

2009

International Climate Change Liability: A Myth or a Reality

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Kilinski, Jennifer (2009) "International Climate Change Liability: A Myth or a Reality," *Florida State University Journal of Transnational Law & Policy*. Vol. 18: Iss. 2, Article 7.

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International Climate Change Liability: A Myth or a Reality

Cover Page Footnote

Comment

**INTERNATIONAL CLIMATE CHANGE LIABILITY:
A MYTH OR A REALITY?**

JENNIFER KILINSKI*

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Human progress is neither automatic nor inevitable. We are faced now with the fact that tomorrow is today. We are confronted with the fierce urgency of now. In this unfolding conundrum of life and history there is such a thing as being too late. . . . We may cry out desperately for time to pause in her passage, but time is deaf to every plea and rushes on. Over the bleached bones and jumbled residues of numerous civilizations are written the pathetic words: Too late.

– Martin Luther King Jr.

I. INTRODUCTION

With each passing day, the literature on the impacts of global climate change grows. Climate change affects nearly every aspect of life, from human and animal existence, to geographical and ecological effects. In the legal community, that has also meant an increasing body of scholarly dialogue concerning the potential avenues for relief and meaningful change. Discussions have ranged from general to specific, with no consensus on the best way to tackle this accumulating giant. Due to the enormity of the problem, and the range of potential responses to any given climate change issue, this Comment will focus on the potential for liability and, more specifically, discuss the possible theories of liability on which to rest a climate change suit.

This Comment is written with the assumption that the United States, and corporations therein, are the most viable targets of climate change liability suits. This assumption is based on several factors, including: U.S. resistance to meaningful participation in implementing climate change solutions, U.S. opposition to Kyoto Protocol ratification, and U.S. embarrassment of being a world leader in emissions while also maintaining one of the least progressive climate change policies of any developed country. There is an abundance of evidence and scholarly dialogue on U.S. failures that, for the purposes of this Comment, will be assumed as well known and accepted. Accordingly, the guiding framework in analyzing and discussing the liability theories in this Comment all center around the potential for naming the United States and its industries as defendants.¹

1. Much of the analysis, though, will also apply to other nations. For example, the United Kingdom, Australia, and New Zealand are also common law countries. Furthermore, countries such as Australia, China, and India, who are among the world's largest emitters of GHGs, but who, like the United States, do not have binding commitments under the *Kyoto*

Private and public institutions have recently held a number of important symposiums, resulting in a large number of articles about issues surrounding climate change litigation. Most of these articles are quick to point out that a number of obstacles must be overcome to have a successful suit. For example, a party must demonstrate legal standing to sue. This issue, along with separation of power concerns, pervades numerous legal systems throughout the world.² On the other side, the defendant must be sufficiently culpable, such that, given a finding of fault, redressability of harms is possible. The third, and perhaps largest consideration is causation. The reality is that a class-action suit comprised of six billion plaintiffs and six billion defendants is theoretically possible, given that each of us contributes to climate change. Finding a defendant reasonably connected to “causing” the harms alleged is a challenging task. Finally, selecting the most appropriate forum and legal theory on which to bring a climate change action is at the very least, a daunting undertaking. Much of that decision rests with, and is limited by, the type of action and the parties involved.

Although this Comment will touch a little on each of these subjects, the bulk of the focus is on the last consideration: what legal theories or forums are available for liability actions and some of the advantages and disadvantages of each. While the list is in no way comprehensive, the goal is to further the dialogue on potentially viable international and domestic forums. Some of the theories discussed will be analyzed in the context of a case study example. This Comment ultimately concludes that there are potentially viable options for liability on the international level, despite the fact that everyone on earth is simultaneously a potential plaintiff or defendant. However, litigation is only one small piece of the puzzle towards realizing an international commitment to reducing emissions. Unfortunately, some countries and industries need the economic incentive that only liability suits can bring to jump start in-house change.

Given the litany of likely setbacks inherent in any climate change suit, a fair question may be, why litigation? Aside from the desirous jump-start previously mentioned, there is a long history of looking towards the judicial branches of government, both na-

Protocol to the United Nations Convention on Climate Change, are also likely primary targets and may find analysis of potential liability applicable to their legal systems. See discussion *infra* Parts III.B and note 50.

2. See, e.g., ONTARIO LAW REFORM COMM'N, REPORT ON THE LAW OF STANDING (1989); AUSTRALIAN LAW REFORM COMM'N, BEYOND THE DOOR-KEEPER: STANDING TO SUE FOR PUBLIC REMEDIES (1996); Blake Bertagna, “Standing” Up for the Environment: The Ability of Plaintiffs to Establish Legal Standing to Redress Injuries Caused by Global Warming, 2006 B.Y.U. L. REV. 415 (2006).

tionally and internationally, to serve as a gap-filler where legislative and regulatory efforts fail. Issues as varying as civil rights and tobacco litigation have previously sought the guidance of the judiciary. In climate change, considering the United States' failure to ratify the Kyoto Protocol or establish a comprehensive plan to decrease emissions and the fact that two major emitters (India and China) have no emission reduction commitments via the Protocol³ has caused the international community to recognize a vacuum in climate change policy. Historically, one of the best ways of filling that proverbial vacuum is through litigation.

In keeping with the goals of this Comment, the first section contains a brief consideration of the causes and impacts of climate change and focuses on two categories of likely plaintiffs. Coastal communities most immediately, and devastatingly, impacted by rising sea levels,⁴ and the polar region, which already experiences enormous change due to sea ice/permafrost melts, and dwindling habitats.⁵ Also within this section is a discussion of the most promising and vulnerable defendants.

The second section contains a discussion and analysis of the options available in international law for holding states or private actors liable for the impacts of global warming, particularly where greenhouse gas (GHG) emissions⁶ are concerned, and some of the

3. For example, the United States, China, and India, none of whom have legal obligations under Kyoto to reduce emissions, account for roughly 45% (and growing) of the world's carbon dioxide emissions. *See, e.g.*, WORLD BANK, LITTLE GREEN DATA BOOK (2007), available at <http://siteresources.worldbank.org/INTDATASTA/FINALPressRelease.pdf>; Carbon Dioxide Information Analysis CTR., Oak Ridge Nat'l Lab. (ORNL), 2007 Total Co₂ Emissions by County, available at coiac.ornl.gov/trends/emis/top2007.tot. As of late 2006, it appears that China overtook the United States as the world's largest emitter of carbon dioxide, with estimates of an additional rise in emissions from China at 2.5 to 11 percent annually by 2010, an increase that is more than the UK or Germany's total emissions. *See* Jay S. Gregg et al., *China: Emissions Pattern of the World Leader in CO₂ Emissions from Fossil Fuel Consumption and Cement Production*, 35 GEOPHYSICAL RES. LETTERS L08806, doi:10.1029/2007GL032887 (2008); Kate Melville, *CO₂ Emissions in China Rocketing*, SCIENCEAGOGO.COM, Mar. 19, 2008, http://www.scienceagogo.com/news/20080218203038data_trunc_sys.shtml (last visited June 20, 2010).

4. *See, e.g.*, The World Bank, *Climate Changes and Impact on Coastal Countries*, (Feb. 12, 2007), <http://econ.worldbank.org/WBSITE/EXTERNAL/EXTDEC/EXTRESEARCH/0,,contentMDK:21215328~pagePK:64165401~piPK:64165026~theSitePK:469382,00.html>; U.S. Env'tl. Prot. Agency, *Coastal Zones and Sea Level Rise*, <http://www.epa.gov/climatechange/effects/coastal/index.html> (last visited July 11, 2009).

5. SUSAN JOY HASSOL, *IMPACTS OF A WARMING ARCTIC: ARCTIC CLIMATE CHANGE IMPACT ASSESSMENT 8-17* (2004), available at <http://amap.no/acia/>; U.S. Env'tl. Prot. Agency, *Polar Regions*, <http://www.epa.gov/climatechange/effects/polarregions.html> (last visited July 11, 2009).

6. Greenhouse gases are known as a group of gases which add to the greenhouse effect, trapping heat in the Earth's atmosphere and directly contributing to the climate change. Among the types of GHGs are carbon dioxide, methane, nitrous oxide, hydro fluorocarbons, per fluorocarbons, and sulfur hexafluoride. *See* DAVID HUNTER ET AL., *INTERNATIONAL ENVIRONMENTAL LAW & POLICY* 631, 633-36 (3d ed. 2007).

advantages and disadvantages of each. Also discussed is the viability of two U.S. domestic theories, for both residents and aliens.

The final section of this Comment examines one of the most recently filed climate change cases, *Native Village of Kivalina v. Exxon-Mobil Corp.*,⁷ and its chances for success given the nature of the parties, the basis for the claim, and the avenues of liability previously discussed. This Comment concludes that the international and U.S. legal systems are slowly “warming up” to the idea of litigation over climate change harms.

II. AN OVERVIEW: ADVERSE IMPACTS OF CLIMATE CHANGE, POTENTIAL PLAINTIFFS & VULNERABLE DEFENDANTS

Due to recent discoveries of anthropogenic contributions to climate change, a scientific consensus now exists that makes it anywhere from likely to virtually certain that increases in GHGs are causing climate change.⁸ According to the Intergovernmental Panel on Climate Change (IPCC) Fourth Assessment Report, human-induced climate change is largely to blame and will unequivocally transform the shape and face of the Earth as we know it.⁹ Based upon these dire projections, one may assume that the international community would take every opportunity to stop this alarming trend. Although work is underway in many nations and regional localities throughout the world, many of the largest GHG contributors are not participating in any meaningful way.¹⁰

Human activities caused global GHG emissions to increase more than 70 percent between 1970 and 2004 alone.¹¹ The Fourth IPCC Summary reports that it is likely (more than a 90 percent probability) that anthropogenic activity contributed to a rise in average sea level.¹² In fact, due to new technologies and scientific research methodologies, the IPCC reports that, since the mid-20th century, it is very likely most of the observed increase in average global temperature is due to the increase in anthropogenic greenhouse gas concentrations.¹³

7. No. cv-08-1138, (N.D. Cal. Feb. 26, 2008).

8. INTERGOVERNMENTAL PANEL ON CLIMATE CHANGE, CLIMATE CHANGE 2007: SYNTHESIS REPORT (2007), available at http://www.ipcc.ch/pdf/assessment-report/ar4/syr/ar4_syr_spm.pdf [hereinafter IPCC].

9. See *id.* at 5, 7-14.

10. See, e.g., *Climate Change: The Big Emitters*, BBC NEWS, July 4, 2005, <http://news.bbc.co.uk/1/hi/sci/tech/3143798.stm>; Kristen Philipkoski, *Bali Climate Change Meeting Opens; China, India and U.S. Still in Denial*, ASSOCIATED PRESS, Dec. 3, 2007, <http://blog.wired.com/wiredscience/2007/12/bali-climate-ch.html>.

11. IPCC, *supra* note 8, at 5.

12. *Id.* at 6.

13. *Id.* at 5.

A. Most Viable Plaintiffs for Climate Change Liability

Due to the generally diffuse nature of GHG emissions and harms, choosing a plaintiff is of great importance in ascertaining the potential for success in a liability suit. Perhaps the best place to begin the search is to identify the group that is currently experiencing the gravest harms. Given the difficulty and necessity of proving causation in any climate change claim, injuries which are diffuse and difficult to attribute to climate change would make such a case problematic, and with little chance of success.¹⁴ One of the largest hurdles plaintiffs will face is the ability to demonstrate a causal link between specific emissions and harms caused. Complicating matters is the reality that nearly all people on Earth contribute to climate change. Generally, the ideal plaintiffs are those individuals or group of individuals who contribute the least but are harmed the most, who are discrete and identifiable, and who can demonstrate significant and specialized harms readily linked to greenhouse gas emissions. A brief consideration of who these plaintiffs may be follows.

1. Sea Level Rise

Perhaps the most widely accepted and well-documented impact of global climate change is sea-level rise.¹⁵ It may also be the most costly.¹⁶ The global sea level rose at an average rate of 1.8 mm a year before 1993 and 3.1 mm a year since then.¹⁷ The primary contributors are melting glaciers, ice caps, ice sheets, and thermal expansion.¹⁸ Alarming, most predict that, even with action, the worst is yet to come.¹⁹

The propensity for sea level rise as a result of climate change was already widely acknowledged and accepted in the late 1980s;²⁰

14. Daniel Farber, *Basic Compensation for Climate Change*, 155 U. PA. L. REV. 1605, 1610 (2007) (advocating for a victims of climate change compensation system; for the purposes of incremental change and potential success, a compensation system should start with "mid-range impacts—impacts involving significant, but not catastrophic, costs that are likely to occur" and can readily be connected to climate change).

15. See, e.g., Dennis Culley, *Global Warming, Sea Level Rise and Tort*, 8 OCEAN & COASTAL L.J. 91 (2002); WORLD BANK, *supra* note 3.

