from the CITES Standing Committee meeting held in early March 2022—after consideration of the matter was delayed nearly a full year because of the COVID-19 pandemic[151]—notes that Mexico's most recent report on illegal fishing activities and vessels in the UGC "stands in sharp contrast with information on the presence of vessels and gillnets in the zero-tolerance area received from other sources."[152] The Secretariat further reports that the "indicators, triggers, and pre-determined actions" established in Mexico's latest agreement for sustainable fishing have not been implemented.[153] While acknowledging that some progress has been made, the Secretariat urges stronger and more consistent surveillance and enforcement.[154] Despite concluding that Mexico has failed to effectively prevent fishers and vessels from entering the vaquita refuge area,[155] the Secretariat has still not initiated compliance procedures petitioned for by U.S. environmental organizations,[156] which

148 *Id.* at 1569 ("The implementation itself is a task entrusted to the member states. CITES' activities in this latter context are limited to supporting and assisting its members.").

149 *See* Convention on Int'l Trade in Endangered Species of Wild Fauna & Flora, *18.292-18.295 Totoaba (Totoaba macdonaldi)*, CITES, Doc. 28.5/S.C.74/C.o.P.18 (Geneva, Switz. 2019).

150 *See id.* at 18.293(a)(iii).

151 *See Illegal Fishing of Totoaba, the Associated Illegal Trade in Totoaba Swim Bladders, and the Protection of the Vaquita in the Gulf of California (Mexico)*, CITES, https://cites.org/eng/Illegal_fishing_of_totoaba_the_associated_illegal_trade_in_totoaba_swim_bladders_and_the_protection_of_the_vaquita_in_the_Gulf_of_California_Mexico (last updated July 16, 2021) (noting that in November 2020, the Secretariat was prepared to update the Standing Committee on Mexico's progress implementing the Committee's decisions, but "due to challenges posed by the COVID-19 pandemic," the 73rd meeting of the Standing Committee was held online with a reduced agenda—and that matter did not make the cut).

152 Convention on the International Trade of Endangered Species [CITES], *Totoaba (*Totoaba Macdonaldi*): Report of the Secretariat*, at 6, SC74 Doc. 28.5 (Mar. 11, 2022) [hereinafter CITES Secretariat Report 2022].

153 *Id.* at 6–7 (referring to the "[a]greement regulating gear, systems, methods, techniques and schedules for carryingout fishing activities with smaller and larger vessels in Mexican Marine Zones in the Northern Gulf of California and establish landing sites as well as monitoring systems for such vessels," published by the Secretary of the Environment and Natural Resources in the Official Federal Gazette of Mexico on July 9, 2021).

154 *Id.* at 7, 10.

155 *Id.* at 7.

156 *See* Letter from Zak Smith et al., Senior Atty. & Dir., Int'l Wildlife Conservation,

would suspend legal trade in CITES-listed species between Mexico and parties to the Convention.[157]

To make matters worse, the CITES Standing Committee has just approved an application for the first aquaculture facility in Mexico that will engage in the trade of captive-bred totoaba.[158] Although some have suggested that totoaba aquaculture as a way to help alleviate the impact of poaching on UGC totoaba stock[159] and provide alternative (legal) livelihoods, experience with the trafficking of other protected species' body parts suggests that this approach will likely do more harm than good to both the totoaba and vaquita.[160] The creation of a legal

Nat. Res. Def. Council, to Ivonne Higuero, Secretary-General of the Convention on Int'l Trade in Endangered Species of Wild Fauna and Flora (Apr. 1, 2021) at 1, https://www.biologicaldiversity.org/species/mammals/vaquita/pdfs/Letter-to-CITES-re-Vaquita-Update-for-Jan-2021-Regs-4-1-21.pdf.

157 *See* Resol. Conf. 14.3 (Rev. CoP18), ¶ 30, https://cites.org/sites/default/files/document/E-Res-14-03-R18.pdf (last visited Mar. 13, 2022). While not the focus of this Note, the chronical of the vaquita population's steady deterioration—despite international pressures and resultant promises—illustrates the broader "need for improved accountability in multilateral environmental agreements." *See* Choetsow Tenzin, *"Save Them All": The Political and Environmental Implications of Vaquita Extinction*, HARVARD INT'L REV. (June 7, 2022), https://hir.harvard.edu/save-them-all-the-political-and-environmental-implications-of-vaquita-extinction/.

158 Andres M. Estrada, *In Mexico, the Green Light for Exporting Farmed Totoaba Divides Opinion*, CHINA DIALOGUE OCEAN (Aug. 18, 2022), https://chinadialogueocean.net/en/governance/in-mexico-the-green-light-for-exporting-farmed-totoaba-divides-opinion/; Press Release, Center for Biological Diversity, CITES Approves Totoaba Trade in Major Blow to Imperiled Vaquita Porpoise (Mar. 11, 2022), https://biologicaldiversity.org/w/news/press-releases/cites-approves-totoaba-trade-in-major-blow-to-imperiled-vaquita-porpoise-2022-03-11/ [hereinafter CBD Press Release]. Although the aquaculture applicant agreed to "temporarily" prohibit the export of totoaba swim bladders and destroy stockpiled bladders, intending to sell totoaba meat instead, it is unclear how long this measure will remain in place as there is no demand for totoaba meat in any market. *See id.*

159 *See* Convention on the International Trade of Endangered Species [CITES], *Additional Information Regarding the Registration of the Operation "Earth Ocean Farms. S. DE R.L. DE C.V." Breeding* Totoaba Macdonaldi, at 4–6, SC71 Inf. 2 (Aug. 16, 2022) (noting "conservation" purpose could be achieved by release of some portion of "fingerling" population, including juveniles, into the wild); Karlotta Rieve, *Can Aquaculture Save a Species from Extinction?*, THE FISH SITE (May 4, 2021), https://thefishsite.com/articles/can-aquaculture-save-a-species-from-extinction-totoaba-mexico (observing Earth Ocean Farms, the aquaculture facility that recently received CITES approval to engage in international trade in totoaba, "support[s] the restocking of wild populations by releasing thousands of juvenile Totoaba into their natural habitat and working with local schools to educate the upcoming generations on the importance of wildlife preservation").

160 *See* Grenon, *supra* note 6. *Cf.*, Solomon Hsiang & Nitin Sekar, *Does Legalization Reduce Black Market Activity? Evidence from a Global Ivory Experiment and Elephant*

alternative can exacerbate the underlying poaching crisis in several ways: it reinforces perceptions of scientifically unproven health benefits, allows illicit products to be more easily laundered and passed off as legal in commerce, and normalizes possession and use.[161] Sharply criticizing CITES leadership for having chosen "commerce over conservation," the Center for Biological Diversity (CBD) issued a statement that the Committee's decision could sound the vaquita's death knell.[162] The CBD announcement explained that totoaba aquaculture will likely increase demand and further incentivize illegal totoaba fishing in the UGC because larger swim bladders that "can only be found in the wild" are valued more and are thus more lucrative.[163]

*Poaching Data*, NAT'L BUREAU OF ECON. RES., https://www.nber.org/system/files/working_papers/w22314/w22314.pdf (last updated Apr. 2019) (noting that announcement of an experimental, one-time legal elephant ivory sale in 2008 led to a 66 percent increase in illegal ivory supply across two continents, an estimated 71 percent increase in ivory smuggling out of Africa, and as much as a ten-fold increase in its trend (i.e., demand)); Claudia Geib, *Fake It Till You Save It? Synthetic Animal Parts Pose a Conservation Conundrum*, MONGABAY (Feb. 19, 2021), https://news.mongabay.com/2021/02/fake-it-till-you-save-it-synthetic-animal-parts-pose-a-conservation-conundrum/ (citing research indicating that herbal and synthetic chemical substitutes for bear bile, another ingredient popularly used in traditional Chinese medicine, have not alleviated demand driving harmful bear poaching and farming practices because consumers prefer wild-harvested bile when possible).

161 *See, e.g.*, Petition from Ctr. for Biological Diversity to Sec'y of the Interior (Feb. 10, 2016), https://wildaid.org/wp-content/uploads/2018/02/Petition-to-Ban-Cultured-Rhino-Horn.pdf (discussing how legalization and commercial distribution of synthetic and cultured rhinoceros horns exacerbates the threat of poaching) [hereinafter CBD Rhino Petition]. *See also* Grenon, *supra* note 6.

162 CBD Press Release, *supra* note 158.

163 *Id.* As noted by Geib, *supra* note 160, this preference for "natural" over "synthetic" specimens is not uncommon in markets for wildlife parts, regardless of functional equivalence. In fact, introduction of smaller, and thus less desirable, totoaba bladders into the market could drive up the price of wild-caught swim bladders, worsening the existing poaching (and extinction) crisis. *See* Adam J. Dutton et al., *A Stated Preference Investigation into the Chinese Demand for Farmed vs. Wild Bear Bile*, 6 PLOS ONE 1, 1 (2011) (observing "the incumbent product may actually sell more items at a higher price when competing than when alone in the market").

## III. MEXICO AND THE INTERNATIONAL COMMUNITY CAN SAVE THE VAQUITA BY ALIGNING ECONOMIC INCENTIVES AND HUMAN DIMENSIONS OF CONSERVATION WITH REGULATORY AND LEGAL EFFORTS

### *A. Mexico Can Improve Regulatory Compliance by Integrating Top-Down and Bottom-Up Policy Solutions*

The vaquita extinction crisis is enmeshed in multifaceted and deeply-rooted socioeconomic issues.[164] Resolving the species conservation problem requires the strategic integration of both top-down and bottom-up policy approaches that are cognizant of the complexity and interrelationship of these issues.[165] Consistent regulatory enforcement must be combined with participatory, rights-based fisheries management that leverages economic incentives to win community support.[166] Additionally, other needs within UGC coastal communities cannot be viewed as detachable from the issue of vaquita conservation and must be addressed through a holistic, community-centered approach.

#### 1. Regulatory Enforcement Must Be Consistent and Carefully Calibrated to Help the Vaquita Without Hurting Coastal Communities

At present, the low likelihood of getting caught and sanctioned for gillnet fishing and the low penalty for doing so (compared to potential profit from totoaba catch) fail to deter illegal gillnet use in the UGC.[167] To change this, enforcement must be consistent and strict.[168] Evidence suggests that the probability of being sanctioned carries the heaviest weight among all variables in a risk calculus, and is thus more deterrent than penalty size.[169] Simply put, to effectively deter poaching, arrests and prosecutions must occur for a greater percentage of infractions.[170]

Determination of appropriate sanctions for illegal activity is more nuanced: it involves striking a balance among the competing

164 Sanjurjo-Rivera et al., *supra* note 1, at 13. *See* Grenon, *supra* note 6.
165 Sanjurjo-Rivera et al., *supra* note 1, at 13. *See* Grenon, *supra* note 6.
166 Sanjurjo-Rivera et al., *supra* note 1, at 13–14.
167 *Id.* at 12.
168 CITES Secretariat Report 2022, *supra* note 152, at 10.
169 *See* Sanjurjo-Rivera et al., *supra* note 1, at 12.
170 *Cf. id.* at 14 (noting deterrence of homicide not achieved until arrests and successful prosecutions reach 40 percent).

factors of fairness, civil liberties, and political palatability.[171] Tiered sanctions—in which heavier fines are imposed on repeat offenders and poachers affiliated with organized crime networks—should be implemented.[172] At the same time, penalties assessed to small-scale and low-level offenders must be carefully calibrated—and ideally, coupled with supportive pathways for offenders to avoid further violations[173]—so as not to drive UGC residents further into poverty and perpetuate the cycle of illegal activity.[174] A careful approach focusing, first and foremost, on severe prosecution of criminal networks is important to win community support. Otherwise, the UGC risks inadvertently deepening the perception that law enforcement authorities prioritize the porpoise over the people.[175] Ensuring that escalating sanctions (e.g., fines, license revocation, catch and boat seizure, jail time)[176] are commensurate with the socioeconomic condition of offenders is critical from both a criminal justice and poverty-elimination perspective, as well as an integral component in the shift toward a more progressive animal protection paradigm.[177]

### 2. Adopting a Participatory Approach to Rights-Based Fisheries Management in the UGC Could Improve Community Compliance, Reducing Enforcement Costs

Inconsistent enforcement efforts in the UGC are further undermined by weak fisheries management. The UGC is home to some of the most diverse and productive fisheries in all of Mexico, but unrestricted access (and ensuing overcapitalization) have contributed to economic hardship, inequality, and organized crime in coastal communities.[178] Creating a system of clearly defined fishery rights could foster a sense of ownership among UGC fishers, aligning their economic

171 *Id.* at 12.
172 *Id.* at 14.
173 *See id.*
174 *See id.* at 13–14 (noting connection between poverty and illegal activity).
175 *See* Sundareshan, *supra* note 31, at 227–29 (explaining incarceration of low-income fishers has little impact on illegal poaching in UGC communities and fosters resentment against the species, causing some community members to "actively desire" extinction of the vaquita so they can return to their normal lives).
176 *See* Sanjurjo-Rivera et al., *supra* note 1, at 14.
177 *Cf.* JUSTIN MARCEAU, BEYOND CAGES: ANIMAL LAW AND CRIMINAL PUNISHMENT (2019) (arguing that the animal welfare movement must move beyond a carceral model of punishment and focus instead on systemic solutions).
178 *See* Sanjurjo-Rivera et al., *supra* note 1, at 13.

interests with sustainable management measures and thus fostering improved compliance with regulations.[179] Management regulations must involve more than a permit system. Instead, management should encompass access rights, capacity and effort parameters, catch-limits, gear transitions, and monitoring plans.[180] In addition to advancing environmental efforts, the pairing of rights-based fishery (RBF) management[181] with spatial protections has been shown to improve local food security and provide opportunities for poverty alleviation in small-scale coastal fishing communities.[182]

This approach could be particularly well-suited to the UGC, given that spatial protections (i.e., the vaquita refuge (NTZ) and gillnet exclusion zone) are already in place, albeit unenforced. A participatory approach to the development and implementation of an RBF program could also improve the perceived legitimacy of fishing restrictions to protect vaquitas in the UGC, building community buy-in and potentially easing some of the communities' resentment currently felt towards the endangered species.[183]

### 3. A Contextual, Holistic Approach Centered on Diversification of the Local Economy Is Needed to Benefit Both Vaquitas and UGC Coastal Communities

Mexico's approach to vaquita conservation must transcend enforcement measures and fisheries management to affect systemic, structural change that will enable long-term species recovery. Saving the vaquita requires a comprehensive approach that looks beyond the gear and management of fisheries to acknowledge the underlying socio-ecological and institutional challenges of the UGC region that

179 *Id.* at 13–14.

