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NOTES

PUTTING THE HEAT ON THE FOSSIL FUEL INDUSTRY: USING PRODUCTS LIABILITY IN CLIMATE CHANGE LITIGATION

LINDSAY LEONE*

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I. INTRODUCTION

[Y]ou often think about the way history works as . . . a set of unintended consequences . . . [avoiding] the idea that there are conspiracies or that there are people planning the world in a certain way. You just try to avoid that because it's . . . too unreal and too frightening in its implications. Yet, when you look at these documents, you say "Yes, there are people who understood what was going on, people who thought about the crisis that was engulfing them or about to engulf them and tried in every which way to get out of that crisis and to actually shape public opinion, shape professional opinion, and also shape government's opinion about an issue that was really dangerous"¹

Off the Northwest coast of Alaska, the village of Kivalina sits on a tiny barrier island bordered on one side by the Chukchi Sea and on the other by a lagoon.² Kivalina's 400 residents are predominantly Inupiaq, an Alaskan Native population, whose ancestors were some of the first people to settle in the Americas thousands of years ago.³

In 1905, the Bureau of Indian Affairs built a school on the island of Kivalina, requiring the Inupiaq to educate their children there on the island.⁴ To limit the number of ocean crossings, dangerous in the sub-zero temperatures and frequent winter storms, the Inupiaq moved to the island permanently, establishing the village of Kivalina.⁵ With this move, the Inupiaq were forced to adapt their subsistence lifestyle to the island, which they previously visited only seasonally for hunting and fishing.⁶ In 1905, the island was surrounded by a hard barrier

¹ *Trade Secrets: A Moyers Report, Interview with David Rosner & Gerald Markowitz* (PBS television broadcast March 26, 2001), interview transcript available at <http://www.pbs.org/tradesecrets/trans/inter05.html>.

² CHRISTINE SHEARER, KIVALINA: A CLIMATE CHANGE STORY 2 (2011).

³ *Id.* at 101-02.

⁴ *Id.* at 34.

⁵ *Id.*

⁶ *Id.* at 34, 102.

of ice, which protected the village from ocean waves and storm surges.⁷ However, due to global warming in the last half-century, this protective ice barrier has thinned and receded, exposing the island to severe erosion.⁸ In just fifty years, erosion has shrunk the island by nearly thirty acres.⁹ From fifty-five acres in 1953 to only twenty-seven in 2003, about half of the livable land has been swallowed up by the sea.¹⁰

Continuous efforts to block out the ocean have turned the island into a constant construction zone.¹¹ But the efforts only delay the inevitable.¹² Soon the danger will force the entire community of Kivalina to leave their lives on the island.¹³ Relocation is the only option, and the Army Corps of Engineers estimates that relocating the village will cost between \$95 and \$400 million.¹⁴ This figure, high as it is, does not encompass the much more personal, and arguably more harmful, injury of yet again being forced to abandon the homes and livelihoods that the Inupiaq have known for over a century on the island.¹⁵ Still principally a subsistence village, the people of Kivalina will once more face the struggle of adapting to a new location and a new life.¹⁶

In 2008, faced with the insurmountable cost of relocation, a lack of federal government support, and no voluntary corporate remedial action, Kivalina was out of options and forced to file a lawsuit to remedy the global warming damage.¹⁷ Taking on the companies that were directly responsible for manufacturing the products that cause global warming, the tiny village of Kivalina filed suit against twenty-four major fossil fuel companies – some of the most powerful companies in the world.¹⁸ Kivalina's complaint explained that the fossil fuel industry has done more than manufacture a dangerous product; the fossil fuel industry has also spent decades and millions of dollars deceiving the American public about the connection between global warming and fossil fuels.¹⁹

Unfortunately, Kivalina's lawsuit was quietly dismissed, and the court failed

⁷ *Id.* at 15.

⁸ *Native Vill. of Kivalina v. ExxonMobil Corp.*, 663 F. Supp. 2d 863, 868 (N.D. Cal. 2009).

⁹ SHEARER, *supra* note 2, at 50.

¹⁰ SHEARER, *supra* note 2, at 50.

¹¹ SHEARER, *supra* note 2, at 5.