16. See, e.g., NICHOLAS STERN, STERN REVIEW ON THE ECONOMICS OF CLIMATE CHANGE part II (Chapters 3-6) (2006), available at http://www.hm-treasury.gov.uk/sternreview_index.htm.

17. IPCC, *supra* note 8, at 1.

18. *Id.*

19. See *id.* at 7-14 (stating that even with GHG stabilization, anthropogenic warming and sea level rise would continue for centuries due to the time scales associated with climate processes and feedbacks).

20. EPA's 1983 Report developed the first set of year-by-year scenarios of sea level

so much so that when signing the Framework Convention on Climate Change²¹ in 1992, four island states (Fiji, Kiribati, Nauru, and Tuvalu) made the following declaration: “understanding that signature of the convention shall in no way constitute a renunciation of any rights under international law concerning state responsibility for the adverse effects of climate change, and that no provisions in the convention can be interpreted as derogating from the principles of general international law.”²² All four states, but particularly Tuvalu, are frequently cited as the first victims, and among the most viable plaintiffs, of climate change. For example, Tuvalu is quickly becoming uninhabitable, as much of its infrastructure has been destroyed by rising seas, erosion, and unusually strong storms. Emigration may soon be the only viable option for the island’s inhabitants.²³

There are numerous reports and examples of land loss as a result of rising sea levels.²⁴ Because anthropogenic climate change very likely caused these effects, the most viable climate change liability plaintiffs include the individuals whose property interests and ways of life no longer exist. This is especially true because many of these nations are among some of the lowest GHG contributors, have experienced some of the most devastating and immediate harms, are discrete in number, and may have an easier time

rise as a result of climate change. That discussion, among many others, can be found in *GREENHOUSE EFFECT AND SEA LEVEL RISE: A CHALLENGE FOR THIS GENERATION* (Michael C. Barth & James G. Titus, eds. 1984). Although originally published by a private company, it was written by EPA employees and EPA contractors. U.S. ENVTL. PROT. AGENCY, *THE POTENTIAL EFFECTS OF CLIMATE CHANGE ON THE UNITED STATES* (1989) (report to Congress). Additionally, for an overview of the climate change science related to sea level rise readily discussed and available in the late 1980’s, see Durwood Zaelke & James Cameron, *Global Warming and Climate Change: An Overview of the International Legal Process*, 5 AM. U. J. INT’L L. & POL’Y 249, 253-60 (1990) (stating Tuvalu, Maldives and other island nations will likely be the first victims and environmental refugees of climate change; nearly twenty years later, Tuvalu was one of the first island nations to threaten a climate change suit, in this case against the United States and Australia, for GHG emission contributions to sea level rise). See, e.g., GERMAN WATCH, *CLIMATE CHANGE CHALLENGES TUVALU* (2004), available at <http://www.germanwatch.org/download/klak/fb-tuv-e.pdf>.

21. United Nations Framework Convention on Climate Change (UNFCCC), May 9, 1992, 1771 U.N.T.S. 107, 31 I.L.M. 849 (1992).

22. *Id.* Declarations 1-2.

23. Richard S.J. Tol & Roda Verheyen, *Liability and Compensation for Climate Change Damages – A Legal and Economic Assessment*, 32 ENERGY POL’Y 1109 (2004) (using Tuvalu as an example of the first victims of climate change to illustrate the need for a system for paying damages and compensation to current and future victims); see also Tom Price, *High Tide in Tuvalu: In the Tropical Pacific, Climate Change Threatens to Create a Real-Life Atlantis – Global Warming*, SIERRA, July-Aug. 2003, at 34.

24. See, e.g., A. BARRIE PITTOCK, *CLIMATE CHANGE: TURNING UP THE HEAT* 252-84 (2005) (discussing examples of land loss and other ramifications around the world); Culley, *supra* note 15 (discussing sea level impacts and liability in general for island nations, particularly for the island nation of Tuvalu); David A. Grossman, *Warming Up to a Not-So-Radical Idea: Tort-Based Climate Change Litigation*, 28 COLUM. J. ENVTL. L. 1, 12-13 (2003) (discussing wide-ranging and costly impacts on the United States Atlantic and Gulf Coasts).

than most in establishing a causal link between global warming and harms suffered.

2. Polar/Arctic Region Loss of Habitat

The Arctic is extremely susceptible to climate change effects. The IPCC Summary reported with high confidence that snow cover contractions, decreases in sea ice, and increases in permafrost thaw are all likely to continue, with some projections predicting that Arctic late-summer sea ice will disappear almost entirely by the latter part of the 21st century.²⁵ The Arctic Climate Impact Assessment (ACIA) comprehensively discusses the impacts of climate change particular to this area, including evidence that average temperatures in the region are rising twice as fast as the rest of the world.²⁶ The report details the global impacts of the changing arctic; rising sea levels, loss of reflective snow (resulting in further warming of the planet), and biodiversity implications are some of the most profound.²⁷

Indigenous Arctic people face major economic and cultural hardships, including forced relocation due to coastal flooding and loss of food sources due to the thinning populations of walrus and polar bear. The Inuits are native to the United States, Canada, Denmark, and the Russian Federation and occupy the most Northern latitudes of our planet. The Inuit have inhabited these northern areas for at least the past one thousand years.²⁸ The impacts of climate change are much more specific and certain for this group than other potential litigants because the Inuit, for example, have particularly defined cultural norms directly dependent upon the climate of the region, *i.e.*, the ice, snow, and flora and fauna of the area.²⁹

25. Grossman, *supra* note 24; IPCC, *supra* note 8.

26. HASSOL, *supra* note 5, at 8.

27. *Id.* at 10-17.

28. SHEILA WATT-CLOUTIER, PETITION TO THE INTER AMERICAN COMMISSION ON HUMAN RIGHTS SEEKING RELIEF FROM VIOLATIONS RESULTING FROM GLOBAL WARMING CAUSED BY ACTS AND OMISSIONS OF THE UNITED STATES 13-14 (2005), available at <http://www.inuitcircumpolar.com/files/uploads/icc-files/FINALPetitionICC.pdf>.

29. See, e.g., Press Release, Nat'l Snow & Ice Data Ctr., Arctic Sea Ice Shatters All Previous Record Lows (Oct. 1, 2007), http://nsidc.org/news/press/2007_seaiceminimum/20070810_index.html; U.S. GEN'L ACCOUNTING OFFICE, ALASKA NATIVE VILLAGES: MOST ARE AFFECTED BY FLOODING AND EROSION, BUT FEW QUALIFY FOR FEDERAL ASSISTANCE (2003) (discussing sinking villages as a result of loss of permafrost due to rising temperatures); IPCC, *supra* note 8, at 6. See also Shi-Ling Hsu, *A Realistic Evaluation of Climate Change Litigation through the Lens of a Hypothetical Lawsuit*, 79 U. COLO. L. REV. 701 (2008) (arguing that the strongest plaintiffs for climate change lawsuit may be the Inuit in the polar region).

Although debate continues about specific impacts of climate change, it is widely accepted and documented that climate change will dramatically affect the polar region. This data makes the arctic populations likely candidates for leading the liability charge. The harms are specialized because climate change destroys not only local infrastructures, but also cultural norms. Accordingly, the indigenous arctic populations meet the established “ideals” of the most viable climate change plaintiffs.

B. Most Vulnerable Defendants

Given the overwhelming number of GHG emitters (a.k.a. potential defendants), another important consideration in any climate change suit is whether any one particular entity, state, or industry, etc., is sufficiently culpable for a court to award damages against that emitter or group of emitters. The naming of defendants is inextricably linked with the choice of legal theory on which to rest the claim. For example, if a plaintiff chooses to file an action with the International Court of Justice (ICJ), claims can only be brought by states against other states.

One logical approach is to name the largest emitters of GHGs, especially when considering problems associated with causation. The industry emitting more GHGs than any other, in the United States, is the electricity generation industry.³⁰ It is said that if one were to attach the top fifty U.S. GHG emitters as defendants, they would collectively account for more than 25 percent of U.S., and nearly 5.5 percent of worldwide emissions.³¹ Another report shows that U.S. power plants are responsible for 63 percent of all U.S. sulfur dioxide emissions and 39 percent of carbon dioxide emissions.³² An added benefit to naming this group as defendants is the general lack of intervening causes in the release of emissions from power plants, as may be the case with other enterprises, such as the automobile industry. Furthermore, with a number of scientific

30. For a summary of U.S. emissions since the UNFCCC, see U.S. ENVTL. PROT. AGENCY, INVENTORY OF GREENHOUSE GAS EMISSIONS AND SINKS: 1990-2005 (2007), available at <http://www.epa.gov/climatechange/emissions/downloads06/07CR.pdf>. See also U.S. Env'tl. Prot. Agency, Human Related Sources and Sinks of Carbon Dioxide, http://www.epa.gov/climatechange/emissions/co2_human.html (summarizing emissions by industry) (last visited July 11, 2009).

31. This calculation was made by using the EPA's EGrid database, available for download at <http://www.epa.gov/cleanenergy/egrid/index.htm> (cited in Hsu, *supra* note 29, at 724).

32. SANDRA GOODMAN, BENCHMARKING AIR EMISSIONS OF THE 100 LARGEST ELECTRIC POWER PRODUCERS IN THE UNITED STATES - 2002 at 7 (2004), available at <http://216.235.201.250/netcommunity/document.doc?id=108>. Furthermore, just five of these producers contribute 25 percent of U.S. CO2 emissions. *Id.* at 3.

advances in alternative energy and emissions mitigation technology, electricity generation industries will have a considerably harder time arguing the necessity of maintaining the status quo.³³ Data may be even worse than previously recorded, as the U.S. has not yet implemented a Canadian style mandatory reporting requirement. Instead, the EPA provides the estimates broken down by industrial sector.³⁴

Another reason for the vulnerability of this group is that one could find culpability for past emissions, which are resulting in today's harms, rather than having to argue prospective harms as the basis for liability. Claims about prospective harms are rarely successful. However, with the number of alternative emission-cutting technologies made available for use by companies over the last several years, this particular set of defendants seem to have much weaker arguments on the "best technology available" defense.³⁵ One could reasonably argue that the electricity generation industry intentionally failed to prevent or reduce its global warming impact. Data on profits realized in the absence of GHG regulations, particularly those made well after affordable technology and mitigation alternatives became available, would lend support to this argument. Industry conduct has, and will, cause long-term harm, especially to those groups previously identified. The arguments for liability seem to find their strongest basis in pointing to conduct that took place after the science was available and the harms were identified, but before implementation of regulatory mandates. Now may very well be that time.

There are other options, of course. Parties could sue states with high levels of GHG emissions, an option that must be considered when exploring most international liability frameworks. This is more fully discussed below. However, there are significant hurdles, for most states, to suing the United States, as the U.S. routinely objects to and refrains from ratifying treaties that may give rise to liability. Furthermore, all nations emit greenhouse gases, leaving the question of whether a smaller country contributing to the climate change problem could find success in suing another, larger contributor of GHGs.

33. For a general list of available alternative energy sources, see, for example, Alternate Energy Sources, <http://www.alternate-energy-sources.com> (last visited Nov. 30, 2009).

34. Nell Greenfieldboyce, *And the Biggest Producer of Greenhouse Gases Is . . .* (Nat'l Pub. Radio June 6, 2007), available at <http://www.npr.org/templates/story/story.php?storyId=10745942>.

35. Hsu, *supra* note 29, at 730-33.

III. POTENTIAL INTERNATIONAL LIABILITY SCHEMES

The primary question of liability is answered by determining whether greenhouse gas emitting nations or companies can be held liable for the impacts generated by their *own* emissions, given that nearly every person on Earth contributes in some way to climate change. There are two essential causation questions. The first is whether sufficient evidence exists to establish a causal link between anthropogenic emissions and climate change. At this point, it is widely accepted that a link does exist between the two.³⁶ The second, and more difficult causation hurdle, is whether particular damage suffered by any one individual or group of individuals is sufficiently attributable to any single source of emissions. Thus, even if the establishment of a link between particular damage and anthropogenic emissions is possible, the problem of causation is still inherent in any liability scheme. There is a great deal of scholarly literature discussing the ways in which apportionment for harms may take place.³⁷

A. *Applicable Principles of International Law*

Principle 2 of the 1992 Rio Declaration codifies the principle that, "[s]tates have...the sovereign right to exploit their own resources pursuant to their own environmental and developmental policies, and the responsibility to ensure that activities within their jurisdiction or control do not cause damage to the environment of other States or of areas beyond the limits of national jurisdiction."³⁸ Also relevant to liability, "in international law, states

36. See, e.g., IPCC Report, *supra* note 8, at 5.

37. See, e.g., Michael G. Faure & André Nollkaemper, *International Liability as an Instrument to Prevent and Compensate for Climate Change*, 43A STAN. J. INT'L L. 123, 128 (2007) (writing from an integrated international and domestic law perspective in an attempt to transcend differences between particular jurisdictions, including the difference between international and domestic law, and to focus on more general conceptions of liability in climate change). See also RODA VERHEYEN, CLIMATE CHANGE DAMAGE & INTERNATIONAL LAW: PREVENTION DUTIES & STATE RESPONSIBILITY 137-224 (2005); Myles Allen, *Liability for Climate Change: Will it Ever be Possible to Sue Anyone for Damaging the Climate?*, 421 NATURE 891, 891-92 (2003); Michael J. Saks & Peter David Blanck, *Justice Improved: The Unrecognized Benefits of Aggregation and Sampling in the Trial of Mass Torts*, 44 STAN. L. REV. 815 (1992); John E. Noyes & Brian D. Smith, *State Responsibility and the Principle of Joint and Several Liability*, 13 YALE J. INT'L L. 225, 237-38 (1988).