180 *See id.* at 9.

181 Rights-based fishery (RBF) management programs assign fishers secure tenure rights to a fishery based on biologically determined annual catch limits. *See* Allison K. Barner et al., *Solutions for Recovering and Sustaining the Bounty of the Ocean: Combining Fishery Reforms, Rights-Based Fisheries Management, and Marine Reserves*, 28 OCEANOGRAPHY 252, 253 (2015). RBFs are commonly structured as harvest allocations (i.e., individual transferrable quotas) or organized spatially (i.e., territorial use rights in fisheries). *Id.*

182 *Id.* By guaranteeing fishery rights, RBF management schemes incentivize environmental stewardship rather than the typical "race to the bottom" that occurs with open-access fisheries. *See id.*

183 *See* Sanjurjo-Rivera et al., *supra* note 1, at 6 (noting "unprecedented" government expenditures on vaquita conservation with no discernable results have led to frustration and resentment in UGC coastal communities).

led to this point.[184] Creation of alternative livelihoods in the UGC with incomes comparable to fishing is critical not only to reduce pressure on marine species, including the vaquita and totoaba, but also to boost the economic resilience of coastal communities in a changing climate expected to increasingly wreak havoc on ocean ecosystems.[185]

To that end, the Mexican government must provide sustained, material benefits to support UGC coastal communities in the transition to a vaquita-friendly (and less fishing-dependent) economy.[186] For example, the provision of entrepreneurial micro-loans to facilitate diversification of incomes, combined with re-training opportunities, is one approach that could help.[187] Beyond the promotion of alternative livelihoods and the development or subsidization of alternative gear, government provision of public goods to ensure food security, healthcare, and education is essential.[188] Expanding the capacity of residents to acquire other skills and addressing land tenure issues currently preventing many community members from leaving the region could help further reduce fishing dependence in the UGC.[189] Experts have noted that approaches that empower women and girls are likely to be especially impactful in reducing economic dependence on fishing at the household scale.[190]

Because fishing will likely remain an important economic sector in the UGC[191] and fishers inherently rely on resources abundant in healthy

184 *See id.* at 3, 13; Grenon, *supra* note 6.

185 *See* Sarjurjo-Rivera et al., *supra* note 1, at 1–2; *see, e.g.*, Greg Bruno, *Climate Change Will Reshuffle Marine Ecosystems in Unexpected Ways: Sophisticated Model Reveals How Predator-Prey Relationships Affect Species' Ranges*, RUTGERS TODAY (Apr. 12, 2022), https://www.rutgers.edu/news/climate-change-will-reshuffle-marine-ecosystems-unexpected-ways-rutgers-study-finds.

186 Sanjurjo-Rivera et al., *supra* note 1, at 2.

187 *See id.* at 15.

188 *See id.* at 9.

189 *See id.* at 9, 15.

190 *See id.* at 8–9, 15.

191 *See* YANN HERRERA ET AL., EXPERT COMMITTEE ON FISHING TECHNOLOGY, A COMPREHENSIVE REVIEW OF THE RESEARCH ON ALTERNATIVE GEAR TO GILLNETS IN THE UPPER GULF OF CALIFORNIA (2004-2016) 5 (2017) https://www.gob.mx/cms/uploads/attachment/file/379214/WP_Sept_1_High_Res_2_opt.pdf (observing that the UGC is "one of the most productive areas in Mexico, hosting a rich fishing ground for [small scale fisheries]"); *Baja California's Pacific and the Sea of Cortez*, PEW CHARITABLE TRUSTS, https://www.pewtrusts.org/en/projects/pew-bertarelli-ocean-legacy-baja-californias-pacific-and-the-sea-of-cortez (last visited Feb. 2, 2023) (remarking that the UGC is "one of the most biologically diverse bodies of water on Earth" and was "[f]amously called 'the world's aquarium' by oceanographer Jacques Cousteau"). The astonishing abundance and diversity of marine life in the UGC, combined with the lack of alternative economic

marine ecosystems, conservation actions must be structured to support the ability of local fishers to earn a living legally and sustainably.[192] Development of effective vaquita-safe fishing gear and methods is critical in ensuring that the vaquita population can fully recover in the years ahead. Consequently, devising a collaborative approach to accelerate the permitting, testing, and deployment of new types of gear at scale, as well as implementing a monitoring and traceability system that create market premiums for sustainable fish, should be priorities for the Mexican government and private sector.[193]

### *B. The International Community Should Implement Individual, Legal, and Market-Based Actions to Halt Vaquita Extinction*

Urgent action from Mexico is undeniably the top priority in vaquita conservation; however, there are legal and economic actions the United States can take to ensure such steps are taken in a timely manner. Additionally, human dimensions of conservation can be intentionally leveraged in market-based approaches to create consumer demand for vaquita-safe shrimp (and other seafood) in the United States and reduce demand for totoaba swim bladders in China.

#### 1. The United States Should Utilize the United States–Mexico–Canada Agreement Consultation Process to Obtain Meaningful Commitments and Follow-Through from Mexico

Prompted by a petition from several environmental organizations,[194] the Office of the United States Trade Representative (USTR) recently issued Mexico a request for consultation under the Environment Chapter of the United States–Mexico–Canada Agreement (USMCA).[195] In this first-of-its kind action, the USTR expressed concern

opportunities in its coastal communities, suggest that marine resources—and specifically, fishing—will remain an economic pillar in these communities for as long as this biodiversity is maintained, underscoring the importance of its conservation. *See* Sanjurjo-Rivera, *supra* note 1, at 14.

192 Sanjurjo-Rivera, *supra* note 1, at 14–15; *see* Grenon, *supra* note 6.

193 *See* Sanjurjo-Rivera, *supra* note 1, at 10–11.

194 *See* Letter from Sarah Uhlemann et al., Int'l Program Dir. & Senior Att'y, Ctr. for Biological Diversity, to Ms. Kelly K. Milton, Assistant U.S. Trade Representative for Env't & Nat. Res. & Chair of the Interagency Env't Comm. for Monitoring & Enf't of the USMCA (Aug. 11, 2021), https://www.biologicaldiversity.org/species/mammals/vaquita/pdfs/Letter-to-US-IEC-re-Vaquita-Enforcement-8-10-21.pdf.

195 Press Release, Office of the U.S. Trade Representative, USTR Announces USMCA

about Mexico's compliance with treaty obligations to protect endangered species and to prevent illegal fishing and trafficking of totoaba.[196] On April 1, 2022, the Secretariat of the Commission for Environmental Cooperation (an environmental dispute body established under the USMCA) recommended a formal investigation to develop a factual record of Mexico's compliance with the "relevant laws and orders."[197]

If the investigation and consultation advance to a dispute settlement panel, the United States could impose tariffs or other trade sanctions on Mexico.[198] Because the United States represents a significant fraction of Mexico's export market,[199] the potential imposition of such economic sanctions may incentivize Mexico to intensify enforcement efforts and follow through on its commitments to eliminate gillnets from vaquita habitat. Trade sanctions could be, however, debilitating to communities already struggling with poverty.[200] Ideally, the mere threat of these measures will be sufficient to catalyze government action. The consultation could also provide opportunity for a partnership between Mexico and the United States in which the latter offers funding and technical assistance to facilitate more rapid implementation of vaquita-safe gear at scale, along with improved seafood traceability programs to reduce the laundering of unsustainably sourced seafood.[201] While the efficacy of the USMCA as a conservation tool remains to be seen, it could potentially strengthen economic incentives for Mexico to act, turning the tide in the fight to save the vaquita.

---

Environment Consultations with Mexico (Feb. 10, 2022), https://ustr.gov/about-us/policy-offices/press-office/press-releases/2022/february/ustr-announces-usmca-environment-consultations-mexico.

196 Andrea Shalal & Caitlin Webber, *U.S. Seeks Trade Talks with Mexico over Endangered Vaquita Porpoise*, REUTERS (Feb. 10, 2022), https://www.reuters.com/world/americas/us-seeks-trade-talks-with-mexico-over-marine-life-protections-2022-02-10/.

197 *Secretariat Notification in Accordance with Articles 24.28 of the United States-Mexico-Canada Agreement*, COMM'N FOR ENV'T COOP, 1-2 (Aug. 11, 2022), http://www.cec.org/wp-content/uploads/wpallimport/files/21-2-adv_en.pdf.

198 Shalal & Webber, *supra* note 196.

199 CONGRESSIONAL RSRCH. SERV., RL 32934 U.S.–MEXICO ECONOMIC RELATIONS: TRENDS, ISSUES, AND IMPLICATIONS at 2 (2020) (stating approximately 80 percent of Mexico's exports are to the United States).

200 *See* Tenzin, *supra* note 157. ("[T]he vitality of millions of citizens and critical markets is dependent on a strong US-Mexico [economic] partnership.").

201 *See* Felbab-Brown & Castillo López, *supra* note 98.

### 2. Efforts to Promote Vaquita-Safe Shrimp Should Leverage Innate Human Bias and Create a Market Niche for Vaquita-Safe Seafood

To serve as "insurance against the temptations of illegal markets," legal fisheries must be able to provide jobs and economic security.[202] One way to remedy the comparatively low profitability of law-abiding fishing in the UGC is through creation of a market niche for shrimp—and other seafood—caught using vaquita-safe nets.[203] Such a niche would allow for premium pricing of sustainably sourced seafood, raising the return fishers get for their investment in alternative gear.[204] Interest in purchasing seafood harvested with "vaquita-friendly" gear among wholesale purchasers and chefs in southern California suggests at least regional market potential for this approach.[205] Successful implementation of such a program would require improving the traceability of seafood to make "[v]erifiable and transparent" sourcing information readily available.[206] Software like that developed for "Know Your Fish"[207] and "This Fish"[208] shows promise at the fishing-industry and commercial-purchase levels. Hopefully, similar smartphone applications for consumers will follow.

Cultivation of willingness to pay extra for vaquita-safe shrimp requires raising awareness about the vaquita among American seafood consumers. To expand market potential beyond southern California, development of "ecolabels" based on standards and certification in the seafood supply chain is necessary.[209] This initiative could be modeled after dolphin-safe tuna labeling, which is widely considered a "conservation success story."[210] Such an approach should deliberately incorporate the "human dimensions" of conservation: the beliefs, values, and intrinsic motivations upon which attitudes and actions toward wildlife are based.[211] For example, taking full advantage of the vaquita's charismatic

202 Sanjurjo-Rivera et al., *supra* note 1, at 11.
203 *See id.* at 10-11; Grenon, *supra* note 6.
204 Sanjurjo-Rivera et al., *supra* note 1, at 10.
205 *See id.*; Dunch, *supra* note 27, at 584.
206 Sanjurjo-Rivera et al., *supra* note 1, at 11.
207 *Know Your Fish: Seafood Traceability Software*, VERICATCH, https://vericatch.com/products/knowyourfish/ (last visited Mar. 14, 2022).
208 THISFISH, https://this.fish/ (last visited Mar. 14, 2022).
209 Sanjurjo-Rivera et al., *supra* note 1, at 10.
210 Dunch, *supra* note 27, at 584.
211 *See id.* at 583.

megafauna attributes[212] by deliberately emphasizing its panda-like face could help increase sympathy among consumers, augmenting the efficacy of a market-based strategy. Centering conservation on charismatic megafauna is, ordinarily, deeply problematic.[213] However, given the well-documented lag in human sympathy towards fish compared to more easily anthropomorphized species,[214] accentuating the suffering of the "smiling panda"[215] may be the best hope for saving both the vaquita *and* the (arguably less adorable) totoaba from extinction.

A similar tack should be taken in China. The significance of pandas in Chinese culture[216]—particularly the panda's symbolic connection to Chinese diplomacy[217]—should not be overlooked. Emphasizing visual parallels with the "panda of the sea" and including this nickname when raising awareness about the detrimental impacts of the totoaba bladder trade could help align cultural values with the desired conservation outcome: elimination of demand for totoaba swim bladder.[218]

### 3. Emulating Strategies from the Campaign to End the Shark Fin Trade Could Help Curb Totoaba Black Market Demand, Reducing Vaquita Deaths

To reduce the market demand driving totoaba poaching, experts have suggested an approach analogous to the public campaign against

212 Amber Pariona, *Who Are the Charismatic Megafauna of the World?* WORLD ATLAS (Apr. 25, 2017), https://www.worldatlas.com/articles/who-are-the-charismatic-megafauna-of-the-world.html.

213 *See, e.g.*, Robert J. Smith et al., *Identifying Cinderella Species: Uncovering Mammals with Conservation Flagship Appeal*, 5 CONSERVATION LETTERS 205, 205–10 (2012) (discussing flaws of focusing conservation efforts on charismatic species).

214 *See, e.g.*, James McWilliams, *Why Fish Can No Longer Escape Our Conscience*, FREE FROM HARM (July 30, 2013), https://freefromharm.org/farm-animal-intelligence/why-we-have-no-compassion-for-fish/.

215 Lottie Limb, *Vaquitas: Scientists Find Last of the Species Can Survive Interbreeding – If Illegal Fishing Stops*, EURONEWS, https://www.euronews.com/green/2021/11/25/vaquitas-what-are-the-smiling-pandas-of-the-sea-and-why-are-they-going-extinct (last updated May 21, 2022).

216 *See* Alexa Oleson, *Chinese People Used to Think Pandas Were Monsters*, FOREIGN POL'Y MAG. (Oct. 23, 2014) https://foreignpolicy.com/2014/10/23/chinese-people-used-to-think-pandas-were-monsters/ (noting that the Giant Panda "has become synonymous with 5,000 years of Chinese history").

217 *See* S.H., *Why China Rents Out Its Pandas*, THE ECONOMIST (Jan. 18, 2019), https://www.economist.com/the-economist-explains/2019/01/18/why-china-rents-out-its-pandas (explaining role of pandas in China's diplomacy); Grenon, *supra* note 6.