¹² SHEARER, *supra* note 2, at 5.

¹³ *Kivalina*, 663 F. Supp. 2d at 868.

¹⁴ *Id.* at 869.

¹⁵ *See id.*

¹⁶ *Id.* at 102.

¹⁷ SHEARER, *supra* note 2, at 115.

¹⁸ *Kivalina*, 663 F. Supp. 2d at 869.

¹⁹ Complaint at 47-62, *Native Vill. of Kivalina v. ExxonMobil Corp.*, 663 F. Supp. 2d 863 (N.D. Cal. 2009) (No. CV 08 1138 SBA).

to address Kivalina's most compelling claims.²⁰ Thus, the situation remains largely unchanged: the residents of Kivalina are a few years closer to the date when they must leave their island forever; a sizeable segment of the American public still does not accept the existence of global warming, let alone recognize the danger;²¹ and the absence of alternative remedies means that victims of global warming injuries must turn to the courts for relief.²² Thus far, climate change litigation has been generally unsuccessful, but finding redress through litigation may just be a matter of bringing the correct claim.²³

To date, the bulk of plaintiffs initiating climate change litigation have relied on the modern theory of public nuisance.²⁴ Courts, however, have systematically rejected these public nuisance claims, finding the injuries to be too far removed from the defendants' products to satisfy strict limitations on the use of public nuisance as a legal remedy.²⁵ Inexplicably, global warming plaintiffs have yet to pursue litigation under the more traditional claim of products liability.²⁶ In the past, plaintiffs have found success utilizing products liability claims for similar tort injuries from products such as tobacco, lead paint, and fuel additives.²⁷ Courts have indicated that, "the proper means of commencing a

²⁰ SHEARER, *supra* note 2, at 7, 12.

²¹ ANTHONY LEISEROWITZ ET AL., AMERICANS' KNOWLEDGE ON CLIMATE CHANGE 7 (2010), available at <http://environment.yale.edu/climate/files/ClimateChangeKnowledge2010.pdf> (reporting that, despite overwhelming scientific consensus, 38% of Americans still believe that there is a lot of disagreement among scientists about whether or not global warming is occurring). See also John D. Sterman, *Risk Communication on Climate: Mental Models and Mass Balance*, 322 SCIENCE 532, 532 (2008) ("The strong scientific consensus on the causes and risks of climate change stands in stark contrast to widespread confusion and complacency among the public.").

²² David A. Grossman, *Warming Up to a Not-So-Radical Idea: Tort-Based Climate Change Litigation*, 28 COLUM. J. ENVTL. L. 1, 2 (2003).

²³ Richard Ingham, *Climate Change: Dogs of Law are Off the Leash*, AGENCE FRANCE-PRESSE (Jan. 22, 2011), <http://www.google.com/hostednews/afp/article/ALeqM5jLQy3zeD7N4ZQzyDjvLA8ChIEhQ>.

²⁴ See *id.*; see also *Native Vill. of Kivalina v. ExxonMobil Corp.*, 663 F. Supp. 2d 863 (N.D. Cal. 2009).

²⁵ See Ingham, *supra* note 23; see also *Kivalina*, 663 F. Supp. 2d at 868.

²⁶ See Ingham, *supra* note 23; see also *Kivalina*, 663 F. Supp. 2d at 868.

²⁷ See *In re Methyl Tertiary Butyl Ether (MTBE) Prods. Liab. Litig.*, 175 F. Supp. 2d 593, 599, 606 (S.D.N.Y. 2001); (holding that, if found to be true, the plaintiff's allegations of groundwater contamination from the gasoline additive, MTBE, supported liability under a products liability failure to warn theory, and therefore denied defendant's motion to dismiss); *Cipollone v. Liggett Group, Inc.*, 683 F. Supp. 1487, 1496-97 (D.N.J. 1988), *rev'd for preemption*, 505 U.S. 504, (1992) ("Plaintiff presented evidence that Liggett knew of the dependency-causing characteristics of cigarettes [and] failed to warn of these characteristics. . . . The jury could reasonably conclude that Liggett's pre-1966 activity proximately caused Mrs. Cipollone's injuries."); *Carter v. Brown & Williamson Tobacco Corp.*, 778 So. 2d 932 (2000) (quashing appellate decision and reaffirming circuit court holding that ciga-

lawsuit against a manufacturer . . . for the sale of an unsafe product is a products liability action. The law of public nuisance never before has been applied to products, however harmful.”²⁸ Thus, this note proposes that climate change litigation would be more successful under a products liability theory.