38. Rio Declaration on Environment and Development, Annex I, Principle 2, June 14, 1992, U.N. Doc. A/CONF.151/26/Rev.1 (Vol. 1), available at <http://www.un.org/documents/ga/conf151/aconf15126-1annex1.htm>; see also Int'l Law Comm'n, Draft Principles on the Allocation of Loss in the Case of Transboundary Harm Arising out of Hazardous Activities, Principle 6, in *Report of the International Law Commission on the Work of its Fifty-Eighth Session*, U.N. Doc. A/61/10 (Oct. 1, 2006), available at http://untreaty.un.org/ilc/texts/instruments/english/commentaries/9_10_2006.pdf.

are responsible for violations of public international law and are obliged to compensate the indirectly or directly affected states for the damage caused."³⁹

Thus, in a general sense, there is dialogue and codification of an arguable right to a safe and healthy environment. However, whether those precepts encompass climate change is a highly contentious and unsettled debate. It remains to be seen whether an international organization will put its legitimacy on the line in finding these declarations sufficient to ground claims of international violations against such countries as the United States for climate change harms.⁴⁰

B. United Nations Framework Convention on Climate Change and the Kyoto Protocol

The major sources of international environmental law are treaties and international agreements.⁴¹ Scholars have carefully scrutinized the leading international documents on environmental law to ascertain principles or declarations by which emitting nations may be held liable.⁴² Given near universal ratification of the United Nations Framework Convention on Climate Change (UNFCCC), the Convention is a logical place to begin specific discussions on potential mechanisms for liability. Considering the UNFCCC, without Kyoto, there are two articles particularly applicable to the question of liability. The first is Article 2, which states:

The ultimate objective of this Convention and any related legal instruments that the Conference of the Parties may adopt is to achieve, in accordance with the relevant provisions of the Convention, stabilization of greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system. Such a level should be achieved within a time frame sufficient to allow ecosystems to adapt naturally to cli-

39. Tol & Verheyen, *supra* note 23, at 2 (citing *The Factory at Chorzów*, (Ger. v. Pol.), 1928 P.C.I.J. (ser.A) No. 17, at 30 (Sept. 13)).

40. See generally Andrew L. Strauss, *The Legal Option: Suing the United States in International Forums for Global Warming Emissions*, 33 ENVIR. L. REP. 10,185 (2003) (discussing possible international forums, including declarations and treaties, for suing the United States for climate change).

41. See, e.g., The Am. Soc'y for Int'l L., ASIL Guide to Electronic Resources for International Law, <http://www.asil.org/resource/env1.htm> (last visited July 12, 2009).

42. See, e.g., Faure & Nolkaemper *supra* note 37 at 142-50; Sumudu Atapattu, *The Right to a Healthy Life or the Right to Die Polluted?: The Emergence of a Human Right to a Healthy Environment Under International Law*, 16 TUL. ENVTL. L.J. 65 (2002).

mate change, to ensure that food production is not threatened and to enable economic development to proceed in a sustainable manner.⁴³

This provision represents the purpose of the UNFCCC, particularly in the realm of customary international law.⁴⁴ Moreover, in accordance with the Vienna Convention, a signatory state which fails to ratify a convention is still under an obligation not to frustrate the object and purpose of a treaty to which it is a signatory.⁴⁵ Thus, it could be argued that those countries that failed in their domestic policy to refrain from frustrating the purposes outlined in the text of the UNFCCC are open to liability. This, of course, is highly contentious as most view this section as non-binding and aspirational in nature.⁴⁶

Other language to consider for potential liability falls within Article 4, the "commitments" section.⁴⁷ In particular, Article 4, paragraph 2 requires industrial nations to commit to lowering, by the year 2000, GHGs within their borders to the level emitted in 1990, a task every state failed to meet.⁴⁸ For those countries that are parties to the UNFCCC, but not Kyoto, the question becomes whether these sections are sufficient enough to maintain an action in liability. Most agree the answer is no, as the provisions are too vague.⁴⁹

However, it may be different in situations where a country commits to both the UNFCCC and the Kyoto Protocol, as the latter provides very specific requirements for reducing GHGs, with quantifiable measurements on certain dates.⁵⁰ Article 3(1) of Kyoto mandates Annex I countries to, individually or jointly, meet their assigned emissions criteria, and thus, where there is a clear obli-

43. UNFCCC, *supra* note 21, art. 2.

44. Roda Verheyen, *The Legal Framework of Adaptation and Adaptive Capacity*, in CLIMATE CHANGE, ADAPTIVE CAPACITY AND DEVELOPMENT 182 (Joel B. Smith, et al. eds., 2003).

45. *Id.*

46. See Daniel Bodansky, *The United Nations Framework Convention on Climate Change: A Commentary*, 18 YALE J. INT'L L. 451, 516 (1993); PATRICIA W. BIRNIE & ALAN E. BOYLE, INTERNATIONAL LAW & THE ENVIRONMENT 524-26 (2d ed. 2002); PHILIPPE SANDS, PRINCIPLES OF INTERNATIONAL ENVIRONMENTAL LAW 361-65 (2d ed. 2003).

47. UNFCCC, *supra* note 21, art. 4.

48. *Id.* art. 4(2).

49. See, e.g., Faure & Nollkaemper, *supra* note 37, at 142-43; Bodansky, *supra* note 46, at 516; BIRNIE & BOYLE, *supra* note 46, at 526; SANDS, *supra* note 46, at 364-65.

50. Kyoto Protocol to the United Nations Framework Convention on Climate Change, Annex B, Dec. 10, 1997, U.N. Doc. FCCC/CP/1997/CRP.6, available at <http://unfccc.int/resource/docs/cop10/09.pdf>. The protocol entered into force upon Russian ratification on Feb. 16, 2005. A list of ratifying countries is available at UNFCCC, Parties to the Kyoto Protocol, <http://maindb.unfccc.int/public/country.pl?group=Kyoto> (last visited Nov. 30, 2009).

gation, failure to comply could be seen as a breach of an express treaty obligation.⁵¹

Literature abounds on UNFCCC and Kyoto limitations. Although the UNFCCC is a major step in facilitating climate change dialogue, it lacks any binding commitments or implementation authority. Furthermore, while Kyoto actually establishes binding commitments for member parties to reduce GHG emissions, it lacks commitments by the most serious emitters: the United States,⁵² China,⁵³ and India.⁵⁴ To use the U.S. as an example, GHG emissions are projected to be more than thirty-two percent above 1990 levels by 2010 and more than fifty percent above 1990 levels by 2020.⁵⁵ Whether a party to Kyoto or otherwise, success in decreasing emissions to specified levels is far from certain.⁵⁶ Furthermore, even if all Kyoto parties meet the Protocol's commitments, this will only represent the tip of the iceberg (or what is left of it) in stabilizing GHG concentrations in the atmosphere. Climatologists estimate that full Kyoto implementation will reduce previous global warming estimates by one-twentieth of one degree by 2050.⁵⁷ In order to make a difference in global temperatures, all industrialized and developing nations will need to play a part, as emissions will need to be reduced by sixty to eighty percent.⁵⁸ Thus, while Kyoto is certainly a step in the right direction, more must be done if global warming is to slow.⁵⁹

51. *Id.* art. 3(1).

52. See Carbon Dioxide Information Analysis CTR., Oak Ridge Nat'l Lab. (ORNL), 2007 Total Co2 emissions by country, available at cdiac.ornl.gov/trends/emis/top2007.tot

53. China accounts for roughly 25 percent of global carbon dioxide emissions. See *id.* But see Neth. Env'tl. Assessment Agency, China Now No. 1 in CO2 Emissions; USA In Second Position, <http://www.pbl.nl/en/dossiers/Climatechange/moreinfo/ChinanownolinCO2emissionsUSAinsecondposition.html> (last visited July 12, 2009).

54. See CD/AC, *supra* note 52 (listing India as accounting for roughly five percent of global carbon emissions).

55. UNFCCC SECRETARIAT, DATA APPENDICES TO UNFCCC PRESENTATION AT THE AWG WORKSHOP 6 (2006), available at http://unfccc.int/files/meetings/cop_12/in-session_workshops/application/pdf/061107_6_ghg_app.pdf.

56. See, e.g., Associated Press, *Canada Acknowledges it Will Not Meet Kyoto Targets Under New Climate Change Plan*, INT'L HERALD TRIB., Apr. 26, 2007, <http://www.ihf.com/articles/ap/2007/04/27/america/NA-GEN-Canada-Climate-Change.php>; Fiona Harvey, *Italy Buys to Meet Kyoto Targets*, FIN. TIMES (London), Apr. 5, 2008, http://us.ft.com/ftgateway/superpage.ft?news_id=fto040420082230597333; *Belgium Will Not Meet Its Kyoto Targets*, BRUSSELE RAAD VOOR HET LEEFMILIEU, Nov. 10, 2006, <http://www.bravzw.be/node/200>.

57. S. Fred Singer, *What Are the Prospects For an Effective Implementation of the Kyoto Protocol*, 30 NAT. RESOURCES F. 76, 76 (2006), available at <http://www.blackwell-synergy.com/doi/pdf/10.1111/html>.

58. IPCC, *supra* note 8, at 20; see also NIKLAS HÖHNE ET AL., WWF CLIMATE SCORECARDS: COMPARISON OF THE CLIMATE PERFORMANCE OF THE G8 COUNTRIES 4 (2005), available at http://www.panda.org/downloads/climate_change/g8scorecardsjun29light.pdf.

59. For a general discussion of Kyoto's failures, see, for example, William D. Nordhaus, *After Kyoto: Alternative Mechanisms to Control Global Warming*, 96 AM. ECON.

Additionally, as previously mentioned, island states made declarations in both the UNFCCC and Kyoto, making it clear they believed the emission reduction requirements were insufficient to prevent damage to their respective locales.⁶⁰ By making such declarations, the island states left open the potential for liability, particularly against the mega-emitters outside Kyoto commitments. The most significant limitations of the UNFCCC and Kyoto are that the emissions requirements are relatively small, especially in comparison to the potential harms. The worst emitters are not bound to its provisions and no long-term emission reduction guarantees are in place, as the climate regime requires all states to consent to reduction obligations on a reoccurring five-year basis.⁶¹

One final observation of the UNFCCC and Kyoto deals with the avenues of redress contained explicitly within the documents. Article 14 of the UNFCCC addresses various dispute settlement opportunities, including negotiation, arbitration, or submission to the International Court of Justice.⁶² Also, Article 14, paragraph 5 includes procedures for a conciliation,⁶³ which would permit a state to “legally” investigate whether a causal link existed between climate change harms in their state and the climate policy implemented in another country, and then, based on the undertaken investigation, request issuance of a non-binding recommendation by the committee.⁶⁴ Although only promising in theory, this may at least establish causation for purposes of liability. However, the Conference of the Parties has not yet approved the conciliations rules of procedure, as mandated in Article 14, paragraph 6 of the UNFCCC, and this avenue may not be available.⁶⁵ Furthermore, for the largest emitters, who have no Kyoto reduction obligations and have not submitted to ICJ jurisdiction, the prospects for filing

REV. 31 (2006) (comparing Kyoto and other quantity-oriented control mechanisms to price-control methods and concluding that price-control methods are more efficient and effective); Stephen M. Gardiner, *The Global Warming Tragedy and the Dangerous Illusion of the Kyoto Protocol*, 18 ETHICS & INT'L AFF. 23, 23-29 (2004) (arguing, generally, that Kyoto is weak in its efforts and creates a false sense of security and accomplishment); Bruce Pardy, *The Kyoto Protocol: Bad News for the Global Environment*, 14 J. ENVTL. L. & PRAC. 27 (2004) (discussing specifics of Kyoto's failures and inadequacies).

60. Kyoto Protocol: Status of Ratification at declarations 4 & 7, http://unfccc.int/files/kyoto_protocol/background/status_of_ratification/application/pdf/kp_ratification.pdf (last visited July 12, 2009).

61. Kyoto Protocol, *supra* note 50, arts. 4(9), 21(7); *see also* Nordhaus, Gardiner & Pardy *supra* note 59 (providing general discussions of Kyoto failures).

62. UNFCCC, *supra* note 21, art. 14.

63. *Id.* art. 14(5).

64. *Id.* art. 14(6).