218 Grenon, *supra* note 6.

the shark fin trade.[219] Similar to the strategy used to reduce demand for shark fin soup,[220] celebrities could speak out against the purchase of totoaba bladders. In combination with efforts to educate the public, celebrity campaigns can aid in denouncing possession of totoaba swim bladders—a shift in social norms that is essential to curbing long-term demand.[221] Another crucial aspect to reducing demand is widely publicizing that there is not yet any decisive scientific evidence indicating health benefits from consumption of totoaba bladder.[222] Raising awareness, through targeted campaigns, that the totoaba trade is directly responsible for the extinction of vaquitas is important and could benefit from integration of charismatic megafauna visuals, as noted above. As with the shark fin trade, direct pressure applied to governments and companies can help drive these changes.[223] Improved enforcement of the existing prohibition on the totoaba swim bladder trade under CITES—for example, through interception and seizure of the swim bladders by customs officials and law enforcement—is also critical.[224] Such efforts require strengthening inter-agency and inter-governmental collaboration, communication, and data-sharing.[225] Finally, sustained international political and diplomatic pressure on China to improve enforcement is necessary.[226]

219 *See* Sanjurjo-Rivera et al., *supra* note 1, at 15.

220 *Id.*

221 *See* CBD Rhino Petition, *supra* note 161, at 14, 33 (discussing reduction of demand through education and noting role of "celebrity ambassadors" in education).

222 *See* Mayra L. González-Félix et al., *First Report on the Swim Bladder Index, Proximate Composition, and Fatty Acid Analysis of Swim Bladder from Cultured* Totoaba macdonaldi *Fed Compound Aquafeeds*, 21 AQUACULTURE REPS. 1, 7 (2021).

223 *Cf.* Alan Yu, *Shark Fin Trade Faces Troubled Waters as Global Pressure Mounts*, NPR (Nov. 7, 2017), https://www.npr.org/sections/thesalt/2017/11/07/561900736/shark-fin-trade-faces-troubled-waters-as-global-pressure-mounts (outlining actions taken by governments and companies in response to pressure from conservation organizations).

224 *See* Jen Sawada, *From Villain to Vulnerable: How a Decade Changed the Perception of Sharks*, PEW CHARITABLE TRS. (Mar. 1, 2019), https://www.pewtrusts.org/en/research-and-analysis/articles/2019/03/01/from-villain-to-vulnerable-how-a-decade-changed-the-perception-of-sharks.

225 *See id.*; Sundareshan, *supra* note 31, at 236, 239 (highlighting importance of inter–agency collaboration).

226 *See* Vanda Felbab-Brown, *China-Linked Wildlife Poaching and Trafficking in Mexico*, FOREIGN POL'Y BROOKINGS, Mar. 2022, at 20-21, https://www.brookings.edu/wp-content/uploads/2022/03/FP_20220328_wildlife_trafficking_felbab_brown.pdf (noting "substantial pressure" from U.S. and Mexico drove China's interdiction efforts against totoaba bladder smugglers and retailers in 2018, and Chinese authorities increased penalties for totoaba smuggling upon "urging" Mexican diplomats).

## CONCLUSION

The vaquita has been hanging on by a thread for far too long. Examining why and how efforts to conserve the species have fallen short sheds light on the steps that are urgently needed to prevent its imminent extinction. While improved enforcement of regulatory measures banning gillnet fishing in the vaquita's habitat is crucial to saving the species, long-term efforts to create a sustainable human and natural environment in which the vaquita population can recover and thrive are equally essential. Saving the vaquita demands a coordinated approach that focuses not just on eliminating the proximate cause of the species' near extinction, but also on adequately addressing the social, political, and economic obstacles affecting the surrounding coastal communities.[227] Hopefully, with help from the international community, the Mexican government can support a transition to alternative livelihoods and means of fishing for UGC coastal communities and create a new structure of incentives where the benefits of legal activities far outweigh the benefits of illegal activity.[228]

If these strategies prove successful, they could be applied in efforts to save other endangered species.[229] Rights-based fisheries management lessons from the UGC may apply to other small-scale fisheries where conservation policies to reduce bycatch and overfishing are seen as conflicting with local values, cultural identities, economies, and wellbeing. More broadly, vaquitas represent just one illustration of a growing trend where organized crime, wildlife trafficking, and biodiversity decline are interrwoven.[230] Successfully resolving these problems requires untangling the complicated socio-ecological context in which they arise, along with the economic, political, and institutional challenges that allow them to flourish.[231] If marine wildlife conservation and fisheries management reforms are aligned with economic incentives and consideration for human wellbeing, conservation policies can benefit both communities and endangered species.

227 *See* Grenon, *supra* note 6.
228 *See id.*
229 *See id.*
230 Sanjurjo-Rivera et. al., *supra* note 1, at 1; *see* Grenon, *supra* note 6.
231 *See* Grenon, *supra* note 6.

# RELEASING THE STEAM: AN ABOLITION CONSTITUTIONALIST APPROACH TO REVITALIZING CLEMENCY PROCEEDINGS

NOTE

*By Alexandra Wood*[*]

* J.D. Candidate, Northeastern University School of Law (2023); Executive Articles Editor, *Northeastern University Law Review* (2022–2023). I want to thank Marissa Mooney and our incredible team of editors for providing their expertise to this Note. I also want to thank Professor Stevie Leahy for providing the initial inspiration for this piece, encouraging me to publish, and demonstrating how to lead with compassion and integrity. Finally, thank you to Joseph Boyle, for listening to me rant about abolition and clemency for years and for always showing me how to embody our values in our work. I could not have done this without you.

## TABLE OF CONTENTS

## ABSTRACT

*Prison abolition radically reimagines a world without criminal punishment or incarceration. While dismantling the prison-industrial complex is a long-term goal, abolition must include efforts to release individuals currently incarcerated. In this Note, I argue that clemency should be realized as an abolitionist mechanism for releasing incarcerated individuals. Employing the legal framework of abolition constitutionalism developed by Professor Dorothy E. Roberts, I argue for due process protections in clemency proceedings. I borrow from other post-conviction contexts to reason that the existence of state statutory and constitutional procedures creates a constitutionally recognized right to clemency. While due process protections may not immediately free all incarcerated individuals, these protections would encourage increased use of clemency, incrementally decreasing prison populations and realizing the goals of abolition.*

## INTRODUCTION

Following the murder of George Floyd, protestors marched through the streets of Minneapolis, demanding that Minneapolis defund its police department.[1] The call was not to lock up Derek Chauvin, the police officer who murdered Mr. Floyd.[2] The demand had changed. The call was, instead, to dismantle the police and the systems of criminal punishment that caused Mr. Floyd's murder.[3] Organizers in Minneapolis have been making demands to abolish the police for years.[4] But this time, thousands joined in their call to action.[5] The abolition of police was no longer such an extremist position.[6]

Calls to abolish the police are part of a larger movement referred to as prison abolition, a praxis that aims to dismantle systems of punishment and oppression.[7] Critical Resistance, the grassroots organization considered to have launched the modern abolition movement,[8] describes its goal as "the creation of genuinely healthy, stable communities that respond to harm without relying on imprisonment and punishment."[9] Abolitionist organizer and scholar Mariame Kaba

1 *See* Catherine Kim, *Minneapolis Mayor is Booed Out of a Rally for Rejecting Calls to Defund the Police*, VOX (June 7, 2020), https://www.vox.com/2020/6/7/21283089/minneapolis-mayor-protests-frey-booed-rally-defund-police.

2 *Id.*; Laurel Wamsley, *Derek Chauvin Found Guilty of George Floyd's Murder*, NPR (Apr. 20, 2021, 3:34 PM) (updated 5:37 PM), https://www.npr.org/sections/trial-over-killing-of-george-floyd/2021/04/20/987777911/court-says-jury-has-reached-verdict-in-derek-chauvins-murder-trial.

3 Kim, *supra* note 1.

4 *See* Aaron Ross Coleman, *Minneapolis May Be the First City to Dismantle the Police*, VOX (June 8, 2020), https://www.vox.com/2020/6/8/21283980/minneapolis-defund-the-police-george-floyd-black-lives-matter; *About Reclaim the Block*, RECLAIM THE BLOCK, https://www.reclaimtheblock.org/home/#about (last visited Apr. 15, 2022); Mary Retta, *MPD150, Reclaim the Block, and the Black Visions Collective Have Been Fighting to Abolish Minneapolis Police for Years*, TEEN VOGUE (June 12, 2020), https://www.teenvogue.com/story/mpd150-reclaim-the-block-black-visions-collective-abolish-minneapolis-police-organizing.

5 Tim Nelson, *Marchers Call for Defunding Minneapolis Police Department*, MPR NEWS (June 6, 2020), https://www.mprnews.org/story/2020/06/06/march-rally-in-twin-cities-after-killing-of-george-floyd.

6 *See* Mariame Kaba, *Yes, We Mean Literally Abolish the Police*, N.Y. TIMES (June 12, 2020), https://www.nytimes.com/2020/06/12/opinion/sunday/floyd-abolish-defund-police.html (arguing that the abolition of police is the only answer to police violence).

7 Dorothy E. Roberts, *Foreword: Abolition Constitutionalism*, 133 HARV. L. REV. 1, 6–7 (2019).

8 *Id.* at 5.

9 *Mission & Vision*, CRITICAL RESISTANCE, https://criticalresistance.org/mission-

poetically describes abolition as a "horizon"—a goal to be constantly moving toward.[10] The goal is not simply to put an end to prisons but to imagine a society that is safe and just.[11]

Abolition is also deeply situated in history, acknowledging the racist origins of the modern criminal legal system.[12] Where abolitionists see incarceration as a continuation of slavery, they envision themselves as heirs to the antislavery abolition movement.[13] And in doing so, the goal to end incarceration is part of the broader goal to "free them all."[14] The movement towards prison abolition is complex and controversial.[15] It is also inevitably going to be incremental: a slow process of dismantling the prison industrial complex. Yet even the release of one individual carves a path toward abolition.

---

vision/ (last visited Apr. 1, 2022).

10 Mariame Kaba & John Duda, *Towards the Horizon of Abolition: A Conversation with Mariame Kaba*, THE NEXT SYS. PROJECT (Nov. 9, 2017), https://thenextsystem.org/learn/stories/towards-horizon-abolition-conversation-mariame-kaba.

11 *See id.*

12 *See* discussion *infra* Section I.A.

13 Roberts, *supra* note 7, at 48–49.

14 The slogan "Free Them All" is used throughout abolitionist activism to refer to the project of abolishing carceral facilities and releasing incarcerated individuals. *See, e.g.*, Kristin Kumpf & Lewis Webb, Jr., *Why We Support the Call to #FreeThemAll*, AM. FRIENDS SERV. COMM. (Apr. 23, 2020), https://www.afsc.org/blogs/news-and-commentary/why-we-support-call-to-freethemall; NAOMI MURAKAWA, *Foreword* to WE DO THIS 'TIL WE FREE US: ABOLITIONIST ORGANIZING AND TRANSFORMING JUSTICE 17 (2021).

15 It is beyond the scope of this Note to respond to arguments against abolition. While I acknowledge that the debate is ongoing, this Note proceeds under the assumption that abolition is a valid goal. For arguments in opposition to abolition, *see, e.g.*, Paul H. Robinson, *Opinion, Don't Abolish the Police. It Didn't Work for 1960s Communes and it Won't Work for Us*, USA TODAY (June 21, 2020, 6:00 AM) (updated 8:30 AM), https://www.usatoday.com/story/opinion/2020/06/21/abolishing-police-unworkable-1960-s-communes-2020-cities-column/3216029001/ (arguing that police abolition does not work and that reform is a better alternative). For abolitionist responses to this opposition, *see, e.g.*, MARIAME KABA, *So You're Thinking About Becoming an Abolitionist*, *in* WE DO THIS 'TIL WE FREE US: ABOLITIONIST ORGANIZING AND TRANSFORMING JUSTICE 25–27 (2021) (discussing the difficulty in creating neatly packaged abolitionist solutions); Allegra M. McLeod, *Prison Abolition and Grounded Justice*, 62 UCLA L. REV. 1156 (2015) (addressing the absence of abolitionist thinking in criminal law scholarship and presenting an argument for "grounded justice," a form of preventative justice, to replace criminal law enforcement); Thomas Ward Frampton, *The Dangerous Few: Taking Seriously Prison Abolition and Its Skeptics*, 135 HARV. L. REV. 2013 (2022) (responding to abolition skeptics' worries about "the dangerous few," and proposing alternative abolitionist answers).

Clemency[16] is one avenue toward this horizon. Clemency is a way to "releas[e] steam regularly"[17] from an unjust criminal legal system by granting mercy to incarcerated individuals—through pardon, commutation, etc.—at the discretion of the executive branch. Indeed, the Supreme Court has characterized clemency as a "fail safe" for the innocent in our criminal legal system.[18] With few exceptions, however,[19] clemency remains a largely unused power. While clemency power has long been employed at the federal level, contemporary presidents rarely grant clemency.[20] In addition, according to the Restoration of Rights Project, most states either refuse to grant clemency, or only do so sparingly.[21] And while all fifty states are mandated to provide clemency

16 Clemency refers to a broad category of merciful acts, but in this Note, I use it to describe the authority invested in executives to grant pardons, amnesty, commutations, remissions of fines, and reprieves. *See* Daniel T. Kobil, *The Quality of Mercy Strained: Wresting the Pardoning Power from the King*, 69 TEX. L. REV. 569, 575 (1991). A pardon is generally considered the forgiveness of the underlying crime and the remission of any consequences or punishment. *Id.* at 576. Amnesty is generally "granted to groups," rather than to an individual, prior to the conviction. *Id.* at 576–77. Commutation refers to a reduction in the punishment imposed, often to shorten an individual's sentence to fewer years in prison. *Id.* at 577. The executive can also remit fines imposed as punishment. *Id.* Finally, reprieves stay the execution of a sentence, typically to allow the individual time to complete an appeal or a personal obligation. *Id.* at 578.

17 Rachel E. Barkow & Mark Osler, *Restructuring Clemency: The Cost of Ignoring Clemency and a Plan for Renewal*, 82 U. CHI. L. REV. 1, 12 (2015).

18 Herrera v. Collins, 506 U.S. 390, 415 (1993).

19 *See* Hicham Raache, *Gov. Stitt Approves Hundreds of Prison Commutations to Mitigate Coronavirus Spread*, OKLA.'S NEWS 4 (Apr. 10, 2020, 3:48 PM) (updated 4:30 PM), https://kfor.com/news/coronavirus/gov-stitt-approves-hundreds-of-prison-commutations-to-mitigate-coronavirus-spread/ (over 450 sentences commuted by the governor of Oklahoma); Tess Riski, *Jay Inslee Released Many Nonviolent Offenders to Stem the Spread of COVID-19. Kate Brown Hasn't Yet*, WILLAMETTE WK. (Sept. 2, 2020), https://www.wweek.com/news/courts/2020/09/02/jay-inslee-released-all-nonviolent-offenders-to-stem-the-spread-of-covid-19-kate-brown-hasnt-yet/; Sam Levin, *California Governor Grants Clemency to 21 Prisoners as Thousands Infected with Covid-19*, THE GUARDIAN (June 26, 2020), https://www.theguardian.com/us-news/2020/jun/26/california-clemency-covid-19-governor-prisons.