Products liability imposes a duty on manufacturers of dangerous products, requiring them to warn users of hazards inherent in their products.²⁹ Given this existing duty, large oil and coal companies should be held responsible for their failure to warn the public of the global warming dangers posed by use of their products.³⁰ Furthermore, many of these manufacturers have not only failed to provide a warning, but have been actively misleading the public and concealing the truth of global warming by secretly financing anti-climate change extremists.³¹ Thus, at the very least, the lack of a warning on fossil fuel products has caused, and continues to cause, global warming-related injuries by perpetuating public misconceptions that have drastically delayed solutions to the United States’ dependence on fossil fuels.³²

In support of this conclusion, Part II will first present the basics of climate change including a brief history of climate change science to convey the full merit of global warming suits. Part III describes the efforts taken by fossil fuel manufacturers to dilute this scientific consensus regarding global warming and mislead the public as to the reality of climate change. Part IV then introduces the most recent climate change litigation, *Native Village of Kivalina v. ExxonMobil*. Delving into the central claim in *Kivalina v. ExxonMobil*,³³ Part V discusses the legal elements of public nuisance claims generally, highlighting the reasons why such claims are poorly suited for addressing global warming injuries. Part VI summarizes the district court’s opinion in *Kivalina v. ExxonMobil*, a specific example of the inadequacy of public nuisance law for climate change litigation.³⁴ Part VII then introduces the concept of products liability as an effective alternative claim to public nuisance, and Part VIII outlines the elements of a successful failure to warn products liability claim. Focusing in on the relevant state law, Part IX identifies the specific version of failure to warn products liability law adopted in Alaskan courts. Part X addresses the threshold requirements for a products liability claim seeking federal court jurisdiction, illustrating that the political question doctrine and standing require-

rette manufacturer was liable for failure to warn plaintiff about the dangers of smoking); see also *State v. Lead Indus. Assoc.*, 951 A.2d 428 (R.I. 2008) (indicating that products liability, rather than public nuisance, would have been the appropriate claim).

²⁸ *Lead Indus. Assoc.*, 951 A.2d at 456.

²⁹ RESTATEMENT (SECOND) OF TORTS § 402 (1979).

³⁰ See *id.*

³¹ Complaint, *supra* note 19, at 47-62 (“There has been a long campaign by power, coal, and oil companies to mislead the public about the science of global warming.”).

³² STERMAN, *supra* note 21, at 532.

³³ *Native Vill. of Kivalina v. ExxonMobil Corp.*, 663 F. Supp. 2d 863 (N.D. Cal. 2009).

³⁴ See *id.*

ments do not present the same obstacle for products liability claims as they do for public nuisance claims. Finally, Part XI evaluates the *Kivalina* case as a failure to warn claim under products liability law, demonstrating the value of products liability as a litigation strategy for redressing climate change injuries.

II. GLOBAL WARMING

A. *The Basics*

Throughout Earth's 4.54-billion-year history, the climate has naturally oscillated between periods of cooling and warming, triggered by shifts in Earth's orbit, tilt, and axis of rotation.³⁵ Natural feedback mechanisms exacerbate the climate shifts, causing the earth to experience cyclical accumulation and melting of ice.³⁶

However, over the last two centuries a new factor has entered this climate cycle: humans.³⁷ Our society has become dependant on fossil fuels and consequently has been burning them at an ever-increasing rate.³⁸ This practice affects the climate because the burning of fossil fuels releases carbon dioxide, a heat-trapping gas.³⁹ Carbon dioxide, found naturally in the atmosphere, has always been a part of the natural feedback mechanisms that contributed to historical oscillation of the climate. Human usage of fossil fuels, however, has caused the amount of carbon dioxide in the atmosphere to skyrocket.⁴⁰ Historic carbon dioxide concentrations, established through ice core testing, show that over the past century the modern industrial world has pushed atmospheric concentration of carbon dioxide to higher levels than Earth has seen in the last 800,000 years.⁴¹ The consequent effect is known as global warming.⁴²