65. *See* Timo Koivurova, *International Legal Avenues to Address the Plight of Victims of Climate Change: Problems and Prospects*, 22 J. ENVTL. L. & LITIG. 267, 276 (2007).

suit against those doing the most harm are limited under UNFCCC and Kyoto.

C. International Court of Justice

Overall, the same substantive allegation requirements apply to any state submitting a petition to the International Court of Justice (ICJ). In this case, a petition must allege facts sufficient to demonstrate the identification of climate change and its harms, whether from loss of sea ice or sea-level rise, as an international legal wrong justifying a remedy. In claims of liability or any other adversarial proceeding, the ICJ jurisdiction only extends to state v. state actions, and only then if the Court finds it has jurisdiction.⁶⁶ Given the widely accepted principles of state sovereignty,⁶⁷ jurisdiction is ultimately based on state consent.⁶⁸

There are three main ways for the ICJ to obtain jurisdiction. First, under Article 36(2) of the Statute of the ICJ, a state may elect prospectively to accept ICJ compulsory jurisdiction.⁶⁹ The problem with this option is that few major emitters accepted compulsory jurisdiction. For example, the United States withdrew its acceptance after the ICJ ruled against it in a case brought by Nicaragua in the 1980s.⁷⁰

The ICJ can also attain jurisdiction if the involved states mutually consent to the Court's authority.⁷¹ The likelihood that a potential defendant would submit to the ICJ, however, is slim to none. It is hard to imagine a scenario where the United States, China, India, or a host of other nations would voluntarily subject themselves to an international court system's determination of liability on such a contentious issue.

66. International Court of Justice, Contentious Jurisdiction, <http://www.icj-cij.org/jurisdiction/index.php?p1=5&p2=1> (last visited July 12, 2009).

67. See, e.g., Conference on the Human Environment, princ. 21, June 5-16, 1972, U.N. Doc. A/CONF.48/14/Rev. 1, U.N. Sales No. E.73.II.A.14, pt. 1, ch. 1, reprinted in 11 I.L.M. 1416; Rio Declaration on Environment and Development, Aug. 12, 1992, U.N. Doc. A/CONF.151/5/Rev. 1 (1992), 31 I.L.M. 876.

68. Strauss, *supra* note 40, at 10,185. However, two frequently cited cases by those arguing the ICJ may be a viable route to liability are the *Corfu Channel* case, where the ICJ said although state's must be allowed to maintain their sovereignty, that sovereignty also embodies "the obligation of every state not to allow its territory to be used for acts contrary to the rights of other states." *Corfu Channel* (U.K. v. Alb.) 1949 I.C.J. 4, 22 (Apr. 9). The other case frequently cited is the *Lac Lanoux Arbitration*, where the arbiters limited sovereignty to the extent that a state has an obligation to recognize, or at least not ignore, the rights of other states in using its own rights. *Lake Lanoux* (Spain v. Fr.) 53 AM. J. INT'L L. 156, 159 (Arb. Tribunal 1957).

69. Statute of the International Court of Justice, art. 36(2), 59 Stat. 1031, 1060, T.S. No. 993 (1945) [hereinafter ICJ Statute].

70. *Military and Paramilitary Activities* (Nicar. v. U.S.) 1986 I.C.J. 14 (June 27).

71. ICJ Statute, *supra* note 69, art. 36(1).

The final, and perhaps most likely avenue for the ICJ to obtain jurisdiction, also comes through Article 36(1) of the Statute of the ICJ.⁷² It requires the parties to specifically agree through treaty provisions to submit to the ICJ for dispute resolution, particularly in an area capable of extrapolation to emissions harm and climate change.⁷³

Several limitations exist when bringing a claim against the major GHG emitters through the ICJ. First, jurisdiction must be acquired over the case through one of the above mentioned mechanisms.⁷⁴ Even assuming that obtaining jurisdiction through consent or treaty provisions is possible, other significant issues emerge.⁷⁵ The causes of action must be well pleaded and give rise to a governing piece of international "legislation" (i.e., treaty, convention, etc.) sufficient for the plaintiff to survive a motion to dismiss. The plaintiff must also obtain standing.⁷⁶ Accordingly, in obtaining a viable claim against the major emitting nations, the ICJ does not appear to be the most promising avenue.⁷⁷

D. Inter-American Commission on Human Rights

There are two governing bodies under this system. The first is the Inter-American Commission on Human Rights (IACHR), the entity that most of this discussion will center on, since it potentially could obtain, through creative legal work, jurisdiction over the United States as a major emitter of GHGs. On the other hand, the Inter-American Court of Human Rights is not yet a realistic means through which to sue the United States for climate change, although it may serve as an option for other Organization of American States members.

72. *Id.*

73. *Id.*; see also Strauss, *supra* note 40 (discussing the possibility of using Friendship, Commerce and Navigation (FCN) or other similar treaties which have broad language requiring that participating countries treat each other's people and property favorably and equitably to obtain ICJ jurisdiction).

74. See generally Mark L. Movsesian, *Judging International Judgments*, 48 VA. J. INT'L L. 65, 73-75 (2007) ("States tend to reject ICJ jurisdiction over disputes that implicate significant interests.").

75. The Island nation of Tuvalu filed a petition with the ICJ against the United States and Australia, alleging each state's violation of the UNFCCC gave rise to liability for damages incurred by Tuvalu due to climate change effects caused by their emissions. For an account of the step-by-step requirements for Tuvalu to file under the ICJ, and the barriers inherent in such a filing, see Akiko Okamatsu, *Problems and Prospects of International Legal Disputes on Climate Change*, in Berlin Conference on the Human Rights Dimensions of Global Environmental Change (2005).

76. See Koivurova, *supra* note 65, at 280.

77. Again, for the purposes of this Comment, only liability claims are considered. The ICJ may be a viable venue for obtaining an advisory opinion on climate change but that option is not analyzed here.

Established in 1979, the Inter-American Court of Human Rights' purpose is to enforce the Inter-American Convention on Human Rights, the principle human rights treaty applied to the Organization of American States.⁷⁸ To submit a case to the court, the petition goes through a two-tiered process whereby the case is first submitted to the Inter-American Commission on Human Rights to determine whether it meets one of four required criteria for standing.⁷⁹ Those criteria include:

- (1) the respondent State has not reasonably complied with the Commission's final, confidential recommendations on the merits; (2) the case involves alleged violations of the American Convention or other treaty over which the Court exercises contentious jurisdiction with respect to the respondent State; (3) the impugned facts occurred *after* the treaty took effect for that State; and (4) the State has made a declaration recognizing the Court's jurisdiction as binding, either *ipso facto* or in the case *sub judice*.⁸⁰

If the court finds none of the criteria have been met, or otherwise decides to not refer the case, the Commission may publish its own nonbinding findings and recommendations on the merits of the case.⁸¹

Not surprisingly, the U.S. has not ratified the Inter-American Convention on Human Rights and would almost certainly not subject itself to the Court's jurisdiction voluntarily. The United States failing to ratify such treaties has become a reoccurring theme in American foreign policy.

There is a remote possibility, however, that the Inter-American Commission on Human Rights *could theoretically* obtain jurisdiction over the United States on the issue of climate change. There are several advantages to this system, as recognized by the Inuit Circumpolar Council (ICC) when they filed a petition with the

78. Statute of the IACHR, art. 1, Oct. 1, 1979, O.A.S. Res. 448 (IX-0/79), O.A.S. Off. Rec. OEA/Ser.P/IX.0.2/80, vol. 1, at 98, entered into force Jan. 1, 1989. *See also* American Convention on Human Rights, art. 62.3, Nov. 22, 1969, 1144 U.N.T.S. 123, O.A.S.T.S. No. 36, at 1, OEA/Ser.L/V/II.23 doc. rev. 2, entered into force July 18, 1978 [hereinafter IACHR].

79. The United States is not a party to the Covenant on Civil and Political Rights, thus an appeal to the Human Rights Committee is not possible. *See International Covenant on Civil and Political Rights*, Dec. 16, 1996, 999 U.N.T.S. 171, available at http://www.unhchr.ch/html/menu3/b/a_ccpr.htm.

80. Tara J. Melish, *The Inter-American Court of Human Rights: Beyond Progressivity*, in *SOCIAL RIGHTS JURISPRUDENCE: EMERGING TRENDS IN COMPARATIVE AND INTERNATIONAL LAW* 1, 12-13 (M. Langford ed., 2008) (emphasis in original).

81. *Id.* at 12.

IACHR against the United States (alleging the U.S. could be held liable for climate change because of its status as the world's largest emitter of GHGs).⁸² The petition contended that the emissions violated the Inuit's human rights,⁸³ and recognized the IACHR as a comparatively progressive institution in the international arena because it had previously found a connection between a state's individual environmental actions and human rights.⁸⁴ Another recognized advantage is the willingness and ability of the Commission to consider ways in which human rights claims were previously handled in international human rights forums.⁸⁵

At the time of this writing, the case is still pending. The decision by the IACHR regarding this petition will offer insight into the future viability of this system of climate change litigation, particularly against the United States.⁸⁶ Although initially rejected, the IACHR later reconsidered its decision and held hearings on March 1, 2007, to determine whether climate change was itself a human rights violation.⁸⁷ Although the IACHR hearings will largely be limited to the publication of its findings, it is the first such hearing held in an international forum and may, at the very least, move climate change (as a human right) towards an international consensus.

The limitations of submitting a petition with the IACHR are inherent in the preceding paragraphs; namely, the organization's lack of authority to mandate state emission cuts or order compensation for human rights violations. Furthermore, the system requires a complete exhaustion of domestic legal remedies before consideration of a petition,⁸⁸ and although United States climate change policy is far from progressive, American courts are historically a viable vehicle for change. It is also worth restating that the IACHR is limited to American states. Thus, as China's emissions continue to rise at an unprecedented rate, this system is not available to file claims against that state. Ultimately, these limitations may not prove to be impossible barriers to issuance of a recom-

82. WATT-CLOUTIER, *supra* note 28.

83. *Id.* at 5.

84. Koivurova, *supra* note 65, at 287 (citing IACHR decisions implicating this connection).

85. *Id.* (citing cases in which the IACHR looked to other regimes to further human rights doctrine).

86. Koivurova provides a detailed account of the foundations for violations of human rights alleged by the Inuit in this petition, along with the potential consequences stemming from the IACHR decision. See Koivurova, *supra* note 65, at 293-95.

87. See, e.g., Jonathan Spicer, *Hearing to Probe Climate Change and Inuit Rights*, REUTERS, Feb. 21, 2007, <http://www.reuters.com/article/scienceNews/idUSN204267120070221>.

88. IACHR, *supra* note 78, art. 28.

mentation, particularly with this systems progressive reputation. However, the impacts are limited due to a lack of enforcement mechanisms for an actual finding and an award of liability.

E. United Nations Convention on the Law of the Sea & the U.N. Fish Stocks Agreement

There exists a mounting body of academic literature on the viability of the United Nations Convention on the Law of the Sea (LOS Convention)⁸⁹ and the U.N. Fish Stocks Agreement (UNFSA),⁹⁰ as dispute resolution mechanisms and a means to liability. The viability of these agreements rests on the impacts previously described (sea level rise, warming water temperatures, and changes in ocean pH)⁹¹ because the LOS Convention addresses the rights and duties of states in protection of the marine environment.

It has been argued that Article 194(2) of the LOS Convention implicitly limits a state's right to emit GHGs in that it requires states "to ensure that activities under their jurisdiction and control are so conducted as to not cause damage by pollution to other States and their environment"⁹² This article continues by stating these requirements must "deal with all sources of pollution [to] the marine environment" and explicitly covers "the release of toxic, harmful or noxious substances, especially those which are persistent, from land-based sources, from or through the atmosphere or by dumping."⁹³

Another portion of the LOS Convention frequently cited when discussing potential liability is Article 235.⁹⁴ This article outlines state responsibility, triggered when States fail to meet LOS Convention-required environmental duties. "States are responsible for

89. United Nations Convention on the Law of the Sea, Dec. 10, 1982, 1833 U.N.T.S. 243 [hereinafter LOS Convention].

90. Agreement for the Implementation of the Provisions of the United Nations Convention on the Law of the Sea of 10 December 1982 Relating to the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks, Aug. 4, 1995, 2167 U.N.T.S. 3 [hereinafter UNFSA].

91. See generally William C. G. Burns, *Potential Causes of Action for Climate Change Damages in International Fora: The Law of the Sea Convention*, 2 INT'L J. SUSTAINABLE DEV'L L. & POL'Y 27 (2006), available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=930438 (considering potential climate change impacts in the world's oceans that may give rise to LOS Convention actions).

92. LOS Convention, *supra* note 89, art. 194(2).

93. *Id.* art. 194(3).