20 *See* Paul J. Larkin Jr., *Revitalizing the Clemency Process*, 39 HARV. J. L. & PUB. POL'Y 833, 852–55 (2016).

21 *50-State Comparison: Pardon Policy & Practice*, RESTORATION OF RTS. PROJECT, https://ccresourcecenter.org/state-restoration-profiles/50-state-comparisoncharacteristics-of-pardon-authorities-2/ (last visited Mar. 31, 2022); *see also* Ed Lyon, *Covid-19 Pandemic Bumps Still Anemic Clemency Numbers*, PRISON LEGAL NEWS (Jan. 1, 2022), https://www.prisonlegalnews.org/news/2022/jan/1/covid-19-pandemic-bumps-still-anemic-clemency-numbers/ (describing the failure of states to use clemency during the pandemic).

procedures by statute or constitutional provision,[22] they often fail to do so.[23] The Supreme Court has so far declined to intervene in clemency cases and assure adequate procedural safeguards, stating that clemency is merely "a unilateral hope."[24]

Clemency proceedings, due to their discretionary nature, fail to provide incarcerated individuals a meaningful opportunity for release. Clemency is, therefore, in need of revitalization. Yet, abolitionists are wary of reforms that use existing legal frameworks at all, arguing that these methods reinforce the legitimacy of the criminal legal system.[25] Abolitionists instead advocate for "non-reformist reforms,"[26] reforms that "reduce the power of an oppressive system while illuminating the system's inability to solve the crises it creates."[27]

Professor Dorothy E. Roberts proposes a revolutionary legal framework for non-reformist reform: abolition constitutionalism.[28] This framework recognizes the abolitionist history of the Constitution's

22 *See 50-State Comparison: Pardon Policy & Practice*, *supra* note 21.

23 In Massachusetts, for example, the Pardons Advisory Board (which also serves as the Parole Board) is required to review clemency petitions and either provide a recommendation to the governor or hold a public hearing. Ben Notterman, *Willie Horton's Shadow: Clemency in Massachusetts*, N.Y.U. L. CTR. ON THE ADMIN. OF CRIM. L. 8 (2019), https://www.law.nyu.edu/sites/default/files/CACL%20Clemency%20MA_Accessible.pdf. Yet the Board has failed to live up to this mandate. *Id.* at 9. The governor has only granted commutations for two men in twenty-five years. Chris Lisinski, *Gov. Baker Announces Commutations for Thomas Koonce and William Allen*, WBUR (Jan. 12, 2022), https://www.wbur.org/news/2022/01/12/baker-murder-case-commutations. *See also* Cara H. Drinan, *Clemency in a Time of Crisis*, 28 GA. ST. U. L. REV. 1121, 1126–30 (2012) (describing the infrequent use of clemency throughout the states, despite widely-held conceptions that clemency is a viable means of post-conviction relief).

24 Drinan, *supra* note 23, at 1130 (quoting Ohio Adult Parole Auth. v. Woodard, 523 U.S. 272, 280 (1998)).

25 Allegra M. McLeod, *Envisioning Abolition Democracy*, 132 HARV. L. REV. 1613, 1616 (2019) ("Whereas reformist efforts aim to redress extreme abuse or dysfunction in the criminal process without further destabilizing existing legal and social systems — often by trading reduced severity for certain 'nonviolent offenders' in exchange for increased punitiveness toward others — abolitionist measures recognize justice as attainable only through a more thorough transformation of our political, social, and economic lives."); Roberts, *supra* note 7, at 105–06; *see also* Matthew Clair & Amanda Woog, *Courts and the Abolition Movement*, 110 CALIF. L. REV. 1, 2–3 (2022) (arguing for the abolition of criminal courts).

26 Kaba & Duda, *supra* note 10.

27 Dan Berger et al., *What Abolitionists Do*, JACOBIN (Aug. 24, 2017), https://www.jacobinmag.com/2017/08/prison-abolition-reform-mass-incarceration.

28 Roberts, *supra* note 7.

Reconstruction Amendments and then wields those Amendments as instruments of prison abolition.[29] Abolition constitutionalism, Professor Roberts contends, is not merely a means to an end but rather, a method of holding the Constitution to a "higher standard of justice."[30]

This Note employs Professor Roberts's legal framework, employing the Fourteenth Amendment's Due Process Clause as an abolitionist tool to revitalize clemency. I propose using a model taken from other post-conviction contexts, in which state-created rights serve as the basis for protection under the Constitution of the United States. According to this model, courts should require that states, having created mechanisms for clemency, provide adequate safeguards to their proceedings.

This Note thus aims to provide the abolition constitutionalist a guide to revitalizing clemency, in the context of both theory and practice. In Part I, I examine the abolitionist framework, discussing how abolitionists situate themselves in history and imagine a radical new future. I then describe the ways in which clemency may further the goals of abolition. In response to the underuse of clemency, I discuss the ways abolitionists conceptualize reform, highlighting Professor Roberts's abolition constitutionalism framework. In Part II, I then analyze how abolition constitutionalism may be applied to clemency through the Due Process Clause. I first consider the Supreme Court's existing jurisprudence, which has rejected the principle of due process protections in clemency proceedings. While I argue that there may be room for expansion of the Court's logic, I ultimately propose that advocates use the state-created rights model of other post-conviction cases.

Of course, this legal argument is but an incremental step. It does not ensure the granting of clemency, nor does it ensure that clemency decision-makers will use their discretion intelligently. But where the clemency process is more regular, clemency grants likely would be too.[31] Clemency would be revitalized by forcing states to abide by their constitutional or statutory procedures. A revitalized clemency system, in turn, would lead to greater emancipation of incarcerated individuals across the country. Though incremental, this strategy would be one step toward the horizon of abolition.

29 *Id.* at 105.

30 *Id.* at 109.

31 *See 50-State Comparison: Pardon Policy & Practice*, *supra* note 21 (demonstrating that, in states where clemency proceedings are more regular, grants are generally more frequent).

## I. CLEMENCY UNDER AN ABOLITIONIST FRAMEWORK

### A. *Abolition: From Slavery to the Modern Criminal Legal System*

Prison abolitionists relate the prison industrial complex—the "surveillance, policing, and incarceration" apparatus of the state[32]—to the racist origins of criminal punishment.[33] Many believe that chattel slavery is the origin of both police and incarceration, arguing that the criminal legal system in the United States serves to perpetuate the subjugation of Black people.[34] The abolition movement cannot be understood without acknowledging how the modern criminal legal system perpetuates the white supremacist ideologies of America's past.

Criminal punishment and slavery have a long history of entanglement. Slave patrols—who suppressed education of enslaved people, prevented rebellion, and hunted down runaways—were among the United States' first police forces.[35] While slave patrols were abolished with chattel slavery, they were immediately replaced by a professionalized system of policing.[36] As a result, the subjugation of Black people shifted from slavery to policing and incarceration. The Thirteenth Amendment, rather than eradicating racial subordination in all its forms, authorized slavery "as a punishment for crime whereof the party shall have been duly convicted" ("the Punishment Clause").[37] After the putative abolition of slavery, the criminal legal system stepped in to "legally restrict the possibilities of freedom for newly released slaves."[38] Criminal punishment became "a chief way the southern states nullified the Reconstruction Amendments, reinstated the white power regime, and made free [B]lacks vulnerable to labor exploitation and disenfranchisement."[39]

Southern states attempted to flout the Reconstruction Amendments through the passage of Black Codes, which resembled modified versions of the original slave codes.[40] The Black Codes created

32 Roberts, *supra* note 7, at 6.
33 *Id.* at 19.
34 *Id.* at 19–20.
35 *Id.* at 20–21; ALEX S. VITALE, THE END OF POLICING 45–46 (2017).
36 VITALE, *supra* note 35, at 47.
37 U.S. CONST. amend XIII, § 1; ANGELA Y. DAVIS, ARE PRISONS OBSOLETE? 28–29 (Greg Ruggiero ed., Publishers Group Canada 2003).
38 DAVIS, *supra* note 37, at 29.
39 Roberts, *supra* note 7, at 30.
40 *Id.*

a new means of social control by prohibiting "freedom of movement, contract, and family life."[41] As the Supreme Court described, "Among these laws' provisions were draconian fines for violating broad proscriptions on 'vagrancy' and other dubious offenses."[42] Police used these charges to force Black people into a system of peonage[43] or into "a cruel and inhuman criminal justice system whose punishments often resulted in death."[44] Once incarcerated, Black people became a part of the convict lease system, which functioned as a reinstitution of slavery.[45] A conviction for something as minor as vagrancy could thus be punished "by incarceration and forced labor, sometimes on the very plantations that previously had thrived on slave labor."[46]

The modern criminal legal system also came to embody a form of racial disenfranchisement. A new racial caste was born with the exponential imprisonment of people of color in the twentieth and twenty-first centuries.[47] This era saw a shift from Black Codes to allegedly race-neutral laws that, in reality, targeted communities of color. As politicians slowly tore down the safety net of social welfare services, these social programs were replaced by increased policing of communities of color.[48] Over time, the association between Black people and crime was only strengthened.[49] For example, by the Reagan era, the "crack epidemic" was largely attributed to Black communities and was disparately criminalized.[50] The resulting War on Drugs saw the largest increase in the incarceration of people of color in the United States.[51]

Today's mass incarceration reflects the discriminatory underpinnings of the criminal legal system. The criminal legal system

41 *Id.*

42 Timbs v. Indiana, 139 S. Ct. 682, 688 (2019).

43 Roberts, *supra* note 7, at 31–32.

44 Vitale, *supra* note 35, at 47.

45 Davis, *supra* note 37, at 29.

46 *Id.*

47 Michelle Alexander, The New Jim Crow: Mass Incarceration in the Age of Colorblindness 73 (10th Anniversary ed., New Press 2020) (2010).

48 Roberts, *supra* note 7, at 15; Mariame Kaba, *A Jailbreak of the Imagination: Seeing Prisons for What They Are and Demanding Transformation, in* We Do This 'Til We Free Us: Abolitionist Organizing and Transforming Justice 37, 39 (2021) ("In truth, the prison system did not see its most massive population surge until the 1980s, when deindustrialization created the need for dungeon economies to replace lost jobs, and a backlash against the Civil Rights Movement and other social gains by Black people propelled heightened efforts at social control.").

49 Roberts, *supra* note 7, at 16.

50 *See* Alexander, *supra* note 47, at 6–7, 66, 110.

51 *Id.* at 76; *see also* Roberts, *supra* note 7, at 13.

functions to "maintain forms of racial subordination that originated in the institution of slavery."[52] Across the country, Black Americans are incarcerated at a rate nearly five times higher than the rate of white Americans.[53] Additionally, Black people are subjected to harsher sentences, representing 46 percent of incarcerated individuals serving life sentences and 55 percent of those serving life without parole sentences.[54] Researchers have determined that these disparities are not the result of differing rates of criminal offenses but of a system that both polices and punishes Black people more harshly than white people.[55]

Confronted with these striking disparities, abolitionists contend that the criminal legal system accomplishes precisely what it was intended to do: extend racial subordination past the abolition of chattel slavery.[56] The prison abolition movement thus sees itself as "the heir[] to a freedom movement that antislavery abolitionists began."[57] Abolitionists argue that the goal of their ancestors can only be achieved by eradicating racial subordination in the United States, in all its forms.[58] As such, abolition is the only answer.[59]

The work of prison abolition contains two necessary steps: (1) the decarceration of existing prisons; and (2) the creation of new social and

52 Roberts, *supra* note 7, at 4.

53 ASHLEY NELLIS, THE SENTENCING PROJECT, THE COLOR OF JUSTICE: RACIAL AND ETHNIC DISPARITY IN STATE PRISONS 6 (2021), https://www.sentencingproject.org/wp-content/uploads/2016/06/The-Color-of-Justice-Racial-and-Ethnic-Disparity-in-State-Prisons.pdf.

54 ASHLEY NELLIS, THE SENTENCING PROJECT, NO END IN SIGHT: AMERICA'S ENDURING RELIANCE ON LIFE IMPRISONMENT 18, 29 (2021), https://www.sentencingproject.org/wp-content/uploads/2021/02/No-End-in-Sight-Americas-Enduring-Reliance-on-Life-Imprisonment.pdf.

55 *See* NELLIS, THE COLOR OF JUSTICE, *supra* note 53, at 12.

56 *See Mission & Vision*, *supra* note 9; *see also* KABA, *supra* note 15, at 40–41.

57 Roberts, *supra* note 7, at 48.

58 *See id.* at 49; DAVIS, *supra* note 37, at 37 ("Given the parallels between the prison and slavery, a productive exercise might consist in speculating about what the present might look like if slavery or its successor, the convict lease system, had not been abolished.").

59 *See* DAVIS, *supra* note 37, at 20 ("As important as some reforms may be the elimination of sexual abuse and medical neglect in women's prison, for example frameworks that rely exclusively on reforms help to produce the stultifying idea that nothing lies beyond the prison. Debates about strategies of decarceration, which should be the focal point of our conversations on the prison crisis, tend to be marginalized when reform takes the center stage. The most immediate question today is how to prevent the further expansion of prison populations and how to bring as many imprisoned women and men as possible back into what prisoners call 'the free world.'").

political orders to prevent harm from occurring in the first place.[60] In considering the first step, abolitionists often focus on decriminalization and the prevention of incarceration.[61] They also discuss the structural ways to reduce funding for the prison industrial complex.[62] Yet the abolitionist project must also strive to improve the current environment in prisons and release the incarcerated.[63] To imagine a world in which we are all free, abolitionists must seek to free those they can.

### B. *Clemency as an Abolitionist Mechanism*

One method of releasing individuals from prison is clemency, often the only source of hope for those facing lengthy or lifelong terms of incarceration. Clemency, therefore, should be reimagined as an abolitionist mechanism.

Consistent with principles of abolition, clemency recognizes justice and mercy above punishment. Clemency may be used to remediate the harms of the criminal legal system, without bolstering criminal punishment. Inevitably, clemency is imperfect. Some acts of clemency can serve to reinforce the racist regimes that abolitionists seek to dismantle, while other acts of clemency may be so offensive to the public as to undermine their desire to release incarcerated individuals. Yet abolition mandates a belief that *no one* belongs in a cage, even those who commit racist, or other terrible, offenses.[64] Abolition contends that these acts are the result of larger social ills that cannot be bandaged with incarceration.[65] Clemency, instead, provides a way to escape the pattern of incarceration and release people from prison.