We can see the effects all around us: sea ice and glaciers are melting; ocean levels are rising; and weather patterns are changing.⁴³ Even from an anthropocentric viewpoint, the dramatic alteration of our atmosphere is affecting everyday life.⁴⁴

B. *Scientific History*

To convey the full weight of the arguments in favor of a products liability theory for climate change litigation, this note must start by explaining the com-

³⁵ SHEARER, *supra* note 2, at 7-8.

³⁶ SHEARER, *supra* note 2, at 8.

³⁷ SHEARER, *supra* note 2, at 8-9.

³⁸ SHEARER, *supra* note 2, at 8-9.

³⁹ *What is Global Warming?*, NATIONAL GEOGRAPHIC, <http://environment.nationalgeographic.com/environment/global-warming/gw-overview> (last visited Jan. 23, 2011).

⁴⁰ SHEARER, *supra* note 2, at 8-9.

⁴¹ SHEARER, *supra* note 2, at 9.

⁴² *What is Global Warming?*, *supra* note 39.

⁴³ *What is Global Warming?*, *supra* note 39.

⁴⁴ *What is Global Warming?*, *supra* note 39.

pling and substantial evidence of global warming, which climate scientists have overwhelmingly accepted.⁴⁵ Climate change science started in the early 19th Century, when prominent scientists first began to understand the significant effect that gases in the atmosphere have on Earth's temperature.⁴⁶ In 1820, Joseph Fourier, was the first scientist to explain the atmosphere's heat-trapping effect that is now termed the "greenhouse effect."⁴⁷

Around 1860, another physicist, John Tyndall, discovered that carbon dioxide in the atmosphere, despite its proportionally miniscule concentrations, is responsible for this greenhouse effect.⁴⁸ In the late 19th Century, Svante Arrhenius, a Swedish scientist, was the first to use simple climate models to demonstrate the connection between the addition of carbon dioxide to the atmosphere and warming of global temperatures.⁴⁹ Further, in his popular published works, Arrhenius noted the possibility of a future warming of the atmosphere due to the burning of coal in factories.⁵⁰ Thus, it has been over a century since scientists first noted the harmful effects of carbon dioxide emissions.⁵¹

The 20th Century brought several periods of intense scientific focus to the study climate change, resulting in significant advancements in understanding.⁵² By the 1960's, the U.S. Government was paying close attention to the findings of climate scientists.⁵³ In 1965, the Johnson Administration commissioned an environmental assessment report, *Restoring the Quality of Our Environment*, which specifically included information regarding the dangerous consequences of global warming.⁵⁴ Four years later, an advisor to President Nixon, Daniel Patrick Moynihan, wrote that it was "pretty clearly agreed" that the concentration of carbon dioxide in the atmosphere was rising dramatically, and that the increased levels would cause the earth's temperature to rise.⁵⁵ Moynihan further acknowledged that the temperature increase would likely lead to a significant rise in sea level, which would be devastating for the United States.⁵⁶ Moy-

⁴⁵ Richard W. Thackeray, Jr., *Struggling for Air: The Kyoto Protocol, Citizens' Suits Under the Clean Air Act, and the United States' Options for Addressing Global Climate Change*, 14 IND. INT'L. & COMP. L. REV. 855, 859-60 (2004).

⁴⁶ Spencer Wearst, *The Carbon Dioxide Greenhouse Effect*, THE DISCOVERY OF GLOBAL WARMING (Feb. 2011), <http://www.aip.org/history/climate/co2.htm>.

⁴⁷ *Id.*

⁴⁸ *Id.*

⁴⁹ *Id.*

⁵⁰ *Id.*

⁵¹ *See id.*

⁵² *Id.*

⁵³ Linda Yorba, *Nixon Administration Debated Global Warming*, MSNBC.COM (July 3, 2010, 1:27 AM), <http://www.msnbc.msn.com/id/38070412/ns/politics/t/nixon-administration-debated-global-warming/>.