94. *Id.*; see also Burns, *supra* note 91, at 46 (arguing that "[a]rticle 235 may impose a more stringent standard of care, mandating that States are responsible for fulfilling international obligations that contribute to the protection and preservation of the marine environment.").

the fulfillment of their international obligations concerning the protection and preservation of the marine environment. They shall be liable in accordance with international law.”⁹⁵ Also, importantly, the Convention defines “pollution of the marine environment” expansively;

‘pollution of the marine environment’ means the introduction by man, directly or indirectly, of substances or energy into the marine environment, including estuaries, which results or is likely to result in such deleterious effects as harm to living resources and marine life, hazards to human health, hindrance to marine activities, including fishing and other legitimate uses of the sea, impairment of quality for use of sea water and reduction of amenities.⁹⁶

Thus, one could connect GHG emissions, (scientifically linked to rising sea levels, increased water temperatures, and changes in pH due to increased carbon dioxide levels in the water), to widespread oceanic impairments. The Convention provides four options for settling disputes over its provisions: (1) the International Tribunal for Law of the Sea (ITLOS); (2) the ICJ; (3) an arbitral tribunal; or (4) a special arbitral tribunal.⁹⁷ States may choose their forum, but in instances where no choice is made or parties differ on forum selection, the only option available is binding arbitration.⁹⁸

An immediate limitation of the LOS Convention is the United States’ failure to ratify it, and thus, a suit could, arguably, not be brought under the Convention.⁹⁹ However, the United States is arguably already bound by the environmental provisions, as many aspects of the LOS Convention are codifications of customary international law.¹⁰⁰ In fact, some U.S. federal courts have held that the LOS Convention is customary international law, due to its

95. LOS Convention, *supra* note 89, art. 235.

96. *Id.* art. 1(4).

97. *Id.* art. 287(1).

98. *Id.* art. 287(5).

99. United Nations, Chronological Lists of Ratification of, Accessions and Successions to the Convention and the Related Agreements at 16 March 2009, http://www.un.org/Depts/los/reference_files/chronological_lists_of_ratifications.htm (last visited Apr. 8, 2008).

100. *See, e.g.,* Strauss, *supra* note 40, at 10188 (arguing LOS Convention environmental provisions are likely customary international law and thus may bind the United States, despite its lack of signatory status). The Strauss article also supports the contention that provisions in the LOS Convention are binding on the U.S. by referencing the 1983 Presidential Proclamation by then President Reagan which espoused to follow most of the LOS Convention as customary international law, except in the area of seabed mining. *Id.*

nearly universal ratification.¹⁰¹ Thus, although some of the means for mandatory arbitration may not be viable against the United States per se, they may be utilized against any of the other 155 members. Furthermore, it is theoretically possible for a party to use the LOS Convention in a suit before the ICJ, against the United States.¹⁰² As previously mentioned, however, the United States withdrew compulsory jurisdiction under the ICJ and unless the new administration adopts major changes in policy towards climate change and international law in general, it is highly unlikely the U.S. will voluntarily submit.¹⁰³

Another limitation of using the LOS Convention to file suit is the difficulty in showing causation. In this context, the defendant/state would likely argue a number of intervening and/or alternative causes, making the causal connection between one state's emissions and the impacts on the marine environment tenuous at best.¹⁰⁴ Furthermore, in defining the standard of care by which parties to the LOS Convention are to conform their behavior,¹⁰⁵ the most likely international climate change obligation is either Kyoto, to which major emitters have no binding obligations, or the UNFCCC, which is largely inspirational and non-binding in nature.¹⁰⁶

The UNFSA presents an additional avenue for finding liability.¹⁰⁷ As is the case with the LOS Convention, this agreement contains a binding dispute resolution procedure,¹⁰⁸ but unlike the LOS Convention, the United States largely follows it.¹⁰⁹ Arguing for climate change liability under this agreement is somewhat of a stretch, as it does not make an explicit reference to pollution or emissions. However, one plausible argument is that the commercial fisheries' sectors are adversely impacted by climate change and these impacts fall upon many of the fish stocks directly regulated under the UNFSA.¹¹⁰ William Burns' timely article, *Potential*

101. *Sarei v. Rio Tinto PLC*, 221 F. Supp. 2d 1116 (C.D. Cal. 2002).

102. See, e.g., Burns, *supra* note 91, at 45; see also ICJ Statute, *supra* note 69, art. 36 (as previously mentioned, jurisdiction can be obtained under the ICJ by treaties and conventions provided for under the UN Charter).

103. Burns, *supra* note 91, at 45 n.106 (describing a "likely" U.S. reaction to such an action submitted to the ICJ).

104. See *id.* at 49-50 (citing terrestrial runoff, disease, predators and pollution as other possible contributors to those harms a plaintiff may allege were caused by climate change).

105. LOS Convention, *supra* note 89, art. 212 (requiring parties to take into account "internationally agreed rules, standards, and recommended practice and procedures" in establishing measures to prevent and reduce pollution).

106. See discussion *supra* Part III.B. (concerning UNFCCC and Kyoto).

107. UNFSA, *supra* note 90.

108. *Id.* art. 30.

109. Strauss, *supra* note 40, at 10,188.

110. See William C.G. Burns, *Potential Causes of Action for Climate Change Impacts*

Causes of Action for Climate Change Impacts Under the United Nations Fish Stocks Agreement, outlines an outstanding basis for adequate harms on which to base a climate change claim,¹¹¹ and discusses ways in which the agreement explicitly and implicitly contains sufficient environmentally protective provisions to demonstrate a breach of the agreement.¹¹²

Overall, there are two significant and unique advantages to using the UNFSA, assuming causation between the impacts on fisheries and climate change emissions. First, the United States is actually a party to the UNFSA, a rarity in the environmental context. Second, the UNFSA contains binding dispute resolution, which is another exceptional rarity in the field of international environmental law and one that does not go unnoticed. On the other hand, there are significant hurdles that are not necessarily unique to UNFSA. As is normally the case with liability claims in this area, finding proof of general and specific causation is difficult, particularly due to evidence of intervening causes. Additionally, one might wonder about the timeliness of UNFSA panels in deciding such a contentious issue as climate change, particularly when the intent of the convention was the harvesting of straddling fish stock, and when the legitimacy of the institution, especially in international circles, is highly dependent upon members submitting to jurisdiction and recognizing their party status.

F. Domestic Law: United States Federal and State Courts

Given the United States' generally plaintiff-friendly tort system, and the fact that the U.S. is a leader in GHG emissions and number of high-emitting industries, an article on potential liability for climate change would be remiss for failing to discuss the pros and cons of filing suit in a U.S. court. This article addresses two options, which are in no way exhaustive of potential domestic remedies: nationals filing in federal court using common law nuisance claims and aliens filing suit under the Alien Tort Statute.

Under the United Nations Fish Stocks Agreement, 7 SUSTAINABLE DEV. L. & POL'Y 34, 34-37 (2007) (outlining the potential impacts of climate change on species of fish, especially impacts on highly migratory and straddling stocks, as well as providing information relating to UNFSA and potential actions for climate change damages there under); see generally S.M. GARCIA ET AL., WORLD REVIEW OF HIGHLY MIGRATORY SPECIES AND STRADDLING STOCKS: FAO FISHERIES TECHNICAL PAPER NO. 337 (D. Spencer et al. eds., 1994), available at <http://www.fao.org/docrep/003/T3740E/T3740E00.htm> (providing "information on the fisheries and state of stocks of a number of highly migratory species and straddling stocks").

111. Burns, *supra* note 110, at 35-37.

112. *Id.*; see also UNFSA, *supra* note 90, arts. 5, 6.

Additionally, the typical issues of standing, political question doctrine, and causation will briefly be discussed.

1. Issues of Standing

U.S. Courts have begun to acknowledge their potential role in the pressing climate change issue. In a landmark decision, the U.S. Supreme Court recently held that climate change science is sufficiently direct and tangible to form a basis for standing,¹¹³ proving the impetuous for overcoming one gigantic hurdle. To gain standing in a U.S. federal court, a well-known three-part test for standing must be met. The plaintiff must show that (1) he suffered an injury in fact that is concrete and actual or imminent rather than hypothetical; (2) the injury is fairly traceable to the challenged action of the defendant; and (3) the injury alleged is capable of redressability by the judiciary.¹¹⁴ The Supreme Court reiterated previous holdings by stating that, "standing is not to be denied simply because many people suffer the same injury," to hold otherwise "would mean that the most injurious and widespread Government actions could be questioned by nobody."¹¹⁵ Although not directly related to actual liability, obtaining standing is an important first step to that end. With this recent decision the burden has eased, especially for the right plaintiffs, who allege more particularized harm than in the recent case of *Northwestern Environmental Defense Center v. Owens Corning Corp.*¹¹⁶

2. Causation and Apportionment of Liability

To be sure, all climate change opinions will discuss the adequacy of climate science for judicial review, but recent cases, including the previously discussed case of *Massachusetts v. EPA*, tend to con-

113. *Mass. v. Env'tl. Prot. Agency*, 549 U.S. 497, 525-26 (2007).

114. *Lujan v. Defenders of Wildlife*, 504 U.S. 555, 560-61 (1992).

115. *Mass. v. Env'tl. Prot. Agency*, 549 U.S. at n.24.

116. *Nw. Env'tl. Def. Ctr. v. Owens Corning Corp.*, 434 F. Supp. 2d 957 (D.Or. 2006) (holding environmental organization had standing to challenge issuance of permit application which would have allowed significant releases of GHGs); see also *Friends of Earth, Inc. v. Watson*, 2005 WL 2035596 (N.D. Cal.) (affirming standing of environmental organization to bring claim, requesting governmental agency to include in their environmental assessments the subject of climate change). But see *Korsinsky v. Env'tl. Prot. Agency*, 2005 WL 2414744 (S.D.N.Y.) (rejecting standing of individual suing in tort for climate change). For a scholarly discussion of standing, see Bradford C. Mank, *Standing and Global Warming: Is Injury to All Injury to None?*, 35 ENV'T'L L. 1 (2005) (arguing some climate change plaintiffs with concrete injuries likely have standing to sue); David R. Hodas, *Standing and Climate Change: Can Anyone Complain About the Weather*, 15 J. LAND USE & ENV'T'L L. 451 (1999).

firm the scientific consensus regarding climate change.¹¹⁷ Accordingly, with the right plaintiff and defendant, it is likely that courts will be more reluctant to dismiss cases on standing grounds related to causation alone.

Winning the issue of causation on the merits, however, has and will be far more challenging for climate change victims. Naming the right defendant is a significant ingredient in the recipe for successful litigation. The theory of liability should be such that a large number of defendants, who are all significant GHG contributors, can be brought in and found jointly and severally liable, as it seems nearly impossible to hold any single emitter alone liable. For example, a liability compensation scheme similar to that in *Sindell v. Abbott Laboratories*¹¹⁸ may be ideal in the realm of climate change. *Sindell* was a products liability action against the drug manufacturers of DES, a drug that was administered during the plaintiff's pregnancy. Although DES was routinely administered at the time, it was later discovered to cause a rare form of cancer in some of the women whose mothers took the drug. After discovering she had cancer, the plaintiff sued eleven of the more than two hundred drug manufacturers of DES.¹¹⁹ Despite the plaintiff's inability to identify the manufacturer of her mother's drug, the court still found the plaintiff successfully stated a cause of action against the drug manufacturers because they all used an identical formula.¹²⁰ Much of the courts holding seemed to rest on a broad policy statement, which noted that the manufacturers were "better able to bear the cost of the injury resulting from the manufacture of a defective product."¹²¹ Importantly, the court apportioned liability, a then novel idea which has since been followed by a number of courts, making each defendant liable for their corresponding market share of DES.¹²²

Comparable to the drug case above, it is nearly impossible to link any one particular GHG emitter to an individual injury. GHGs have been emitted in significant amounts since the industrial revolution, and their buildup is cumulative.¹²³ However, like

117. *Mass. v. Env'tl. Prot. Agency*, 549 U.S. at 521-27.

118. *Sindell v. Abbot Laboratories*, 607 P.2d 924 (Cal. 1980).

119. *Id.* at 925-26.

120. *Id.* at 928-32.

121. *Id.* at 936.

122. *Id.* at 936-37; *see also* Grossman, *supra* note 24, at 39-51 (discussing the possibility of a products liability claim for climate change).