60 *See* Roberts, *supra* note 7, at 43–44.

61 *See* Davis, *supra* note 37, at 108–10 (discussing the decriminalization of drug use and sex work).

62 *See id.* at 103–04.

63 *Id.*; Roberts, *supra* note 7, at 118.

64 *See* Amber Rose Howard, *Holding True to the Abolitionist Framework*, Mundo Obrero, Workers World (Apr. 30, 2020), https://www.workers.org/2020/04/48065/ ("We don't believe that anybody belongs in a cage. And I think we have to hold true to that sort of abolitionist framework. Because when we start to say that some people belong in the cage, then that makes room for many people to be put in cages, and that's why we have an incarceration crisis on our hands right now.").

65 *See*, Mariame Kaba et al., *Uncaging Humanity: Rethinking Accountability in the Age of Abolition*, Bitchmedia (Dec. 8, 2020), https://www.bitchmedia.org/article/mariame-kaba-josie-duffy-rice-rethinking-accountability-abolition ("Inevitable harms are going to happen, but you should have more tools to respond to them before they escalate . . . . It's my belief that [locking people up in cages] won't actually transform the harms that have occurred.").

Clemency is recognized federally in Article II of the United States Constitution[66] and every state vests its clemency power in either the governor or another executive body.[67] Clemency is often characterized as an act of grace.[68] Deeply rooted in American history,[69] however, clemency also traditionally serves as a "justice-enhancing" mechanism.[70] The framers of the Constitution characterized clemency as a means of dispensing mercy and avoiding unnecessary cruelty.[71] They further recognized that there might be instances where justice is not served by the legal system and punishment would be cruel.[72] In such cases, clemency is necessary to ensure justice is realized. Specific acts of clemency are thus a "check on the judiciary," rectifying its mistakes.[73] In an imperfect or unjust legal system, clemency can correct errors and step in where other remedies are unavailable to individual defendants.[74]

Clemency may also be used to "draw[] attention to *systemic* failings in the justice system" and "remedy gross sentencing disparities among similarly culpable defendants."[75] For example, in 2003, Illinois Governor George Ryan commuted the capital sentences of all individuals on death row after determining that there were serious breakdowns in the state's criminal process.[76] Similarly, clemency may be used to address struggling indigent defense systems that lack adequate staffing and resources to effectively represent indigent criminal defendants.[77] Clemency may also be used to address the overcrowding of prisons,[78] an especially pressing need during a deadly pandemic.[79]

66 U.S. CONST. art. II, § 2, cl. 1.

67 Drinan, *supra* note 23, at 1126–27.

68 Daniel T. Kobil, *Should Mercy Have a Place in Clemency Decisions?*, *in* FORGIVENESS, MERCY, AND CLEMENCY 36, 39 (Austin Sarat & Nasser Hussain eds., 2007) (2006).

69 Herrera v. Collins, 506 U.S. 390, 411–12 (1993).

70 *See* Kobil, *Quality of Mercy Strained*, *supra* note 16, at 591–92.

71 *Id.*

72 *Id.* at 591.

73 Drinan, *supra* note 23, at 1123.

74 *Id.* at 1127.

75 *Id.* at 1127 (emphasis added).

76 *Id.* at 1132.

77 *See id.* at 1133–34, 1138.

78 *Id.* at 1135, 1138–40.

79 Prisons have been incubators of disease during the COVID-19 pandemic. Incarcerated individuals were already especially vulnerable, more likely to be older, or have chronic illnesses. Weihua Li & Nicole Lewis, *This Chart Shows Why the Prison Population is So Vulnerable to COVID-19*, THE MARSHALL PROJECT (Mar. 19, 2020), https://www.themarshallproject.org/2020/03/19/this-chart-shows-why-the-prison-population-is-so-vulnerable-to-covid-19. With "dense facilities where social distancing is impossible, sanitation is poor, and medical resources

Legislatures, the judiciary, and executives often invoke clemency as a reason to deny relief to certain individuals.[80] In the 1993 case, *Herrera v. Collins*, the Supreme Court refused federal habeas corpus relief to an individual on death row who discovered evidence that could prove his actual innocence.[81] Despite the potential that an innocent man would be executed, the Court denied the defendant relief on procedural grounds.[82] In response to the argument that this left the defendant no viable relief, the Court asserted that clemency remained an appropriate remedy for any injustice that took place in the defendant's case.[83] In doing so, the Court characterized clemency as the "fail safe" of our criminal legal system.[84] Because clemency would always be a possible avenue for relief, it was unnecessary for the Court to provide criminal defendants greater protections. The Court has repeatedly articulated this function of clemency.[85]

In addition to its corrective role, clemency may redress harms to specific communities. For example, scholars have proposed that Black people serving lengthy sentences of incarceration should be considered

---

are extremely limited," the rapid spread of COVID-19 and its disastrous effects were all but inevitable. Emily Widra & Dylan Hayre, ACLU Smart Justice & Prison Policy Initiative, Failing Grades: States' Responses to COVID-19 in Jails & Prisons (2020), https://www.aclu.org/sites/default/files/field_document/failing_grades_states_responses_to_covid-19_in_jails_prisons_063020.pdf. By June 2020, the COVID-19 case rate was five and a half times higher for incarcerated individuals than for the general United States population. Brendan Saloner et al., *COVID-19 Cases and Deaths in Federal and State Prisons*, 324 JAMA, no. 6, 602–03 (2020), https://jamanetwork.com/journals/jama/fullarticle/2768249. The death rate, too, was three times higher for incarcerated individuals than the expected rate for the U.S. population. *Id.* (adjusting the death rate to match the U.S. population's age and sex distribution).

80 *See* Alan Prendergast, *Clemency for These Six Prisoners Could Save Millions and Serve Justice – So Why Won't Governor Ritter Try it?*, Westword (Oct. 22, 2009), https://www.westword.com/news/clemency-for-these-six-prisoners-could-save-millions-and-serve-justice-so-why-wont-governor-ritter-try-it-5105776 (describing activists' efforts to get juvenile life without parole laws changed, who were told by legislators that clemency was a viable alternative, despite its underutilization).

81 506 U.S. at 393.

82 *Id.* at 416–17.

83 *Id.* at 411–12.

84 *Id.* at 415.

85 Gregg v. Georgia, 428 U.S. 153, 168 (1976) ("In cases in which the death sentence is affirmed there remains the possibility of executive clemency."); Cavazos v. Smith, 565 U.S. 1, 8–9 (2011) ("It is said that Smith, who already has served years in prison, has been punished enough, and that she poses no danger to society. These or other considerations perhaps would be grounds to seek clemency, a prerogative granted to executive authorities to help ensure that justice is tempered by mercy.").

first for clemency, as a means of correcting the over-punishment of Black communities.[86] Clemency has been advocated as a means of redressing the harms of the criminalization of marijuana, now legal in many states.[87] Additionally, activists advocate for mass clemency for survivors of domestic and sexual abuse.[88] Clemency may also be used to acknowledge the criminal legal system's perpetuation of racial subordination after slavery by providing mercy as a form of reparations.

Clemency, therefore, can effectuate abolitionist goals to recognize the harms the legal system has caused. Moreover, it does so while embodying the values underlying abolition. As Professors Nasser Hussain and Austin Sarat write:

> A life lived as if the law were one's only guiding principle would be as much of a tragedy or a farce as a triumph of good over evil. To humanize the world in which we live, to make it possible for people to thrive and survive, the law needs the company of other virtues, such as mercy.[89]

As do abolitionists, clemency refocuses the narrative of crime and incarceration on the humanity of every individual. Similar to abolition, clemency strengthens communities by incorporating the benefits of forgiveness.[90] And as abolitionists argue for accountability without punishment,[91] clemency also serves as a mechanism for redressing harm

86 Antje du Bois-Pedain, *Mass Incarceration, Penal Moderation, and Black Prisoners Serving Very Long Sentences: The Case for a Targeted Clemency Program*, 24 NEW CRIM. L. REV. 655, 687–88 (2021).

87 *See* Lexi Lonas, *Warren Presses Biden on Pardons for Nonviolent Cannabis Convictions*, THE HILL (Nov. 10, 2021), https://thehill.com/homenews/senate/580998-warren-presses-biden-on-pardons-for-federal-nonviolent-cannabis-convictions/. Some states have successfully adopted such programs. *See 50-State Comparison: Marijuana Legalization, Decriminalization, Expungement, and Clemency*, RESTORATION OF RTS. PROJECT, https://ccresourcecenter.org/state-restoration-profiles/50-state-comparison-marijuana-legalization-expungement/ (last updated Dec. 2022) (detailing each state's laws regarding marijuana, including states' adoptions of pardon programs for marijuana convictions).

88 Victoria Law, *Why Activists Are Calling on Kathy Hochul to "Free Them All,"* THE NATION (Oct. 15, 2021), https://www.thenation.com/article/society/domestic-violence-clemency-hochul/.

89 Nasser Hussain & Austin Sarat, *Toward New Theoretical Perspectives on Forgiveness, Mercy, and Clemency: An Introduction*, *in* FORGIVENESS, MERCY, AND CLEMENCY 1 (Austin Sarat & Nasser Hussain eds., 2007) (2006).

90 *Id.* at 9 (discussing "studies that have shown a link between the practice of forgiveness and better mental and physical well-being" and the notion that mercy shows "strength as a community").

91 *See* Kaba et al., *supra* note 65 (describing the abolitionist vision of accountability as a process through which individuals recognize the harms they have created,

without punishment.

While clemency is a valuable abolitionist device, it is not without problems. Clemency has been used to accommodate racist behavior. For example, Presidents Abraham Lincoln and Andrew Johnson issued amnesty to those who had fought alongside the Confederate Army in the Civil War.[92] Governor Greg Abbott of Texas recently suggested that he would grant clemency to nineteen police officers who were indicted for brutality against the civilians protesting the murder of George Floyd.[93] Clemency has also been used by executives for personal gain. President Bill Clinton's pardon of Marc Rich,[94] and President George W. Bush's commutation of Scooter Libby[95] were both scandalous examples of self-interested clemency grants.[96] More recently, President Donald J. Trump issued a series of pardons for his allies in his final hours as president.[97] Such acts of clemency, used to project a symbolic political stance or serve oneself, lead some critics to believe that clemency vests too much power and unfettered discretion with the executive.[98]

---

try to redress those harms, and reflect on where those harms originated within themselves).

92 Kobil, *Quality of Mercy Strained*, *supra* note 16, at 593.

93 Acacia Coronado, *Abbott Floats Clemency for Indicted Austin Police Officers*, AP News (Feb. 23, 2022), https://apnews.com/article/police-shootings-austin-texas-george-floyd-31fd91f81078fedf3ca9efb04dfc32d6; Acacia Coronado et al., *Sources: 19 Austin Police Officers Indicted in Protest Probe*, AP News (Feb. 18, 2022), https://apnews.com/article/business-shootings-austin-texas-884a81a9663391e79b0ac45c7ae463cd.

94 Marc Rich was a fugitive commodities trader indicted on fifty counts of tax evasion, fraud, and racketeering. David Johnston, *U.S. Beginning Criminal Inquiry in Pardon of Rich*, N.Y. Times (Feb. 15, 2001), https://www.nytimes.com/2001/02/15/us/us-is-beginning-criminal-inquiry-in-pardon-of-rich.html?searchResultPosition=5. Rich's wife had contributed substantial sums of money to Democratic causes, including President Clinton's presidential library foundation. *Id.* When President Clinton pardoned Rich on his last day in office, it raised serious concerns that the pardon had been bought, resulting in a federal criminal investigation. *Id.*

95 President Bush commuted the sentence of Scooter Libby, Vice President Dick Cheney's Chief of Staff, "hours after a panel of judges ruled that Mr. Libby . . . could not put off serving his sentence while he appealed his conviction." Scott Shane & Neil A. Lewis, *Bush Commutes Libby Sentence, Saying 30 Months 'Is Excessive,'* N.Y. Times (July 3, 2007), https://www.nytimes.com/2007/07/03/washington/03libby.html. Libby was convicted of lying to the FBI about the leaking of the identity of a CIA agent whose husband had criticized the Bush administration. *Id.* Opponents of the commutation said that it demonstrated Bush's "lack of accountability and respect for the law." *Id.*

96 Barkow & Osler, *supra* note 17, at 6 n.21, 12.

97 *Here Are Some of the People Trump Pardoned*, N.Y. Times (Jan. 26, 2021), https://www.nytimes.com/article/who-did-trump-pardon.html.

98 *See* Kobil, *Quality of Mercy Strained*, *supra* note 16, at 569, 596 (arguing that clemency

While executives may wield the clemency power with abandon, the reverse also occurs: many executives have become wary of using their clemency powers. Clemency has become a form of "political suicide,"[99] largely due to the events surrounding the 1988 presidential election. In 1986, a Massachusetts incarcerated individual named Willie Horton was released on furlough and then repeatedly raped a woman and assaulted her fiancé.[100] When former Governor Michael Dukakis ran for President, his opponent George H.W. Bush relentlessly attacked Governor Dukakis for being weak on crime.[101] President Bush recounted the Horton episode during speeches, blaming Governor Dukakis.[102] A conservative PAC later released an ad fearmongering around the Horton case.[103] The scare tactics worked: Governor Dukakis lost the election.[104] Though the tactics used by President Bush were viewed as racist dog-whistling,[105] discretionary release programs, including furlough and clemency, became "political landmines."[106]

In response, executives avoid clemency and instead choose to keep people incarcerated, where the alleged dangers of recidivism are lessened. Abolition, however, argues that crime, and thus recidivism, are the result of societal ills that must be corrected, rather than bandaged with incarceration.[107] Abolition further argues that all people, even those without political alliances, deserve to be free. To hold that some individuals deserve to be incarcerated would legitimize the entire carceral system.[108] The answer, according to abolition, is not to withhold

should be wrested from the control of federal and state executives and instead controlled by consistent and principled standards).

99 Drinan, *supra* note 23, at 1141.

100 Notterman, *supra* note 23, at 6.

101 Peter Baker, *Bush Made Willie Horton an Issue in 1988, and the Racial Scars Are Still Fresh*, N.Y. TIMES (Dec. 3, 2018), https://www.nytimes.com/2018/12/03/us/politics/bush-willie-horton.html.

102 *Id.*

103 *Id.*

104 Rachel Withers, *George H.W. Bush's "Willie Horton" Ad Will Always be the Reference Point for Dog-Whistle Racism*, VOX (Dec. 1, 2018), https://www.vox.com/2018/12/1/18121221/george-hw-bush-willie-horton-dog-whistle-politics.