⁵⁴ *Id.*

⁵⁵ *Id.*

⁵⁶ *Id.*

nihan suggested that government action was necessary to address the threat.⁵⁷

In 1988, the United Nations, through the World Meteorological Organization and the United Nations Environmental Program, established the Intergovernmental Panel on Climate Change (IPCC) in an effort to synthesize the existing scientific predictions, and “provide the governments of the world with a clear scientific view of what is happening to the world’s climate.”⁵⁸ The scientific evidence compiled in the first IPCC Assessment Report in 1990 verified the need for immediate international action to address the causes of climate change.⁵⁹

This worldwide consensus led to the establishment of the United Nations Framework Convention on Climate Change (UNFCCC), an international treaty to reduce global warming.⁶⁰ In 1997, the UNFCCC adopted the Kyoto Protocol, in which 37 countries committed to reducing emissions of greenhouse gases, particularly carbon dioxide.⁶¹ Although such proposals to combat climate change met significant political resistance in the United States, in 2007, even the Bush administration publicly confirmed the existence of climate change and acknowledged global warming as a human-caused problem.⁶²

Plainly, the scientific community was in agreement as to the existence of global warming and the central role of human emissions in causing global warming well before the end of the 20th Century.⁶³ Thus, entering the 21st Century, the only debate in climate change science was over specific predic-

⁵⁷ *Id.*

⁵⁸ *History*, INTERGOVERNMENTAL PANEL ON CLIMATE CHANGE, http://www.ipcc.ch/organization/organization_history.shtml (last visited Jan. 28, 2011).

⁵⁹ *Id.*

⁶⁰ *Id.*

⁶¹ *Kyoto Protocol*, UNITED NATIONS FRAMEWORK CONVENTION ON CLIMATE CHANGE, http://unfccc.int/kyoto_protocol/items/2830.php (last visited Jan. 28, 2011).

⁶² COMM. ON ENV'T & NATURAL RES., NAT'L SCI. & TECH. COUNCIL, SCIENTIFIC ASSESSMENT OF THE EFFECTS OF GLOBAL CHANGE ON THE UNITED STATES 1-2 (2008). In 2007, environmental organizations brought a legal action for declaratory and injunctive relief against the Executive Branch for violating the Global Change Research Act (GCRA) of 1990. *Center for Biological Diversity v. Brennan*, 571 F. Supp. 2d 1105, 1113 (2007). The GCRA established a mandatory climate change research plan, requiring the Executive Branch to commission a new assessment of “current trends in global climate change” every four years. *Id.* at 1112. Consequently, the United States District Court for the Northern District of California compelled the Bush Administration to commission the overdue comprehensive scientific assessment of the impacts of global warming on the United States. *Id.* at 1136-37. In this report the Bush Administration finally admitted that “it is *very likely* (greater than 90% probability) that most of this global warming is due to increased concentrations of human-generated greenhouse gases.” *Id.* at 1. Further, the report found “several lines of evidence” that confirm a “strong human influence on climate [change].” *Id.*

⁶³ Thackeray, *supra* note 45, at 859.

tions on the timing and degree of particular global warming effects.⁶⁴

III. PUBLIC MISCONCEPTIONS & FALSE SCIENCE

Despite scientific consensus on global warming, portions of the United States' population remain unconvinced of the existence of human-caused warming and the danger it presents.⁶⁵ Given the enormity of the problem and considerable study on the topic, it is surprising how few Americans understand the basic concepts of global warming and how many hold false beliefs regarding the existence of climate change. A poll conducted by Yale University in October 2010 reported that 37% of Americans do not "believe that global warming is happening," 50% do not "understand that global warming is caused mostly by human activities," and 55% do not "understand that carbon dioxide traps heat from Earth's surface."⁶⁶ These widespread public misconceptions are likely the result of a decades-long campaign by coal, oil and utility companies to deliberately deceive the public regarding the reality and severity of climate change.⁶⁷ Like the tobacco, lead and asbestos industries before it, the fossil fuel industry has employed a "discourse of doubt" to obscure the fact that their products cause severe harm.⁶⁸ The Assistant Secretary of Labor for the Occupational Safety and Health Administration, David Michaels, has his own term for this business of manufacturing doubt.⁶⁹ He calls it the "PDI," the product defense industry: an industry where science is bought rather than tested, where so called scientists repeat juicy sound bites developed by PR firms, and where the aim is to mask scientific consensus and delay well-reasoned action by demanding impossible certainty.⁷⁰ Certainty does not exist in science, and the PDI uses this to their advantage.⁷¹ Science is built upon the scientific method, which states that a hypothesis can never be absolutely proven, but only disproved. When enough studies consistently do NOT disprove a hypothesis, the scientific community will eventually come to a consensus and consider the hypothesis confirmed. But scientists do not deal in certainties, and the PDI exploits this to generate misunderstanding within the public.⁷² Michaels explains that "Industry has learned that debating the *science* is much