123. As previously mentioned, attributing specific climate change harms is difficult because, among other reasons, it is the accumulation of GHGs in the atmosphere from the past, compounded by today's and future emissions, that has resulted in harms and will continue to plague the Earth. However, there are historical reports, for example the one conducted by World Research Institute (WRI) on emissions by country from 1900-1990 (and

the manufacturers of DES, who used identical formulas, any carbon dioxide emission is similar in nature, particularly within the electricity generation industry. By narrowing the defendants to a particular industry, like electricity generation, one could argue the processes for fuel combustion are vastly similar in makeup and apportionment, and thus form an equitable way of apportioning the harms associated with climate change. Additionally, like the manufacturers of DES, the energy companies are better able to bear the cost of the injury resulting from continued emissions.¹²⁴

3. Nuisance Law

The focus of this section is the federal common law of nuisance.¹²⁵ Before discussing the specifics of bringing this kind of action in a U.S. court, the underlying goals of tort law are worth mentioning. Many scholars argue that the disproportionate effects of climate change are such that a claim sounding in tort is more than appropriate. Several reasons for this are offered. First, although causation is a hurdle in any climate change suit, one of the primary reasons for the tort system is to compensate for damages to individuals and property caused by human activity, thereby decreasing the costs of accidents.¹²⁶ Other readily apparent connections between tort law and climate change include the disproportionate effects of climate change harms on localized victims, particularly, the disparity between rich and poor nations/individuals, the availability of allocation of costs across multiple U.S. companies and industry sectors, and the idea of attributing costs to the

significant tracking post-1990). Europe is said to have contributed 28%, the U.S. 30%, Japan 4% and the former Soviet Union 14%, while Africa is responsible only for 3% and South and Central America combined for 4% during this early time period. WRI, *Contributions to Global Warming: Historic Carbon Dioxide Emissions from Fossil Fuel Combustion, 1900-1999*, <http://earthtrends.wri.org/text/climate-atmosphere/map-488.html> (last visited Mar. 23, 2008). Accordingly, there may be a creative way to average emissions over the last one hundred years to apportion damages, while giving more weight to those emissions taking place post-1990, with the mainstreaming of climate change dialogue and with it, responsibility to act.

124. *Sindell v. Abbot Laboratories*, 607 P.2d 924, 936 (Cal. 1980).

125. Although some argue that a claim for climate change could also sound in negligence, it seems an unlikely proposition given that the requirements of negligence include a duty owed to the victim and reasonableness of care, both of which are likely tough hurdles for plaintiffs to overcome. *But see* David Hunter & James Salzman, *Climate Change Litigation and the Duty of Care*, 155 U. PA. L. REV. 1741 (2007) (arguing that negligence cause of actions will gain acceptance and viability with the passage of time and with increased exposure).

126. *See generally* RICHARD A. POSNER, *ECONOMIC ANALYSIS OF LAW* §§ 6.1-6.17 (4th ed. 1992); Eduardo M. Penalver, *Acts of God or Toxic Torts? Applying Tort Principles to the Problem of Climate Change*, 38 NAT. RESOURCES J. 563, 569-79 (1998); Grossman, *supra* note 24, at 3-5.

party who can best bear the burden of the injury.¹²⁷ For example, when you pit the oil, gas, or electricity generation industries against the Inuit, who may be the first American environmental refugees of climate change, the industries are plainly more adept and financially capable of internalizing the costs of climate change damage when compared to a small native Alaskan fishing village. Similarly, when considering which cost allocation scheme best decreases climate change “accident” costs, the analysis seems compelling for an action in tort. The reason is that making already poor victims bear those burdens would only ensure a higher frequency and level of “accidents” in the future.¹²⁸ Given the lack of incentives for emission reductions currently at play in the United States, evidence of these accident costs abound in data concerning increasing levels of emissions each year. This is particularly true for the “vulnerable defendant” industries previously discussed.

With regards to the public nuisance doctrine in particular, the Restatement (Second) of Torts §821B defines public nuisance as “an unreasonable interference with a right common to the general public.” Factors taken into consideration in determining whether the conduct in question is a violation of a public right include the effects on the public health, safety, peace, convenience or comfort.¹²⁹ Another factor is whether the conduct is “of a continuing nature or has produced a permanent or long-lasting effect,” and whether the potential defendant “knows or has reason to know” of its effect on the “right[s] common to the general public.”¹³⁰

Accordingly, the first step in a public nuisance suit is proving that the rights alleged are common to the general public. In the context of climate change, one could imagine the scope of the infringements on public rights. For example, when beaches and other public lands are lost to erosion or rising sea levels and when the infrastructures of entire villages are destroyed due to melting sea ice and coastal erosion, these effects have historically been sufficient to show interference with public rights.¹³¹

127. See, e.g., Grossman, *supra* note 24; POSNER, *supra* note 126; Penalver, *supra* note 126.

128. See Grossman, *supra* note 24, at 4-5 (discussing three principal obstacles inherent in climate change victims’ effective organization to force industry changes in reduction of GHGs).

129. RESTATEMENT (SECOND) OF TORTS § 821(B) (1977).

130. *Id.*

131. NAT’L ASSESSMENT SYNTHESIS TEAM, CLIMATE CHANGE IMPACTS ON THE UNITED STATES: THE POTENTIAL CONSEQUENCES OF CLIMATE VARIABILITY AND CHANGE (2000). See generally, IPCC, *supra* note 8.

A second element to be proven is that the interference is unreasonable and the factors previously mentioned are considered. Thus, for a climate change suit, plaintiffs need to demonstrate that the emissions caused by the named defendants are such that they interfere with the public health, safety, peace, convenience, or comfort, and that defendants knew or had reason to know of the effects upon the public right.¹³² Given the ever-increasing scientific body of evidence demonstrating the connection between GHG emissions (in particular carbon dioxide) and climate change effects, and new comprehensive tracking mechanisms of GHGs released by industry sectors, satisfying this element seems increasingly realistic. For example, in the cases of the Alaskan Inuit and the island inhabitants of Tuvalu, both of whom are on the brink of losing their infrastructure, property, and culture, the defendants' conduct could be shown to significantly interfere with their safety, peace, and comfort. Further, evidence has long shown that by emitting carbon dioxide into the atmosphere, climate change effects take place. As in any case, particularized findings of harm must still be alleged, but it certainly seems the propensity is there for demonstrating these elements.

The comments in the Restatement dictate that simply staying within the bounds of statutory law is not necessarily sufficient to meet the reasonableness standard and avoid liability.¹³³ Courts consider all attendant circumstances.¹³⁴ Thus, simply because the U.S. government has not enacted new guidelines or regulations mandating particular reductions in carbon emissions, the attendant circumstances would be considered in a case of public nuisance. The fact that many U.S. states and most of the developed countries of the world have had emission reduction policies in place for years may add additional fuel to the proverbial fire. Additionally, the disproportionate impact of climate change-related injuries felt by specific groups of victims has been apparent for some time, and the ability to mitigate those damages has also been readily available. This evidence is useful to support a claim in nuisance.

Finally, at least two of the petitions recently filed against U.S. electricity generators have alleged a fraudulent misinformation campaign to keep the country misinformed, or at the least, create doubts about climate change.¹³⁵ If such a campaign is proven to

132. RESTATEMENT (SECOND) OF TORTS *supra* note 129, § 821

133. *Id.* § 821 cmt. f.

134. *Id.*

135. *See, e.g.,* *Comer v. Murphy Oil Co.*, No. 05-CV-436LG (S.D. Miss. Aug. 30, 2007); *Complaint for Damages & Demand for Jury Trial, Native Village of Kivalina v. ExxonMobil*

exist, these tactics would readily support the unreasonableness of industry inaction and failure to mitigate.

One immediate advantage to these kinds of suits is the existence of a fairly long and well-developed body of law specific to the federal court's use of public nuisance, particularly in pollution related suits.¹³⁶ Thus, courts would not have to stretch too far to say air pollution and carbon dioxide emissions should entail similar legal analysis. Furthermore, scholars argue many of the difficulties associated with causation are more readily overcome due to the nature of public nuisance suits.¹³⁷

In order to obtain a damage award under the common law of public nuisance, plaintiffs must show they "suffered harm of a kind different from that suffered by other members of the public exercising the right common to the general public that was the subject of interference."¹³⁸ Thus, to obtain an award of damages rather than injunctive relief, one must allege particularized findings of harm distinct from that of the general public. For example, people residing in northern Alaska, within fifty miles of the Kivalina coast, may visit Kivalina to enjoy the beaches, fish, or to use the roadways in and out of the area. They may claim this use is a public right and that this right is unreasonably interfered with due to impacts of climate change from GHG emissions, citing that the beaches are eroding, the roads are falling into the water, etc. However, this is not necessarily a different harm from any other member of the general public. Should you or I take a trip to northern Alaska, we could allege the same harm. Instead, it is the native population of the area, who depend on the land, the roads, and the sea ice for survival, and therefore may claim harm different in kind. For these individuals, there is specialized harm. Overall, a suit in public nuisance appears most desirable for the population that is suffering the greatest amount of identifiable, specialized harms, specific to their way of life.

There are a number of obstacles to a successful nuisance suit, aside from the damage limitations just mentioned. At the outset, issues of standing and the political question doctrine must be con-

Corp. (N.D. Cal. Feb. 26, 2008), available at <http://www.turtletalk.files.wordpress.com/2008/02/kivalina-complaint.pdf> [hereinafter Kivalina Complaint].

136. See Benjamin P. Harper, *Climate Change Litigation: The Federal Common Law of Interstate Nuisance and Federalism Concerns*, 40 GA. L. REV. 661, 674-79 (2006) (discussing the development of the federal common law of public nuisance, as well as a number of the key cases); see also Robert V. Percival, "Greening" the Constitution - Harmonizing Environmental and Constitutional Values, 32 ENVTL. L. 809 (2002).

137. See Harper, *supra* note 136, at 685-88 (giving an overview of the ways in which this is true, including various approaches to causation).

138. RESTATEMENT (SECOND) OF TORTS, *supra* note 129, § 821(C).

sidered. Although some have seen the U.S. Supreme Court's holding in *Massachusetts v. EPA*¹³⁹ as indicative of an "ease" in the standing burden for climate change litigants, the holding in that case would differ, given the nature of the plaintiffs, had the plaintiffs been individuals rather than states.¹⁴⁰ Even assuming the standing requirement is satisfied, there still remains a significant question; can a climate change suit, in any context, survive the political question doctrine?

The obstacle here is whether federal courts view themselves as sufficiently equipped to deal with such a large, controversial, and scientifically complex policy issue as climate change. In nuisance, there are two parts to this question. First, is this an issue capable of judicial determination, and second, if it is, is application of federal common law appropriate in these circumstances?

Satisfying the political question doctrine has, and will likely continue to be, the most formidable hurdle. For example, in *Connecticut v. American Electric Power Co.*,¹⁴¹ Connecticut, seven other states, the City of New York, and several environmental groups sued a group of electric utilities under federal public nuisance common law, asking them to abate the global warming nuisance.¹⁴² The complaint alleged that the defendants were the five largest emitters of carbon dioxide in the United States, constituting approximately one fourth of the electricity generation sector's carbon dioxide emissions, and that U.S. electric power plants are responsible for ten percent of worldwide carbon dioxide emissions from human activities.¹⁴³ The court held that nuisance claims aimed at the utilities' abatement of emissions, alleging their contribution to climate change, raised non-justiciable political questions beyond the court's jurisdiction.¹⁴⁴ The court stated that "[t]he scope and magnitude of the relief Plaintiffs seek reveals the transcendently legislative nature of this litigation. Plaintiff asks this

139. See generally *Mass. v. Env'tl. Prot. Agency*, 549 U.S. 497, 520-26 (2007).

140. See, e.g., *Comer v. Murphy Oil Co.*, No. 05-CV-436LG (S.D. Miss. Aug. 30, 2007) (dismissing, on grounds of standing and political question doctrine, individual plaintiff's public nuisance suit against a variety of coal, oil and energy companies and distinguishing *Mass. v. EPA* because of the nature of the private versus public plaintiffs); Lisa Heinzerling, *Mass. v. EPA*, 22 J. ENV'TL L. & LITIGATION 301, 311 (2007) (arguing that it is unlikely a state will now be denied standing to bring a climate change suit but that it will be a much closer call when it comes to private litigants, as the Court's indication of the special status afforded state claims may have been indicative of limitations of the holding); Thomas Merrill, *Global Warming as a Public Nuisance*, 30 COLUM. J. ENVTL. L. 293, 294-305 (providing a detailed analysis of standing hurdles for private individual claims and claims brought as *parens patriae*). But see Grossman, *supra* note 24, at 55 (arguing particularly vulnerable plaintiffs, such as those on the coast, are "among the paradigmatic public nuisance plaintiffs" and thus should be able to meet usual standing requirements).

141. *Conn. v. Am. Elec. Power Co.*, 406 F. Supp. 2d 265 (S.D.N.Y. 2005).

142. *Id.* at 267-68.

143. *Id.* at 268.

144. *Id.* at 273-74.

court to cap carbon dioxide emissions and mandate annual reductions of an as-yet-unspecified percentage.¹⁴⁵ The standard offered was that the court could only decide a case that is “justiceable in light of the separation of powers ordained by the Constitution,” and only if “the duty asserted can be judicially identified and its breach judicially determined, and protection for the right molded.”¹⁴⁶ The decision was appealed and no ruling has been issued. Thus, the uncertainty over whether this issue may prove to be a barrier is still unsettled.¹⁴⁷

4. Alien Tort Statute

Potential litigants could also pursue climate change liability in the United States by arguing that the emission of GHGs is a human rights violation. There is a substantial body of scholarly work on the potential for U.S. domestic litigation centering on human rights and brought under the Alien Tort Statute (ATS).¹⁴⁸ This statute allows non-citizens to bring claims in U.S. courts based on torts violating treaties and customary international human rights laws.¹⁴⁹ The ATS states that “district courts shall have original jurisdiction of any civil action by an alien for a tort only, committed in violation of the law of nations or a treaty of the United

145. *Id.* at 272.