105 *Id.* at 3.

106 Notterman, *supra* note 23, at 6.

107 *See* Kaba et al., *supra* note 65 ("Inevitable harms are going to happen, but you should have more tools to respond to them before they escalate . . . . It's my belief that [locking people up in cages] won't actually transform the harms that have occurred."); KABA, *So You're Thinking About Becoming an Abolitionist*, *in* WE DO THIS 'TIL WE FREE US, *supra* note 15, at 25–26; Kaba, *supra* note 6.

108 *See* Kaba et al., *supra* note 65; *see also* Kaba & Duda, *supra* note 10 ("Somebody wrote an article a couple of years ago saying there is no contradiction being an abolitionist

clemency from certain individuals or certain offenses but to make it more broadly accessible and to release more people from prison.

The deeper issue is, therefore, the declining use of clemency across the country. Despite the invocation of clemency as a viable alternative remedy where others have been exhausted, clemency grants have become extremely rare since the mid-twentieth century.[109] Even in states that have retained the death penalty, clemency is rarely used.[110] Fewer than 300 death sentences have been commuted since 1976,[111] compared to over 1,500 executions that have taken place.[112] The Restoration of Rights Project determined that the vast majority of states grant pardons sparingly, infrequently, or rarely.[113] Similarly, the Project found that most states have clemency processes that are irregular, at best.[114] Despite a few instances,[115] calls for large-scale grants of clemency during the pandemic went unheeded. The systemic process of releasing large numbers of incarcerated people through clemency is failing.[116] As Professors Rachel E. Barkow and Mark Osler write, "[I]nstead of releasing steam regularly, the system has burst. That herky-jerky reaction does not reflect a healthy, ongoing mechanism."[117]

### C. *Non-Reformist Reforms and Abolition Constitutionalism*

If clemency is to serve as a valid abolitionist mechanism, it must be revitalized. Academics and activists have suggested structural and procedural changes in the federal and state decision-making processes to make clemency more regular.[118] Abolition, however, mandates that

---

and calling for the prosecution and more importantly the imprisonment of killer cops. That's bonkers . . . . [I think we need] to help people understand that there are, in fact, some things that are just not PIC abolition.").

109 Drinan, *supra* note 23, at 1127.

110 *Id.*

111 *List of Clemencies Since 1976*, DEATH PENALTY INFO. CTR., https://deathpenaltyinfo.org/facts-and-research/clemency/list-of-clemencies-since-1976 (last visited Apr. 4, 2022).

112 *Facts About the Death Penalty*, DEATH PENALTY INFO. CTR. (last updated Nov. 30, 2022), https://documents.deathpenaltyinfo.org/pdf/FactSheet.pdf.

113 *50-State Comparison: Pardon Policy & Practice*, *supra* note 21.

114 *Id.*

115 *See supra* note 19.

116 Barkow & Osler, *supra* note 17, at 12.

117 *Id.*

118 Professors Barkow and Osler, for example, advocate for the creation of a clemency commission—outside of the Department of Justice—with representation from prosecutors that would utilize data to create uniform standards of clemency and evaluate the risks of release. *Id.* at 1. Professor Daniel T. Kobil argues that the

changes made to the existing criminal legal system do not legitimize the carceral state.[119] "Reformist reforms," as abolitionists call them, stereotypically include efforts like the creation of mandatory minimum sentencing, which sought to address problems with indeterminate sentencing and instead resulted in higher rates of incarceration.[120] In the clemency context, these reformist reforms might include electronic monitoring as a condition of release or the use of sentencing guidelines to determine eligibility. Each of these reforms legitimizes state control and punishment, while failing to redress harm through meaningful accountability.

Abolitionists, therefore, advocate for "non-reformist-reforms."[121] Kaba encourages abolitionists to ask whether a proposed reform will make it harder to dismantle the carceral system or to create new, non-punitive alternatives to the carceral state.[122] If the answer to either of these questions is "yes," then the reform is "reformist" and not in line with abolitionist goals.[123] In other words, non-reformist reforms are those that "shrink the state's capacity for violence."[124]

The concept of non-reformist reforms appears contradictory to the legal system, putting abolitionist advocates in a challenging position. Indeed, some have encouraged abolishing criminal courts entirely.[125] Others argue that constitutional law legitimizes the violence of the

---

federal clemency process should be bifurcated, with the executive making the ultimate decision, but with guidance from a board of neutral and diverse experts. Kobil, *Quality of Mercy Strained*, *supra* note 16, at 622–24. He also suggests that such a board recommend clemency for individuals for whom there is substantial doubt of guilt; individuals with diminished mental capacity; individuals who received sentences disproportionate to similarly-situated defendants; individuals with special circumstances for whom the sentence is severe; individuals convicted not out of desert but because of some form of discrimination; individuals who committed a crime out of necessity, coercion, or adherence to moral principles; and individuals who have sufficiently suffered during their punishment. *Id.* at 624–33.

119 *See Reformist Reforms vs. Abolitionist Steps to End Imprisonment*, CRITICAL RESISTANCE (2021), https://criticalresistance.org/wp-content/uploads/2021/08/CR_abolitioniststeps_antiexpansion_2021_eng.pdf.

120 *See* Berger et al., *supra* note 27.

121 Kaba & Duda, *supra* note 10, at 11.

122 *See id.*

123 *See id. See generally* MARIAME KABA & ERICA R. MEINERS, *Arresting the Carceral State, in* WE DO THIS 'TIL WE FREE US 76, 77–78 (2021) (discussing reforms to policing that abolitionists should oppose because they work against the dismantlement of policing).

124 Berger et al., *supra* note 27.

125 Clair & Woog, *supra* note 25, at 1.

state, with some pointing to the Thirteenth Amendment's Punishment Clause as inapposite to abolitionist goals.[126] Yet this contradiction is not complete: there is room for abolition in our legal frameworks.[127]

Professor Roberts presents a novel and revolutionary method of imagining constitutional law in harmony with abolition. She argues that antislavery abolitionists interpreted the federal Constitution as a call to democracy and freedom.[128] Such a constitutional interpretation can be utilized to achieve modern abolition's goals.[129] Professor Roberts writes:

> The tension between recognizing the relentless antiblack violence of constitutional doctrine, on one hand, and demanding the legal recognition of black people's freedom and equal citizenship, on the other, animates this [argument] as it has long animated abolitionist debates on the U.S. Constitution. Despite my disgust with the perpetual defense of oppression in the name of constitutional principles, I am inspired by the possibility of an abolition constitutionalism emerging from the struggle to demolish prisons and create a society where they are obsolete.[130]

With this inspiration in mind, Professor Roberts charts the first substantial analysis of the Constitution as an abolitionist instrument.[131]

This analysis depends in large part upon the historical relationship between the Constitution's Reconstruction Amendments and antislavery abolitionists, a relationship largely ignored by legal historians.[132] One scholar, Randy E. Barnett, attempted to correct the distancing between abolitionists and the Constitution, what he described as "revisionist history."[133] According to Professor Barnett, antislavery abolitionists' interpretation of the Fourteenth Amendment provides strong insight into the amendment's original meaning.[134]

The Reconstruction Amendments were particularly significant because they marked a departure from America's original

126 Roberts, *supra* note 7, at 8, 66.

127 *See, e.g.*, Jamelia Morgan, *Lawyering for Abolitionist Movements*, 53 Conn. L. Rev. 605, 606, 610 (2021) (describing and proposing frameworks for understanding lawyering in support of abolitionist movements).

128 Roberts, *supra* note 7, at 8.

129 *Id.* at 9.

130 *Id.* at 10.

131 *See id.* at 8–9.

132 *Id.* at 50–51.

133 Randy E. Barnett, *Whence Comes Section One? The Abolitionist Origins of the Fourteenth Amendment*, 3 J. Legal Analysis 165, 165 (2011).

134 *Id.*

constitutionalism, which perceived slavery as entirely legal.[135] The Supreme Court's controversial proslavery decision, *Dred Scott v. Sandford*, held, "We think [Black people] . . . are not included, and were not intended to be included, under the word 'citizens' in the Constitution, and can therefore claim none of the rights and privileges which that instrument provides for and secures to citizens of the United States."[136] The decision further asserted that the original Constitution viewed Black people as an "inferior class of beings" subject to "the dominant race."[137] Thus, the Court confirmed that, under its interpretation of the original Constitution, Black people had no rights and were not entitled to freedom.

Antebellum antislavery abolitionists sought to imagine a constitution that could bestow rights and freedom onto Black people. "Abolitionists fought for the amended Constitution to embody their radical constitutional vision and to install a 'second founding' of the nation built on equal citizenship and freedom of labor."[138] Their intentions are evident in speeches and writings preceding the adoption of the Reconstruction Amendments. The constitutionalism embraced by these abolitionists came to include each of the concepts within Section One of the Fourteenth Amendment, which guarantees that no person may be deprived of life, liberty, or property without due process of law and guarantees the equal protection of the law.[139]

One prominent antislavery abolitionist, Lysander Spooner, persuasively argued that the Constitution should be read, not according to the intentions of those who signed on to it but according to its public meaning at the time.[140] Other abolitionists similarly argued that the Constitution's support of slavery was a misinterpretation guided by the supposed intentions of its framers, not by its public meaning.[141] Under this umbrella of the interpretative method, abolitionists at the time generally agreed that the Fifth Amendment protected enslaved people and thus prevented their enslavement without due process of law.[142] This position was supported, for example, by John Bingham, who later served as a member of the "Joint Committee of Fifteen on Reconstruction" in

135 Roberts, *supra* note 7, at 53.
136 *Id.;* 60 U.S. 393, 404 (1857).
137 60 U.S. at 405.
138 Roberts, *supra* note 7, at 54.
139 Barnett, *supra* note 133, at 168–69.
140 *Id.* at 199–200.
141 *Id.* at 195.
142 *Id.* at 191.

the Thirty-Ninth Congress.[143]

The central debate among antislavery abolitionists centered around whether the Due Process Clause's prohibition of slavery applied to the existing states.[144] When the Fourteenth Amendment was later ratified,[145] it resolved the debate, expressly applying due process to the states.[146] The extension of the Fourteenth Amendment, and the guarantees it provided, were directly influenced by the antislavery abolitionists.[147] The Fourteenth Amendment, therefore, must be read alongside the abolitionists' radical vision of freedom and democracy for Black Americans.

Contrary to popular belief, the abolitionists' interpretation of the Reconstruction Amendments was not necessarily inconsistent with the Thirteenth Amendment's Punishment Clause.[148] Rather, Professor Roberts posits that the Thirteenth Amendment was originally understood to permit a very narrow exception to the continued use of hard labor for those convicted of crimes.[149] She maintains that the abolitionists who influenced the Thirteenth Amendment "vehemently objected" to any other interpretation.[150]

Modern abolitionists can and should adopt the interpretations of the Reconstruction Amendments envisioned by the antislavery abolitionists.[151] Professor Roberts posits three reasons that this abolition constitutionalism framework is useful.[152] First, this framework "embraces the Reconstruction Amendments' constitutional imperatives to end enslaving systems, provide equal protection against state and private violence, and install full citizenship."[153] Second, using abolitionist thinking allows us to evaluate the role slavery and racial subjugation continues to have on modern institutions.[154] Finally, the antislavery abolition movement, like that of prison abolition, envisioned

143 *Id.* at 246–47, 250. The Committee went on to draft the Fourteenth Amendment. *The Civil War: The Senate's Story*, U.S SENATE, https://www.senate.gov/artandhistory/history/common/generic/JointCommitteeonReconstruction.htm (last visited Apr. 5, 2021).

144 Barnett, *supra* note 133, at 191.

145 Roberts, *supra* note 7, at 63.

146 U.S. CONST. amend. XIV.

147 Roberts, *supra* note 7, at 63; Barnett, *supra* note 133, at 169.

148 Roberts, *supra* note 7, at 67–70.

149 *Id.*

150 *Id.* at 69.

151 *Id.* at 70.

152 *Id.* at 70–71.

153 *Id.*

154 *Id.* at 71.

a democracy in which Black people would be able to participate as full citizens.[155]

While acknowledging that the Supreme Court has taken an anti-abolitionist stance,[156] Professor Roberts argues that abolitionists may use this alternative constitutionalism in their movement to abolish prisons.[157] She writes, "The Reconstruction Amendments impose a constitutional duty on the Court to abolish systems that reinstate slavery, to protect citizens equally from private and state incursions on their basic freedoms, and to support democratic citizenship for everyone."[158]

Thus, while abolition and the Constitution may sometimes be in conflict, Professor Roberts establishes a constitutional framework through which they can coexist. This Note demonstrates how abolition constitutionalism is one non-reformist reform that may be used in the context of clemency. It argues for the assertion of rights under the Reconstruction Amendments, specifically the enforcement of clemency procedures under the Due Process Clause. There is a historical basis for the utilization of Reconstruction Amendment rights in abolitionist movements: incarcerated individuals have successfully used the Reconstruction Amendments to challenge the conditions of their confinement.[159] They may seek to do the same with clemency.

Because the interpretation of the Constitution as an abolitionist device is novel, some may be suspect of its usefulness. But to instead view the Constitution through the narrow view of its signatories and the Punishment Clause would deny the important role abolitionists played in the creation of the Reconstruction Amendments.[160] Additionally, by reimagining the Constitution as a tool for establishing freedom, courts may serve a valuable abolitionist function, rather than simply reinforcing racial subjugation.[161] Rights-based challenges do not distract from the overall abolitionist approach[162] but instead *supplement* the movement's overarching goals of dismantling the system by addressing the immediate needs of incarcerated individuals.

Abolition does not require that advocates forego viable constitutional challenges in lieu of other avenues but rather, recognizes

155 *Id.*
156 *Id.* at 71–93.
157 *Id.* at 73.
158 *Id.* at 90.
159 *Id.* at 111.
160 *See id.* at 106.
161 *See id. Contra* Clair & Woog, *supra* note 25, at 1 (asserting that courts operate as "tools of racial and economic oppression.").
162 *See* Mark Tushnet, *The Critique of Rights*, 47 SMU L. REV. 23, 32 (1994).

the need for multi-faceted approaches.[163] Abolition requires dismantling prisons *and* restructuring our societies to mitigate harm, ending carceral punishment *and* creating new forms of accountability. Abolition imagines that every act is an incremental step toward the horizon. Constitutional claims challenging incarceration will not immediately eradicate the prison industrial complex. Clemency will not systematically decarcerate all prisons but using the Constitution to hold clemency to a higher standard of justice is an incremental step in the process.