⁶⁴ Thackeray, *supra* note 45, at 859-60; *see also* Eileen Crist, *Beyond the Climate Crisis: A Critique of Climate Change Discourse*, 141 *TELOS* 29, 29 (2007).

⁶⁵ SHEARER, *supra* note 2, at 9-10.

⁶⁶ LEISEROWITZ, *supra* note 21, at 7.

⁶⁷ Complaint, *supra* note 19, at 47; *see also* SHEARER, *supra* note 2, at 16; *see also* DAVID MICHAELS, DOUBT IS THEIR PRODUCT: HOW INDUSTRY'S ASSAULT ON SCIENCE THREATENS YOUR HEALTH xi (2008).

⁶⁸ SHEARER, *supra* note 2, at 16.

⁶⁹ MICHAELS, *supra* note 67, at x.

⁷⁰ MICHAELS, *supra* note 67, at x.

⁷¹ SHEARER, *supra* note 2, at 16.

⁷² SHEARER, *supra* note 2, at 16.

easier and more effective than debating the *policy*.”⁷³

For example, in 2003, a Republican political consultant, Frank Luntz, delivered a memo to his clients titled “Winning the Global Warming Debate.”⁷⁴ The memo outlined a familiar strategy:

Voters believe that there is *no consensus* about global warming within the scientific community. Should the public come to believe that the scientific issues are settled, their views about global warming will change accordingly. Therefore, *you need to continue to make the lack of scientific certainty a primary issue in the debate The scientific debate is closing [against us] but not yet closed. There is still a window of opportunity to challenge the science.*⁷⁵

The giants of the fossil fuel industry have emulated this strategy by financing front groups, sham scientific organizations, fake citizens associations and extremist “scientists” through which the fossil fuel industry has publicized faulty global warming science.⁷⁶

Some of the misleading front groups that the fossil fuel industry established include the Global Climate Coalition (GCC), the Greening Earth Society, the George C. Marshall Institute, the Cooler Heads Coalition and The Advancement of Sound Science Coalition (TASSC).⁷⁷ Alone, the GCC spent \$60 million on political donations in 11 years,⁷⁸ \$13 million on a single advertising campaign to dispute global warming science,⁷⁹ and millions more on doubt misinformation such as cost-benefit analyses that incorrectly suggested that regulations would cause widespread unemployment and inflation.⁸⁰ Not surprisingly, the GCC Board of Directors included top executives from many major fossil fuel companies and utilities,⁸¹ and many more fossil fuel companies, including ExxonMobil, the American Petroleum Institute, and Duke Power, regularly sent representatives to GCC meetings.⁸²

In 1998, the *New York Times* published an article exposing disinformation campaign meetings between representatives of large “oil companies, trade associations and conservative policy research organizations” at the American Petroleum Institute offices.⁸³ The article explained that a leaked memo confirmed

⁷³ MICHAELS, *supra* note 67, at xi.

⁷⁴ *Id.*

⁷⁵ MICHAELS, *supra* note 67, at xi (emphasis and alterations in original).

⁷⁶ Complaint, *supra* note 19, at 47-48; *see also* SHEARER, *supra* note 2, at 85-88.

⁷⁷ Complaint, *supra* note 19, at 47-48.