146. *Id.* at 271 (citing *Baker v. Carr*, 369 U.S. 186 (1962)).

147. At least three cases have held that climate change issues presented non-justiciable political questions. See *Conn. v. Am. Elec. Power Co.*, 406 F. Supp. 2d 265 (S.D.N.Y. 2005); *Cal. v. Gen. Motors Co.*, C06-05755 MJJ, 2007 U.S. Dist. LEXIS 68547 (N.D. Cal. Sept. 17, 2007); *Comer v. Murphy Oil Co.*, No. 05-CV-436LG (S.D. Miss. Aug. 30, 2007).

148. See, e.g., Eric A. Posner, *Climate Change and International Human Rights Litigation: A Critical Appraisal* (Univ. of Chicago Law Sch, Working Paper No. 329, Jan. 26, 2007), available at <http://ssrn.com/abstract=959748> (arguing that although American courts might be open to suits for global warming under Alien Tort Statute, it would be a mistake to utilize such measures because American courts cannot provide sound, acceptable policy for climate change the world over); Bradford C. Mank, *Can Plaintiffs Use Multinational Environmental Treaties as Customary International Law to Sue Under the Alien Tort Statute?*, 2007 UTAH L. REV. 1085-1170, available at <http://ssrn.com/abstract=1010205> (arguing that in light of the U.S. Supreme Court decision in *Sosa*, most international legal principles are too vague to rest environmental claims on, under the ATS); Natalie L. Brideman, *Human Rights Litigation Under the ATCA as a Proxy For Environmental Claims*, 6 YALE HUM. RTS. & DEV. L.J. 1 (2003); DINAH SHELTON, *The Environmental Jurisprudence of International Human Rights Tribunals*, in LINKING HUMAN RIGHTS AND THE ENVIRONMENT 8-19 (Romina Picolotti & Jorge Daniel Taillant, eds. 2003); Rosemary Reed, *Rising Seas and Disappearing Islands: Can Island Inhabitants Seek Redress Under the Alien Tort Claims Act?*, 11 PAC. RIM L. & POL'Y J. 399 (2002); James Boeving, *Half Full . . . or Completely Empty?: Environmental Alien Tort Claims Post Sosa v. Alvarez-Machain*, 18 GEO. INT'L ENVTL. L. REV. 109 (2005) (arguing that the *Sosa* decision failed to clarify the ATS scope but did seem to leave the door open for foreign plaintiffs to make environmental claims based on human rights as a proxy for environmental harm, solidifying the role of legal scholars to continue to impact the definition of customary international law).

149. *Alien's Action for Tort*, 28 U.S.C. § 1350 (2003).

States.”¹⁵⁰ The test for determining the “law of the nations,” mentioned above, was laid out in *Sarei v. Rio Tinto*, which asks “(1) whether [plaintiffs] identify a specific, universal, and obligatory norm of international law; (2) whether that norm is recognized by the United States; and (3) whether they adequately allege its violation.”¹⁵¹ The ATS is distinctive from many other legal avenues in that it awards damages, making it arguably “the most prominent and effective means for litigating international human rights.”¹⁵² However, that does not necessarily mean it is the best avenue for litigating climate change liability.

Most of the limitations inherent in this type of suit are the same mentioned in the general international arena; namely, that a right to a healthy environment is not yet fully recognized in customary international human rights law.¹⁵³ Thus far, U.S. Courts have rejected such a basis for liability under the ATS.¹⁵⁴ One of significant obstacles noted by scholars in this arena is the notion that by awarding damages for climate change injury, U.S. federal courts would essentially be acting as a climate change policymaker for the world.¹⁵⁵ This would be a generally undesirable policy, and courts are incredibly resistant to filling the aforementioned void, particularly in an area as contentious as global warming. Potential litigants will want to keep a close eye on developments regarding environmental claims in this area, as the next few years may largely determine the viability of this statute. These cases may also yield insight into federal courts’ views on the use of the LOS Convention as a proxy to climate change liability. Either way, as

150. *Id.*

151. *Sarei v. Rio Tinto PLC*, 221 F. Supp. 2d 1116, 1132 (C.D. Cal. 2002).

152. Posner, *supra* note 148, at 5.

153. *But see id.* at n.14 (listing a vast array of international documents codifying a right to a healthy environment).

154. *See, e.g., Sarei v. Rio Tinto PLC*, 456 F.3d 1069 (9th Cir. 2006), *withdrawn and superseded in part on rehearing by Sarei v. Rio Tinto PLC*, 487 F.3d 1193 (9th Cir. 2007). The court held that plaintiffs presented a cognizable ATS claim under the LOS Convention, reasoning that the LOS Convention was declaratory of customary international law, and paving the way for potential plaintiffs’ suits based on treaty provisions that are arguably customary international law due to widespread ratification (*i.e.*, Kyoto). However, in August of 2007, the court withdrew its decision and ordered a rehearing. *Sarei v. Rio Tinto PLC*, 499 F.3d 923 (9th Cir. 2007). Further, the court stated the decision shall not be cited as precedent, leaving many wondering if the court will withdraw the dicta stating that the LOS Convention should be viewed as customary international law.

155. For a discussion on these effects, see Posner, *supra* note 148, at 13-17 (arguing that foreign corporations who want or need access to American markets would have to comply with American law and if they fail to do so, they could have assets seized by, in this case, climate change plaintiffs; thus, in the context of climate change, should the courts order a reduction in GHG emissions, the foreign corporations would have to choose between abandoning the U.S. market, shutting down some of their factories, or adopting significant measures in mitigating emissions).

the corpus of international environmental law grows, these suits may prove increasingly promising.

IV. A CASE STUDY: NATIVE VILLAGE OF KIVALINA V. EXXONMOBIL CORP¹⁵⁶

On February 26, 2008, the Inupiat Eskimo Village of Kivalina, Alaska filed suit against twenty-four of the world's largest oil and energy companies,¹⁵⁷ alleging that they caused the global warming responsible for significant harms to Kivalina.¹⁵⁸ The claims are being brought by the Native Village and City of Kivalina, acting on its own behalf and as *parens patriae* on behalf of the citizens and residents of Kivalina.¹⁵⁹ The lawsuit was filed in the U.S. District Court for the Northern District of California.

The complaint utilizes federal common law public nuisance claims. It specifically alleges that global warming is destroying Kivalina through the melting of arctic sea ice that had, for thousands of years, protected the village from winter storms.¹⁶⁰ Further, it states that each of the defendants knew or should have known of the impacts of their emissions on global warming, and on particularly vulnerable communities such as coastal Alaskan villages, but continued their substantial contributions despite this information.¹⁶¹ Additionally, (and it is this which sets this lawsuit apart) the complaint contends the defendants conspired to create a false scientific debate about global warming in order to deceive the public.¹⁶² Finally, Kivalina is asking for monetary damages, including the cost of moving the village due to the land being uninhabitable.¹⁶³

At the very least, it seems this lawsuit will bring to light the names and faces of climate change victims, which could have a big role in personalizing climate change, moving the general public, and impacting policy.¹⁶⁴ At the most, it could provide meaningful relief to some of the most immediately and gravely impacted vic-

156. Kivalina Complaint, *supra* note 135.

157. *Id.* ¶¶ 18-122.

158. *Id.* ¶¶ 163-88.

159. *Id.* ¶ 13.

160. *Id.* ¶¶ 185-88.

161. *Id.* ¶¶ 18-180.

162. *Id.* ¶¶ 189-248.

163. *Id.* ¶¶ 260, 266.

164. See David B. Hunter, *The Implications of Climate Change Litigation for International Environmental Law-Making* (Am. Univ. Wash. College of Law Res. Paper 2008-14, July 15, 2007), available at <http://ssrn.com/abstract=1005345> (putting forth idea of using liability as a means to further climate change dialogue and bolster the climate change regime).

tims of climate change and get the ball rolling towards international liability.¹⁶⁵ However, one important consideration, noted at the outset of this discussion, and the reason international liability should perhaps be the preferred method over domestic tort litigation, is that suing only U.S. companies in domestic jurisdictions merely shuffles the source of emissions. As long as the world is dependent upon current energy sources and technology, the industries and/or factories impacted in the U.S. may simply shift operations outside the country, making U.S. corporations less competitive but having little to no effect on GHG emissions. That being said, a finding of liability within U.S. borders could certainly pave the way for limitations on imports from factories or corporations doing business in the United States. An overall analysis of this case follows.

A. *Strong Plaintiff*

This case involves claims between natives of Alaska and domestic corporations. Thus, some of the typical barriers in a foreign legal system are not present, and chances are, domestic courts look more favorably upon their own victims.¹⁶⁶ The nature of these particular villagers, who are discrete and identifiable, should make the natives of Kivalina good plaintiffs to bring a claim. They are

165. For example, in what is hailed as the test case for the insurance industry, in July of 2008 Steadfast Insurance Company filed the case of *Steadfast Insurance Co. v. AES Corp.*, No. 2008-858 (Va Cir. filed July 9, 2008), available at <http://www.globalclimatelaw.com/uploads/file/AES%20Complaint.pdf>. This suit arises out of the Kivalina case. Steadfast is the insurer for one of the Kivalina defendants, AES, and seeks a declaratory judgment that it is not obligated to defend or indemnify AES should the court find liability rests therewith. Steadfast's argument derives from policy language that requires covered property damage to occur during the policy period. Because Steadfast issued its policy in 2003, after harms allegedly already occurred, they should not have to provide coverage. AES, meanwhile, contends that Steadfast bases its claim for relief on too broad of a reading of narrow policy exclusions as well as a narrow reading of broad allegations found in the Kivalina complaint. Much of this case will ultimately rest on the application of the policies' pollution exclusion—whether climate change falls under the ambit of “any injury or damage which would not have occurred in whole or in part but for the actual, alleged or threatened discharge, dispersal, seepage, migration, release or escape of pollutants at any time.” Thus, the Kivalina complaint propelled serious dialogue, and likely major change, in the insurance industry.

166. See Andre Nollkaemper, *How Public International (Environmental) Law Can Furnish a Rule of Decision in Civil Litigation*, 12 ENVTL. LIABILITY L. REV. 3 (1998) (arguing that even in claims between private parties international law can play a part in civil litigation), discussed in Faure & Nollkaemper, *supra* note 37, at 138 (stating domestic courts dealing with civil liability have two opportunities to use international law norms in tort cases—one way is to “bypass national law and to provide redress for violations of international law in a tort case on basis of international law” and the second, and more common way, is to “provide redress for violations of international law . . . through the application of domestic law and to give effect to international law in the application of domestic liability law.”).

approximately 400 in number and live on a six-mile long barrier island on the Northwestern Alaskan coast, nearly seventy miles north of the Arctic Circle.¹⁶⁷ The people of Kivalina are Inupiat Eskimo and have lived in this location “since time immemorial.”¹⁶⁸

Furthermore, because the culture is such that these native villagers do little to add to the climate change problem, the defense of “unclean hands” would likely not be available to the defendants, as may be the case in actions brought by U.S. states.¹⁶⁹ Judging from previous cases in U.S. District Courts, this could prove a big advantage, should the case reach the merits.

Finally, given the nature of these plaintiffs and the specific, identifiable harms alleged in the complaint, causation is less problematic than in many previous cases. This action could be viewed as an incremental step in liability. As previously discussed, the IPCC reports point to the arctic regions as experiencing the most profound and devastating impacts of climate change.¹⁷⁰

B. Vulnerable Defendant

This petition lists as defendants twenty-four major energy and electric corporations in the United States.¹⁷¹ Evidence shows highly concentrated emissions from a few major producers.¹⁷² There is no shortage of data connecting the major companies named in the Kivalina complaint with high levels of carbon dioxide emissions.

Aside from their role as major players in emitting the GHGs that are allegedly causing the climate change effects in Kivalina, these companies are also vulnerable in the sense that mitigation efforts and technological alternatives, available for some time, have rarely been utilized. As the complaint alleges, renewable energy sources, such as wind, solar, geothermal, and biomass, have

167. Kivalina Complaint, *supra* note 135, ¶ 1.

168. *Id.*

169. Many have cited the equitable defense of “unclean hands” as an obstacle to climate change litigation. This doctrine “closes the door of a court of equity to one tainted with inequity or bad faith relative to the matter in which he seeks relief, however improper may have been the behavior of the defendant.” Harper, *supra* note 136, at 685-86 (citing *ABF Freight Sys. Inc. v. N.L.R.B.*, 510 U.S. 317, 330 (1994) (Scalia, J., concurring)). Harper contends that courts hearing cases of public nuisance have always considered the plaintiff's contributions to the harms alleged. *Id.*

170. See, e.g., IPCC, *supra* note 8, at 6.

171. At the time of this writing, two of those defendants, Mirant and NRG Energy, were dismissed with prejudice by stipulation of the parties. *Native Village of Kivalina v. ExxonMobil Corp.*, 2008 WL 2951517 (N.D. Cal. June 16, 2008); *Native Village of Kivalina v. ExxonMobil Corp.*, 2008 WL 2951523 (C.D. Cal. June 4, 2008).