## II. WHAT PROCESS IS DUE IN CLEMENCY?

At present, the Constitution does not hold clemency to this higher standard of justice, or to its potential as an abolitionist mechanism. Rather, constitutional protections remain absent from clemency proceedings and decisions. Advocates for greater use of clemency contend that the procedures are standardless and unreviewable.[164] Indeed, clemency decision-makers fail to follow procedures set forth in the statutory or constitutional schemes,[165] leaving the decision-making process opaque. For example, the Massachusetts Parole Board routinely fails to submit conclusions and recommendations to the governor within ten weeks of receiving a petition, or to schedule a public hearing within six months, as mandated by statute.[166] Such failures to provide incarcerated individuals a meaningful opportunity at clemency may violate those individuals' constitutional rights under the Reconstruction Amendments.

Despite the Supreme Court's reliance on clemency as an available remedy in the criminal legal system, it is reluctant to provide judicial oversight into clemency decisions.[167] The Court consistently asserts that clemency's discretionary nature gives incarcerated individuals no right to clemency.[168] Instead, the Court insists that clemency is merely a "hope," ignoring the significance of clemency to a person who may otherwise never see beyond prison's walls. By employing a mechanical analysis of constitutional rights, the Court has thus denied incarcerated

163 *See* Roberts, *supra* note 7, at 44.

164 Drinan, *supra* note 23, at 1130.

165 *See 50-State Comparison: Pardon Policy & Practice*, *supra* note 21 (comparing state statutes and constitutional provisions authorizing clemency, the procedures mandated by those provisions, and the regularity of the procedures being used).

166 MASS. GEN. LAWS ANN. ch. 127, § 154 (West 2021); Letter from the Massachusetts Parole Bd. (June 9, 2020) (on file with author).

167 *See* discussion *supra* Section I.A.

168 Ohio Adult Parole Auth. v. Woodard, 523 U.S. 272, 280–81 (1998).

individuals a meaningful chance at clemency.

Despite the impersonal nature of such constitutional decisions, the Court's existing doctrine may be a useful tool for ensuring greater use of clemency systems. Incarcerated individuals may be able to assert that, while they have no right to a *grant* of clemency, they have a right to be *considered* for clemency. These individuals (hereinafter referred to as "clemency applicants") may be able to assert that this right arises from the Fourteenth Amendment's Due Process Clause, which prohibits the deprivation of "life, liberty, or property, *without due process of law*."[169]

A successful challenge to clemency proceedings would force clemency decision-makers to thoroughly consider each applicant for clemency and would likely increase the number of applications ultimately granted.[170] Further, these challenges would make the clemency process more transparent, allowing clemency applicants to better utilize it as a means of getting out of prison. Finally, raising the rights of clemency applicants under the Due Process Clause would further the abolition constitutionalism advocated by Professor Roberts: challenging the system of incarceration and vying for freedom. The following section considers the legal arguments for applying the Due Process Clause to clemency proceedings.

### A. *From* Dumschat *to* Woodard*: A Reluctance to Interfere*

Constitutional protections are more limited behind prison gates. When a person is legally charged, prosecuted, and convicted, they receive due process. Under these circumstances, they may be constitutionally deprived of their freedom by incarceration, or—in the case of the death penalty—their life. Nonetheless, incarcerated individuals retain some rights and protections under the Constitution.[171] As the Supreme Court has held, "There is no iron curtain drawn between the Constitution and the prisons of this country."[172] An incarcerated individual is not rendered

169 U.S. CONST. amend. XIV.

170 Indeed, states with more regular proceedings also have higher grants of clemency. *50-State Comparison: Pardon Policy & Practice*, *supra* note 21.

171 *See* 60 AM. JUR. 2D *Penal and Correctional Institutions* § 120 (2022).

172 Wolff v. McDonnell, 418 U.S. 539, 555–56 (1974); *see also* Turner v. Safley, 482 U.S. 78, 84 (1987) ("Prison walls do not form a barrier separating prison inmates from the protections of the Constitution."); Sandin v. Conner, 515 U.S. 472, 485 (1995) ("[P]risoners do not shed all constitutional rights at the prison gate . . . ." (internal quotations omitted)); Connecticut Bd. of Pardons v. Dumschat, 452 U.S. 458, 469 (1981) (Stevens, J., dissenting) ("[T]he deprivation of liberty that follows conviction of a criminal offense is not total; the individual possesses a residuum

a nonperson under the Constitution by the fact of their imprisonment.[173]

While an incarcerated individual obviously remains invested in their quality of life once behind bars, courts struggle to determine which constitutional rights are revoked upon incarceration and which rights remain. Incarcerated individuals must identify a right to life, liberty, or property at stake to claim a constitutional violation. These "interests," as courts call them, may either be found in the Constitution itself or state law.[174] Without a claim to a recognized life, liberty, or property interest, no procedural protections are due to the incarcerated individuals.

The Supreme Court has been reluctant to recognize any right to clemency or its process. The Court considered due process rights to clemency in the 1981 case, *Connecticut Board of Pardons v. Dumschat*.[175] The Court held that the petitioner had no liberty interest in obtaining clemency and thus suffered no due process violation when the Board of Pardons repeatedly denied his commutation with no explanation.[176] The Court instead insisted that an incarcerated individual's expectation of commutation "is simply a *unilateral hope*."[177] Further, the Court stated that, as discretionary decisions designated to executive authorities, clemency was not "the business of courts."[178]

The Court reiterated these positions in *Ohio Adult Parole Authority v. Woodard*.[179] Woodard was sentenced to death and lost several appeals of his sentence.[180] Pursuant to its statutory authority, Ohio commenced a clemency investigation.[181] The Ohio Adult Parole Authority ("the Authority") subsequently offered Woodard an interview and a hearing.[182] When the Authority failed to inform Woodard whether his counsel could participate in the interview and hearing, Woodard sued, alleging in part that the clemency procedures violated his constitutional right to due process.[183]

---

of constitutionally protected liberty even while he is in the legal custody of the State.").

173 *See Wolff*, 418 U.S. at 594 (Douglas, J., dissenting) ("Conviction of a crime does not render one a nonperson whose rights are subject to the whim of the prison administration . . . .").

174 16C C.J.S. *Constitutional Law* § 1888 (2021).

175 *Dumschat*, 452 U.S. at 458.

176 *Id.* at 465–67.

177 *Id.* at 465 (emphasis added).

178 *Id.* at 464.

179 *Woodard*, 523 U.S. at 276, 280.

180 *Id.* at 277.

181 *Id.* at 276–77.

182 *Id.* at 277.

183 *Id.*

Under his Due Process claim, Woodard argued that he had a life interest in clemency up until his execution, which deserved due process protections.[184] The Court, in a divided opinion, disagreed.[185] The plurality instead recognized a "residual life interest" retained by individuals seeking clemency.[186] This residual interest, however, was only an interest "in not being summarily executed by prison guards," and thus, was not a protected life interest per the Due Process Clause.[187]

The Court again emphasized the importance of leaving discretionary decisions to their respective branches of government, reasoning that the pardon power belonged to the executive alone.[188] The Court wrote:

> Procedures mandated under the Due Process Clause should be consistent with the nature of the governmental power being invoked. Here, the executive's clemency authority would cease to be a matter of grace committed to the executive authority if it were constrained by the sort of procedural requirements that respondent urges.[189]

According to the Court, the discretionary nature of clemency is essential to its functioning.[190] Because clemency was removed from the adjudicative or sentencing stages of a criminal case, judicial review would be inappropriate.[191]

Despite the majority's denial of a life interest involved in clemency, two partial concurring opinions suggested different interpretations of the life interest. Justices Stevens wrote, "There is, however, no room for legitimate debate about whether a living person has a constitutionally protected interest in life. He obviously does."[192] Justice O'Connor agreed.[193] Justice O'Connor, moreover, believed that "some *minimal* procedural safeguards" applied to all clemency procedures, including those that are discretionary.[194] She acknowledged that judicial review might be appropriate where the clemency scheme at issue was deficient.[195]

184 *Id.* at 279.
185 *Id.* at 275–76.
186 *Id.* at 281.
187 *Id.*
188 *Id.* at 276.
189 *Id.* at 285.
190 *Id.*
191 *Id.* at 282, 284–85.
192 *Id.* at 291 (Stevens, J., concurring in part and dissenting in part).
193 *Id.* at 288 (O'Connor, J., concurring in part).
194 *Id.* at 289.
195 *Id.*

Justice O'Connor named two hypothetical schemes: a clemency system "whereby a state official flipped a coin to determine whether to grant clemency, or in a case where the State arbitrarily denied a prisoner any access to its clemency process."[196]

Justice O'Connor's two examples have become the standard test used by federal courts across the country to evaluate clemency proceedings. Courts apply the *Woodard* standard strictly, requiring that the clemency decision or process was "wholly arbitrary, capricious or based upon whim."[197] In one such case, the Ninth Circuit held that there was no due process violation where a Governor had a blanket policy of denying clemency to individuals convicted of murder.[198] Assuming *arguendo* that the Governor had such a policy, the Court found that it was neither arbitrary nor capricious.[199] Notably, this policy would exclude all capital defendants from the ability to have their sentences reduced.[200] Other federal courts have similarly found no due process violations in the face of clemency procedures that provided little guidance or transparency to applicants.[201]

Despite these minimal protections afforded clemency applicants, the Supreme Court has denied the existence of life interests requiring full due process protections in clemency proceedings. The Court has not yet considered clemency as applied to people serving term-of-

196 *Id.*

197 Duvall v. Keating, 162 F.3d 1058, 1061 (10th Cir. 1998).

198 Anderson v. Davis, 279 F.3d 674, 676–77 (9th Cir. 2002).

199 *Id.*

200 *See id.* at 675–76.

201 *See, e.g.*, Winfield v. Steele, 755 F.3d 629, 631 (8th Cir. 2014) ("The procedures employed by the state actors in this case may not have been ideal, but they do not approach the arbitrariness contemplated by Justice O'Connor in *Woodard*: a coin flip or an arbitrary denial of access to any clemency process."); Faulder v. Texas Bd. of Pardons & Paroles, 178 F.3d 343, 344–45 (5th Cir. 1999) (finding no violations of minimal due process protections where Texas Board of Pardons and Paroles allegedly gave inadequate notice of issues they would consider, refused to hold hearing, gave no explanation of decision, and kept no records of process); Tamayo v. Perry, 553 F. App'x 395, 401 (5th Cir. 2014) (holding that the Texas Board of Pardon and Parole's unchanged clemency procedures still did not rise to a violation of minimal due process protections); Lee v. Hutchinson, 854 F.3d 978, 980, 982 (8th Cir. 2017) (finding no violation of due process where several incarcerated individuals alleged that the Arkansas clemency process failed to provide adequate notice, and also held hearings that were too soon after notice was given, too close to the execution date, and too short); Woratzeck v. Arizona Bd. of Exec. Clemency, 117 F.3d 400, 402, 404 (9th Cir. 1997) (holding that there were no due process violations in clemency proceedings that involved two of the petitioner's former attorneys).

years or life without parole sentences, nor has it recognized a liberty interest in clemency. The Supreme Court has instead contended that a person's liberty interest is extinguished at the time of conviction.[202] Even the partial concurrences in *Woodard* draw a clear distinction between a potential life interest and a liberty interest, noting that an incarcerated individual has already been deprived of their liberty by their confinement.[203]

In a prior case, however, Justice Stevens's dissenting opinion asserted that "the deprivation of liberty that follows conviction of a criminal offense is not total; the individual possesses a residuum of constitutionally protected liberty even while he is in the legal custody of the State."[204] A charitable reading of this caselaw suggests that the issue is unresolved. A realistic interpretation, on the other hand, acknowledges the improbability that the Court will recognize a liberty interest in clemency where it has refused to recognize a life interest after conviction.

Should the Court opt not to recognize a liberty interest in clemency, there are still some minimal protections available to applicants according to Justice O'Connor's concurrence. Clemency applicants in states that do not regularly review applications may argue that this failure arbitrarily denies them access to clemency. In effect, they have been denied access to the *opportunity* to receive clemency.[205] Accordingly, "there is room for federal courts to constrain state executives charged with the responsibility of making clemency decisions, in a manner that is entirely consistent with Supreme Court precedent."[206] While no authority yet affirmatively supports this argument, a door remains open.

Despite the Supreme Court's reluctance to recognize a life or liberty interest in clemency, applicants may still have some hope. There remains potential to challenge the underlying assumptions of *Dumschat* and *Woodard* as applied to liberty interests. Further, state laws may provide a basis for constitutionally recognized interests in clemency.

202 *Woodard*, 523 U.S. at 280; *see also Dumschat*, 452 U.S. at 465 ("In terms of the Due Process Clause, a [] felon's expectation that a lawfully imposed sentence will be commuted or that he will be pardoned is no more substantial than an inmate's expectation, for example, that he will not be transferred to another prison; it is simply a unilateral hope.").

203 *Woodard*, 523 U.S. at 289 (O'Connor, J., concurring in part); *id.* at 291–92 (Stevens, J., concurring in part and dissenting in part).

204 *Dumschat*, 452 U.S. at 469 (Stevens, J., dissenting).

205 *See* Alyson Dinsmore, Comment, *Clemency in Capital Cases: The Need to Ensure Meaningful Review*, 49 UCLA L. REV. 1825, 1852–53 (2002).

206 *Id.* at 1853.

The next two sections examine these potential avenues for challenge.

### B. *Expanding the Court's Understanding of Liberty*

Though the likelihood is low that the Court will extend a liberty interest to clemency, there is room to challenge the Court's understanding. Ultimately, the debate over whether an individual's liberty has been deprived by their incarceration is a question about the structure of the criminal system. Thus far, the Supreme Court has framed the criminal system as ending at conviction and sentencing. According to this framing, once a person is incarcerated, they have received the process they were due.[207] Stated more simply, their confinement ends their liberty. If, however, one views the criminal system as continuing past conviction, a person incarcerated may be confined but not deprived of all the "liberty" guaranteed to them under the Constitution. Under this view, clemency and other post-conviction proceedings necessitate due process protections.[208]

There are significant arguments to be made for the latter interpretation.[209] Federal clemency was viewed by the Framers of the U.S. Constitution as necessary to counteract "injustices that inevitably result in any criminal justice system."[210] Clemency has the potential to serve as a corrective measure for problems such as wrongful convictions; racial disparities in charging, conviction and sentencing; and the use of laws no longer deemed constitutional.[211] Indeed, the Supreme Court has called clemency as a safeguard against our "fallible" criminal system.[212] Courts have historically used the availability of clemency as justification for their inability or unwillingness to review capital cases.[213] Because clemency serves as the final remedial step, it should be regarded as integral to the system, with corresponding due process protections.