⁷⁸ TIM FLANNERY, *THE WEATHER MAKERS: HOW MAN IS CHANGING THE CLIMATE AND WHAT IT MEANS FOR LIFE ON EARTH* 242 (Grove Press 2006) (2005).

⁷⁹ Complaint, *supra* note 19, at 49.

⁸⁰ SHEARER, *supra* note 3, at 88.

⁸¹ Complaint, *supra* note 19, at 50.

⁸² Complaint, *supra* note 19, at 49.

⁸³ John Cushman, Jr., *Industrial Group Plans to Battle Climate Treaty*, N.Y. TIMES, Apr. 26, 1998, available at <http://www.nytimes.com/1998/04/26/us/industrial-group-plans-to-battle-climate-treaty.html?pagewanted=all&src=pm>.

that the group planned to pump \$5 million into a two-year publicity campaign to stir-up doubt regarding global warming in an attempt to sink an international climate treaty.⁸⁴ The memo identified the “recruitment” of scientists to argue against the Administration as one of the main tasks for the campaign.⁸⁵ With five million dollars as enticement, the parties were all but guaranteed to find “scientists” to fit their specifications.⁸⁶

In fact, the fossil fuel industry has often used organizations to fund notable skeptics, allowing these “scientists” to promote their marginal views with misleading frequency, creating a false impression of significant disagreement within the scientific community.⁸⁷ Furthermore, some of the principal skeptics in the climate change disinformation campaign are crossover “scientists” who first made their mark as skeptics for previous PDI campaigns, where they also questioned the harmful effects of second-hand smoke and ozone depletion.⁸⁸ Predictably, these skeptics’ controversial views were almost always published solely in nonscientific media rather than in respected, peer-reviewed scientific journals.⁸⁹

In 2009, a smoking gun document was leaked to the *New York Times* confirming that the fossil fuel industry *knew*, from their own investigations, the reality of global warming, as well as the inaccuracy of the opinions they continued to promote.⁹⁰ The document, a 1995 primer prepared for the GCC by a hired advisory committee of climate science experts, stated:

[S]cientific basis for the Greenhouse Effect and the potential impact of human emissions of greenhouse gases such as CO₂ on climate is well established and cannot be denied [C]ontrarian theories raise interesting questions about our total understanding of climate processes, but they do not offer convincing arguments against the conventional model of greenhouse gas emission-induced climate change.⁹¹

However, the industry-backed GCC deleted the statement from its primer before distributing it to members, effectively suppressing the information.⁹² The original primer is, therefore, the climate change equivalent of the tobacco industry’s insider cover-up of tobacco’s health risks.⁹³

⁸⁴ *Id.*

⁸⁵ *Id.*

⁸⁶ *See Id.*

⁸⁷ Complaint, *supra* note 19, at 52.

⁸⁸ SHEARER, *supra* note 2, at 86.

⁸⁹ Complaint, *supra* note 19, at 47.

⁹⁰ *See* Andrew Revkin, *Industry Ignored Its Scientists on Climate*, N.Y. TIMES, Apr. 23, 2009, available at <http://www.nytimes.com/2009/04/24/science/earth/24deny.html?pagewanted=print>.

⁹¹ *Id.*

⁹² *Id.*

⁹³ MICHAELS, *supra* note 67, at 3. “For decades, cigarette manufacturers have known that

Even with this knowledge, the fossil fuel industry formed a joint task force, the Global Climate Science Communications Team (GCSCT), to discredit the scientific findings of global warming.⁹⁴ Composed of fossil fuel industry representatives from ExxonMobil, Chevron Corporation, The Southern Company, American Petroleum Institute, and many others, the GCSCT distributed a 1998 memo, outlining their explicit plan to manufacture doubt on the issue of global warming.⁹⁵ This task force memo specifically stated that, "Victory will be achieved when average citizens understand (recognize) uncertainties in climate science and when public recognition of uncertainty becomes part of the conventional wisdom."⁹⁶

Currently, the pervasive public confusion illustrates that a great number of Americans *have* indeed been unable to filter sound scientific conclusions from misleading campaigns.⁹⁷ Thus, the fossil fuel industry has in many ways achieved its "victory."⁹⁸ The public's confusion confirms the need for a warning on products that cause global warming.