172. See, e.g., ENERGY INFO. ADMIN., EMISSIONS OF GREENHOUSE GASES REPORT (2008), available at <http://www.eia.doe.gov/oiaf/1605/ggrpt/carbon.html>.

continued developing, even in the face of industry backlash.¹⁷³ Yet these defendants have done little in attempting to reduce emissions, despite the number of potentially viable alternatives.¹⁷⁴

Claims about prospective harms caused by current industry emissions are hard arguments on which to lay a successful claim for liability. However, with the increasing number of technologies and alternatives available to companies to cut the amount of GHGs emitted, this particular set of defendants would seem to have a significantly weaker “best technology available” defense. One could argue that the electricity generation industry purposefully missed numerous opportunities to prevent, or even to reduce, its impact on global climate change. This argument gains further support when reviewing evidence of industry profits made because of the absence of GHG regulation, and profits made well after science and affordable technology were readily available to demonstrate the need for GHG emission reductions. Science supports Kivalina’s assertion that this conduct has, and will, cause long-term harm, especially to these particular plaintiffs. The arguments for liability seem to find their strongest basis when identifying conduct that takes place after the science is readily available and the harms identified, but before full implementation of regulatory mandates.

Another reason these companies appear to be readily vulnerable defendants is that the nature of emissions from the electricity generation industry is quite similar in nature from one facility to another, each creating the same harm in much the same way. Similarly, emissions occur directly from the electricity generation source. In other words, there are no intervening causes, as would be the case with much of the transportation industry (separate companies make the parts put on vehicles, separate companies assemble the vehicles, other companies sell the vehicles, individuals then buy and run the vehicles, which release the carbon emissions). All of these factors make the defendants named in the Kivalina petition particularly vulnerable.

173. Kivalina Complaint, *supra* note 135, ¶ 174.

174. See MCKINSEY & COMPANY, REDUCING U.S. GREENHOUSE GAS EMISSIONS: HOW MUCH AT WHAT COST?, (2007), available at http://www.mckinsey.com/clientservice/ccsi/pdf/US_ghg_final_report.pdf (discussing relatively long known potential options for reducing U.S. GHG emissions, focusing on particularly large emitting industries such as electricity generation sector).

C. Chosen Theory of Liability

The United States has long been viewed as having a plaintiff-friendly tort system. By shifting the focus of liability from government agencies and states to deep-pocketed private industries, which by their nature, emit large quantities of measurable GHGs, there is potential to skip what is typically a very time-consuming and burdensome legislative and/or executive process.¹⁷⁵ Simple talk of liability started this proactive movement in many corporate communities. One can only imagine the impact of a finding of liability.¹⁷⁶

Additionally, many argue precedent exists for this type of mass tort litigation, which continues to serve as a governmental gap filler when domestic or foreign executive and legislative branches fail to appropriately act in the minds of the people.¹⁷⁷ Examples include, but are not limited to, tobacco, asbestos, toxic torts and prescription drugs. Furthermore, much of the discussion behind the tobacco litigation cases is similar in nature to climate change proceedings. One website even alleges that the Philip Morris Advancement of Sound Science Coalition obtains funding through ExxonMobil in order to contest climate change science.¹⁷⁸ Another entity, the American Petroleum Institute (API), is recognized as one of the organizational leaders in efforts to cast doubt on climate change science.¹⁷⁹ Most of API's work in this area focused on the "natural causes" of global climate change and greatly criticized the Kyoto Protocol which, according to API's calculations, would force a huge drop in energy use, causing significant economic damage but no change in global temperature.¹⁸⁰ These media campaigns,

175. For example, even in the case of *Massachusetts v. EPA*, where the plaintiffs won, the timetable on regulation of carbon dioxide emissions will take months, if not years, to begin, as standards and rules must be promulgated by the agency in the typical administrative process.

176. See generally Hsu, *supra* note 29, at 710-18.

177. Hunter, *supra* note 164 (discussing liability as gap filler in both international and domestic law). In addition to the judiciary generally filling the holes of a failing political system, many also argue that domestic, or private law, influences international principles of liability as well (and vice versa). For such a discussion, see also HERSCH LAUTERPACHT, PRIVATE LAW SOURCES AND ANALOGIES OF INTERNATIONAL LAW 38-42 (Archon Books 1970) (stating that much of the international body of law in existence arose from principles of private law and international courts often rely on private law inferences for filling); Faure & Nollkaemper, *supra* note 37, at 126-27.

178. ExxonSecrets.org, The Advancement of Sound Science Coalition, <http://www.exxonsecrets.org/html/orgfactsheet.php> (last visited Dec. 15, 2009)

179. The American Petroleum Institute, with more than 400 members, lobbies on behalf of oil and gas industry interests. More information is available about this interest group at Am. Petroleum Inst., <http://www.api.org> (last visited Dec. 15, 2009).

180. Am. Petroleum Inst., The Big Picture, What is Global Climate Change?, <http://www.api.org/ehs/climate/science/index.cfm> (last visited Feb. 12, 2008).

and the suppression of key climate change information, are the types the *Kivalina* case, and other academics, are attempting to address.¹⁸¹

There are several barriers to this and similar suits, including judicial determinations which must be made before moving to the merits. As previously mentioned, considerations of standing and separation of powers will permeate every climate change suit filed in the United States. On the issue of standing, results are mixed. However, due to the strength of these particular plaintiffs, namely their discrete and specialized harms, standing to sue now seems more readily attainable than in previous cases.¹⁸²

The single largest impediment to this case being successful is the separation of powers issue. Courts are generally hesitant to play policymaker in highly contentious and political areas of law. This is especially true now as a new administration, one friendlier to environmental controls, is in power. I believe the courts, cognizant of the Obama administration's vow to fight climate change, will be especially sensitive to the "wait and see" game, allowing the new executive who, regardless of the recent economic downturn, will push a marked improvement in emission reduction policies over the last administration. Accordingly, courts are likely to defer to the executive and legislative branches, in the hope that the new administration will bring more progressive and proactive U.S. policy, filling in regulatory gaps that currently permeate the American system.

Additionally, climate change is a highly complicated scientific issue that requires technical reports, models, and advanced equations from both sides of the debate. Evaluating this data is a daunting task, even for the U.S. Supreme Court.¹⁸³ Many see the most competent policy determinations coming from experts, such as environmental and scientific agencies. Perhaps with the growing mainstream dissemination of climate change science and more

181. See *Kivalina* Complaint, *supra* note 135, ¶¶ 189-248; see also Farber, *supra* note 14, at 1642 (arguing that the large quantities of misinformation disseminated by industry-sponsored groups, as well as U.S. government efforts to suppress climate change information, may very well lend themselves to negligence and/or the deliberate misrepresentation liability, as was the case in tobacco litigation).

182. See discussion *supra* Part IV.A.; see also Hsu, *supra* note 29, at 736-59 (discussing standing issues for a hypothetical case between the Inuit and major U.S. corporations and stating that the largest advantage of using the Inuit for plaintiffs come in the realm of standing).

183. Justice Scalia, in oral arguments of *Massachusetts v. EPA*, readily noted the complex nature of the science behind climate change, stating this complexity was the reason he did not "want to have to deal with global warming, to tell you the truth." Transcript of Oral Argument at 23, *Mass. v. Envtl. Prot. Agency*, 549 U.S. 497 (No. 05-1120), available at http://www.supremecourtus.gov/oral_arguments/argument_transcripts/05-1120.pdf.

user-friendly reports, such as the IPCC, courts can one day become comfortable making common law fault and liability determinations, as they did with the science related to cigarette smoking. However, at this point it seems the political question doctrine is a large pothole in the road to successful litigation.

Specifically regarding the use of public nuisance as a proxy for climate change litigation (assuming that standing and justiciability issues are overcome), the *Kivalina* case entails most of the necessary elements that have proven successful in past public nuisance claims. The plaintiffs are identifiable and discrete. They can allege harms that interfere with rights common to the general public and specialized injuries different from the general public; in particular, the injuries to Kivalina's property interests.¹⁸⁴ These harms are especially heinous in that not only are the rights to use impacted in the short-term, but the entire village must be relocated.¹⁸⁵ Furthermore, the Inupiat contribute little to nothing to the climate change nuisance.

By also presenting specific technical data which tracks industrial GHG emissions, available technologies, international and state-level actions, along with proof pertaining to the misinformation campaign promulgated by many of these companies, the Kivalina plaintiffs should have a good chance of adequately demonstrating that the defendants knew or should have known that their GHG emissions contributed to global warming, causing the specific injuries alleged by the plaintiffs. There is also plenty of evidence to show this is a continuing nuisance. It is not a stretch for a court to hold these companies intentionally or negligently created, contributed to, or maintained the public nuisance, despite viable mitigation alternatives.

In terms of a decision on the merits, it is causation that will play the biggest part in determining a positive outcome for Kivalina. The ultimate question is whether the facts alleged are sufficient to prove that the specific emissions from these companies caused the harms incurred by the natives of Kivalina. Even if a court found that answer to be yes, questions of apportionment and redressability are also issues plaintiffs will face. For example, even if a court were to find these companies 25 percent at fault for harms suffered by Kivalina, is that sufficient to find liability given

184. Kivalina Complaint, *supra* note 135, ¶¶ 185-88, 250-67.

185. U.S. ARMY CORP OF ENGINEERS, ALASKA DISTRICT, ALASKA VILLAGE EROSION TECHNICAL ASSISTANCE PROGRAM: AN EXAMINATION OF EROSION ISSUES IN THE COMMUNITIES OF BETHEL, DILLINGHAM, KAKTOVIK, KIVALINA, NEWTOK, SHISHMAREF, AND UNALAKLEET 21-25 (2006); *see also* GEN. ACCOUNTING OFFICE, ALASKA NATIVE VILLAGES: MOST ARE AFFECTED BY FLOODING AND EROSION, BUT FEW QUALIFY FOR FEDERAL ASSISTANCE 32 (2003).

that 75 percent of the harm remained to be addressed by other entities and causes that are not a party to the suit nor perhaps ever discoverable? It seems, given the nature and number of contributors to climate change, courts are always going to prefer a regulatory solution to this enormous problem, making any climate change case incredibly difficult to "win."

However, if any case can contain the necessary elements to succeed in the near future, *Kivalina*, as a whole, appears to have them all. It has a viable plaintiff. The complaint names highly vulnerable defendants with allegations of civil conspiracy. The legal theory of public nuisance is one that is well developed in federal common law and has yet to be pre-empted. It also presents an opportunity for incremental change in damage awards, asking for the realistic cost of relocation, as measured by two independent government agencies. Many scholars argue that attempting to redress a diffuse number of harms presents a number of important obstacles, including a tougher time with proof and causation, and overriding policy concerns of undermining the opportunity for adaptation and mitigation (as compensation for victims could leave industry pockets empty). This would barely scrape the surface of the capability of these profit-rich industries to internalize the costs of damages caused by their past, present, and future greenhouse gas emissions.

V. CONCLUSION

The bottom line is that it is better to start with incremental steps in any attempt to succeed in a suit for climate change liability. A case with a small numbers of plaintiffs, requesting relatively modest damages is preferable at this stage, as compared to one that aims for a currently unattainable goal. Unfortunately, the impacts of climate change will long be with us and as such, an expansive, international system seems inevitable. It will take the world, acting in concert, to succeed in meeting the emissions reductions necessary to reverse the warming trends. The priority now should be to compensate those discrete sets of victims who are losing their culture, their land, and themselves to climate change, spurning the public and private sectors to make meaningful changes and setting a better path for the generations of people to come.

Furthermore, the *Kivalina* case presents an opportunity for further dialogue on the need for legislative and executive action. As Martin Luther King Jr. said, "we are faced now with the fact that tomorrow is today." When courts and other highly credible

institutions validate the urgency of reducing emissions, the general public's perception of the climate change debate shifts from whether climate change is real, to what remedies are immediately available for implementation. For the public, court decisions can move the debate from an esoteric one among scientists to an issue decided by impartial judges whose job it is to resolve such matters. The only question is, will this movement come from the judiciary by finding liability for climate change? Or will the filing of cases alone move world governments to action, precluding the immediate need for large damage awards? Either way, this planet will long be dealing with how to apportion responsibility for emissions and corresponding damages incurred by victims of climate change.

*Editor's Note: Pending Publication of this article, the court granted defendants' motions to dismiss plaintiffs' federal claim for nuisance for lack of subject matter jurisdiction. The court found the political question doctrine applicable, and further that plaintiffs lacked U.S. Const. art. III standing to pursue their global warming claims under nuisance theory because their injury was not fairly traceable to the conduct of defendant. The court declined to assert supplemental jurisdiction over the remaining state law claims which were dismissed without prejudice to their presentation in a state court action. *Native Village of Kivalina v. Exxon Mobil Corp.*, 663 F. Supp. 2d 863 (2009).*