---

207 *See* Meachum v. Fano, 427 U.S. 215, 224 (1976) ("[G]iven a valid conviction, the criminal defendant has been constitutionally deprived of his liberty to the extent that the State may confine him and subject him to the rules of its prison system so long as the conditions of confinement do not otherwise violate the Constitution.").

208 *See* David S. Olson, *Second Guessing the Quality of Mercy: Due Process in State Executive Clemency Proceedings*, 22 HARV. J.L. & PUB. POL'Y 1009, 1023 (1999).

209 *See* discussion *supra* Section I.B.

210 Molly Clayton, *Forgiving the Unforgivable: Reinvigorating the Use of Executive Clemency in Capital Cases*, 54 B.C. L. REV. 751, 759 (2013) (citation omitted).

211 For example, mass clemency could be granted to sentenced to life without parole in states where such a sentence is no longer considered constitutional.

212 *Herrera*, 506 U.S. at 415.

213 *See* Dinsmore, *supra* note 205, at 1835.

While no law yet exists to support this position, it remains possible that the current or future Supreme Court could find an existing liberty interest for incarcerated individuals seeking clemency.

### C. *Assuring Meaningful Opportunity for Clemency through a State-Created Rights Model*

Even without a progressive evolution in the Supreme Court's interpretation of liberty interests, clemency applicants may have due process protections by nature of their states' laws, which create separate entitlements to which due process attaches. By bringing due process claims in this context, clemency applicants may be able to force the clemency procedures to be more regular. And by doing so, clemency grants may become more regular, too.

The Supreme Court has continually held that states may create a new life or liberty interest by their own laws.[214] Like liberty interests derived from the Constitution itself, due process is required for any state-created right to a post-conviction proceeding.[215] The Constitution requires that state-created proceedings be fundamentally fair.[216]

This requirement was recognized by the *Dumschat* Court, despite its reluctance to find a life interest. *Dumschat* argued that a Connecticut statute providing the Connecticut Board of Pardons the ability to grant clemency created a state statutory right.[217] While the Court disagreed that the statute created such an interest in clemency,[218] the Court acknowledged that states were free to create their own constitutionally protected rights.[219] The Connecticut statute failed to

214 *See Woodard*, 523 U.S. at 293 (Stevens, J., concurring in part and dissenting in part) ("[I]f a State establishes postconviction proceedings, these proceedings must comport with due process."); 59 AM. JUR. 2D *Pardon and Parole* § 37 (West Publishing Company 2022) ("Although a prisoner has no constitutional right to a clemency proceeding, a State may provide such a right."); *Meachum*, 427 U.S. at 229 (noting that states are free to create their own entitlements, regardless of whether those entitlements are required at the federal level); *Dumschat*, 452 U.S. at 463 (recognizing the possible existence of "state-created right[s]" requiring due process protections).

215 *Woodard*, 523 U.S. at 293 (Stevens, J., concurring in part and dissenting in part).

216 Jay Clayton, Comment, *Vindicating the Right to Be Heard: Due Process Safeguards against Government Interference in the Clemency Process*, 88 U. CHI. L. REV. 897, 904–05 (2021).

217 *Dumschat*, 452 U.S. at 465–66.

218 *Id.* at 465 ("[R]espondents' argument wholly misconceives the nature of a decision by a state to commute the sentence of a convicted felon.").

219 *See id.* at 463.

create a constitutional entitlement to clemency because the statute contained no guiding criteria, definitions, or mandates.[220] The opinion suggests that if the state *had* mandated certain procedures for clemency, the Court may have found a state-created liberty interest.

Similarly, in *Woodard*, Justice O'Connor dismissed the state law claim only after finding that the Parole Board's actions comported with the law and so satisfied any potential requirement of due process.[221] Where many state provisions include specific procedures for the consideration of clemency applications,[222] Justice O'Connor's opinion opens the door for due process challenges to those state-created rights.[223]

In other post-conviction contexts, particularly parole and disciplinary proceedings, state law has already created a protected liberty interest. In a series of cases from the 1970s through the 1990s, the Supreme Court considered what due process was required by state procedures involving incarcerated individuals who were facing additional punishments by the prison. For example, in *Wolff v. McDonnell*, the Court required minimum due process protections in the deprivation of good-time credits.[224] Nebraska's statutes allowed the deprivation of good-time credits as a sanction for misconduct and required that the incarcerated individual be "consulted regarding the charges of misconduct" before the credits were withheld, forfeited, or returned.[225] Additional prison regulations provided specific procedures to be followed in cases of

220 *Id.* at 466.

221 *Woodard*, 523 U.S. at 289–90 (O'Connor, J., concurring in part) (finding that the Ohio Death Penalty Clemency Procedure was followed by the Ohio Adult Parole Authority).

222 *See 50-State Comparison: Pardon Policy & Practice*, *supra* note 21. It is beyond the scope of this Note to list every state's procedures, but a few are provided here for illustration: Alaska requires that its Parole Board investigate each case and submit a report of the investigation to the Governor within 120 days. ALASKA STAT. § 33.20.080 (2007). In Georgia, clemency can only be granted by majority vote of the Parole Board and written decisions must be provided. GA. CODE ANN. § 42-9-42 (2017). In Hawaii, the paroling authority must consider every application referred to them and provide a recommendation. HAW. REV. STAT. § 353-72 (2019). In Massachusetts, the Parole Board must submit conclusions and recommendations to the Governor within ten weeks of receiving a petition, or schedule a hearing within six months. MASS. GEN. LAWS ch. 127, § 154 (2006).

223 *See* Dinsmore, *supra* note 205, at 1853. *See also* 59 AM. JUR. 2D *Pardon and Parole* § 37 (2021) ("Although a prisoner has no constitutional right to a clemency proceeding, a State may provide such a right. If a State actively interferes with a prisoner's access to the system that it has established for considering clemency petitions, due process is violated.").

224 *Wolff*, 418 U.S. at 556–58.

225 *Id.* at 546–48.

misconduct.[226] While acknowledging that incarcerated individuals had no right to good-time credits under the Constitution, the Court wrote:

> But the State having *created* the right to good time and itself recognizing that its deprivation is a sanction authorized for major misconduct, the prisoner's interest has real substance and is sufficiently embraced within Fourteenth Amendment 'liberty' to entitle him to those minimum procedures appropriate under the circumstances and required by the Due Process Clause to [e]nsure that the state-created right is not arbitrarily abrogated.[227]

Thus, because the state created a statutory right to good-time credits, due process was implicated by the deprivation of the good-time credits. The Court went on to require notice of misconduct charges, a hearing and written findings.[228]

Two years later, in *Meachum v. Fano*, the Supreme Court confirmed that a state could create certain rights involved in disciplinary proceedings.[229] Several incarcerated individuals brought suit against prison officials after they had been transferred to less favorable institutions without suitable hearings.[230] Finding that the disciplinary proceedings at issue were expressly discretionary and had no applicable state law, however, the Court declined to extend due process protections.[231]

The Court later clarified its findings in *Sandin v. Conner*, rejecting the idea that all mandatory language in state law or regulations would necessarily create a liberty interest.[232] Rather, the court held that:

> [State-created liberty] interests will be generally limited to freedom from restraint which, while not exceeding the sentence in such an unexpected manner as to give rise to protection by the Due Process Clause of its own force... nonetheless *imposes atypical and significant hardship on the inmate in relation to the ordinary incidents of prison life.*[233]

The Court narrowed the potential state-created rights, eventually finding no process was due to the respondent.[234]

226 *Id.* at 548.
227 *Id.* at 557 (emphasis added).
228 *Id.* at 564.
229 *Meachum*, 427 U.S. at 226.
230 *Id.* at 222.
231 *Id.* at 228–29.
232 *Sandin*, 515 U.S. at 483–84.
233 *Id.* (internal citations omitted) (emphasis added).
234 *Id.* at 487.

While *Sandin* appears to be a significant retrenchment in due process protections for incarcerated individuals, the potential for certain state-created rights remains. *Sandin* specifically took issue with a series of cases that attempted to change the conditions of confinement by challenging the use of a prison's *internal regulations*.[235] Moreover, the Court reiterated that it agreed with *Meachum* and *Wolff*, leaving those holdings in-tact.[236] Because clemency is more akin to *Wolff* (which involved the loss of an expectation of release) than to *Sandin* (which involved a change in the individual's continued confinement), clemency should be excluded from *Sandin*'s narrowing. This preserves the opportunity for clemency applicants to challenge the proceedings mandated by statute or constitutional provision. Further, for clemency applicants, the executive's failure to adhere to state procedures imposes an "atypical and significant hardship," because it divests them of an opportunity of life outside prison walls, when they are otherwise entitled to that opportunity.

A comparison to parole confirms the viability of a state-created rights model in challenges to clemency proceedings. Parole, like clemency, offers an opportunity for release from prison. As with clemency, it is a discretionary decision left to the executive branch. The Supreme Court considered whether due process protections applied to discretionary parole in the 1979 case *Greenholtz v. Inmates of Nebraska Penal and Correctional Complex*.[237] Incarcerated individuals in Nebraska brought a class action suit, alleging they had been unconstitutionally denied parole.[238] The respondents brought two arguments: first, that the "possibility" of parole created a liberty interest; and alternatively, that Nebraska's statute created an expectation of parole requiring due process protections.[239]

While the Supreme Court found that the possibility of parole was a "mere hope," it confirmed that the state statute *could* create a protected liberty interest.[240] Because the respondents chose to litigate their claim in federal court, the Court was denied the opportunity to determine "the scope of the interest, if any, the [Nebraska] statute was intended to afford to inmates."[241] The Court assumed that such a state-

235 *Id.* at 480–81.
236 *Id.* at 483.
237 442 U.S. 1 (1979).
238 *Id.* at 3–4.
239 *Id.* at 8–9.
240 *Id.* at 11–12.
241 *Id.* at 12.

created right was possible and that it would be "entitled to some measure of constitutional protection" if it did indeed exist.[242]

A case decided in 2011 provides additional support for the state-created rights model. In *Swarthout v. Cooke*, the Supreme Court confirmed that a state was free to create a liberty interest in parole by its own laws.[243] While the Court did not specifically discuss the creation of the liberty interests, it affirmed the Ninth Circuit's finding that a liberty interest had in fact been created by California's parole laws.[244] The Court called this state-created liberty interest a "reasonable application of our cases."[245] While both *Swarthout* and *Greenholtz* fail to explain the scope of the liberty interest created by state parole laws, both cases demonstrate the Court's willingness to acknowledge the power of a state to create rights in parole. This willingness may be extended to clemency, as well.

In his seminal essay, *State Constitutions and the Protection of Individual Rights*, Justice William J. Brennan argued that the Supreme Court's retrenchment of individual liberty necessitated greater protections under state law.[246] He wrote:

> If the Supreme Court insists on limiting the content of due process to the rights created by state law, state courts can breathe new life into the federal due process clause by interpreting their common law, statutes and constitutions to guarantee a 'property' and 'liberty' that even the federal courts must protect.[247]

Where the Supreme Court has limited due process protections for clemency applicants, those applicants may find that the laws of their states create a liberty interest invoking the Due Process Clause of the Fourteenth Amendment.

---

242 *Id.* at 12. Justice Powell's partial concurrence stated that an interest *was* established by the state's parole system, independent of any interpretation of what interests were included in the statute. *Id.* at 19 (Powell, J., concurring in part and dissenting in part) ("Nothing in the Constitution requires a State to provide for probation or parole. But when a State adopts a parole system that applies general standards of eligibility, prisoners justifiably expect that parole will be granted fairly and according to law whenever those standards are met. This is so whether the governing statute states, as here, that parole 'shall' be granted unless certain conditions exist, or provides some other standard for making the parole decision.").

243 Swarthout v. Cooke, 562 U.S. 216, 219–20 (2011).

244 *Id.*

245 *Id.* at 220.

246 William J. Brennan, Jr., *State Constitutions and the Protection of Individual Rights*, 90 HARV. L. REV. 489, 503 (1977).

247 *Id.* at 503.

The application of due process protections to clemency proceedings would not result in the immediate release of all incarcerated individuals. With the use of mechanical rules to address significant problems, the due process analysis is unsatisfying. Yet, it is also a method of realizing the higher standard of justice that antislavery abolitionists imagined for our Constitution. Moreover, it is an incremental step in the process of abolition, ensuring meaningful opportunities for the release of incarcerated individuals, thereby increasing the use of clemency.[248] The Due Process Clause thus provides a method of revitalizing our lacking clemency system and "releasing the steam."

## CONCLUSION

Our criminal legal system, including incarceration, has served to extend the white supremacy of the antebellum era. It has policed, charged, and imprisoned Black Americans at disproportionate rates. In doing so, our criminal legal system has denied Black Americans what the antislavery abolitionists sought to achieve: a constitution under which all people are free and equal. This Note argued that prison abolition is a necessary result of this system. Only through abolition can we truly "free them all."

This Note also grappled with the paradox at the heart of abolition advocacy: the ways in which the Constitution has legitimized racial subordination and the ways in which the Constitution can be reimagined to serve abolitionist goals. By using the abolition constitutionalism framework articulated by Professor Roberts, abolitionists can push forward with legal arguments to advance the goals of abolition, particularly by using the Reconstruction Amendments.

One step towards abolition is a revitalized clemency process. Clemency serves as a valuable check on the criminal legal system, as well as a means to achieve the immediate release of incarcerated individuals. By employing abolition constitutionalism, clemency applicants are due greater protections under the Due Process Clause of the Fourteenth Amendment. While clemency applicants may strive for an expansion of the Supreme Court's interpretation of liberty, this Note advocates for the use of a "state-created rights" model. This model, already used in other post-conviction contexts, would guarantee due process to applicants wherever there exists a state statutory or constitutional

248 *See 50-State Comparison: Pardon Policy & Practice*, *supra* note 21 (demonstrating that, in states where clemency proceedings are more regular, grants are generally more frequent).

clemency scheme.

The state-created rights model may not immediately result in widespread clemency for incarcerated individuals, but it would significantly improve the transparency, predictability, and accountability of clemency systems. And while clemency cannot empty all prisons or dismantle the prison-industrial complex entirely, it would provide meaningful opportunities for release for people behind bars. It is one incremental step toward the horizon of abolition—a horizon that imagines all people free.