IV. NATIVE VILLAGE OF KIVALINA V. EXXONMOBIL

Faced with the insurmountable cost of relocation and the challenge of leaving an island that is critical to the residents' way of life, the governing body of the village of Kivalina and the city of Kivalina joined as plaintiffs (collectively, Plaintiffs) to bring suit against twenty-four major oil, energy and utility companies (collectively, Defendants).⁹⁹ The Defendants include but are not limited to ExxonMobil Corporation, BP Entities, Chevron Entities, ConocoPhillips, and Shell Entities.¹⁰⁰ The Plaintiffs, who sought damages for injuries caused by global warming, filed suit alleging four related claims of relief in the United States District Court for the Northern District of California.¹⁰¹ The Plaintiffs' central claim was a public nuisance claim, derived from federal common law, based on the Defendants' significant contributions to global warming through greenhouse gas emissions.¹⁰² In addition, the Plaintiffs brought state public and private nuisance claims, as well as claims of civil conspiracy and concert of

their product is hazardous to our health, did not care, and took whatever measures were necessary to protect their profits... Big Tobacco knew the facts about smoking better than anyone. In their public statements, however, tobacco executives and their public relations coconspirators fudged, weaved, bobbed and roped-a-dope almost to perfection." *Id.*

⁹⁴ Complaint, *supra* note 19, at 55.

⁹⁵ Complaint, *supra* note 19, at 55.

⁹⁶ Complaint, *supra* note 19, at 55 (internal quotation marks and emphasis omitted).

⁹⁷ See LEISEROWITZ, *supra* note 21, at 3.

⁹⁸ See Complaint, *supra* note 19, at 55.

⁹⁹ Native Vill. of Kivalina v. ExxonMobil Corp., 663 F. Supp. 2d 863, 868 (N.D. Cal. 2009).

¹⁰⁰ *Id.*

¹⁰¹ *Id.* at 869.

¹⁰² *Id.* at 868.

action.¹⁰³

Native Village of Kivalina v. ExxonMobil (hereinafter *Kivalina*) demonstrates the inadequacy of public nuisance claims in global warming litigation and is a valuable case study because, despite the unusually plaintiff-favorable facts, the court dismissed the Plaintiffs' claim.¹⁰⁴

There are three specific characteristics of *Kivalina* that made it seemingly the optimal climate change case for plaintiffs seeking redress from the effects of global warming. First, the injury in *Kivalina*, the erosion of the island due to melting arctic ice and rising sea level, is a type of injury that is immediately visible and logically linked to global warming.¹⁰⁵ Climate change victims often have difficulty demonstrating the direct connection between global warming and their own injuries because the effects of global warming are complex, extensive and often delayed.¹⁰⁶ But, in this case, melting arctic ice and rising sea level caused the injury, which are widely accepted effects of global warming that do not require complicated science to explain.¹⁰⁷

Second, the Plaintiffs are a discrete group with quantifiable damages.¹⁰⁸ In many instances, the effects of climate change are so widespread and complex that it is impossible to define a discrete group of plaintiffs or even calculate the extent of the injury itself.¹⁰⁹ In this case, however, the Plaintiffs are defined by the bounds of the island, and damages are, at minimum, equal to the cost of the Plaintiffs' relocation, an easily quantified value.¹¹⁰

Finally, the Plaintiffs themselves are ideal.¹¹¹ In any lawsuit, the plaintiffs that evoke the most sympathy are those that have not contributed to their own suffering.¹¹² In global warming cases, however, defendants may argue that every American has contributed to global warming. This argument is less persuasive against the *Kivalina* Plaintiffs because, given their subsistence lifestyle, the Plaintiffs' use of fossil fuels is minimal, and are therefore among those Americans that are least responsible for global warming.¹¹³ Thus, the facts of *Kivalina* are uncommonly advantageous for the Plaintiffs because their injury is directly connected to global warming; they represent a discrete class of vic-

¹⁰³ *Id.* at 869.

¹⁰⁴ *Id.* at 868.

¹⁰⁵ Jennifer Kilinski, *International Climate Change Liability: A Myth or a Reality?*, 18 J. TRANSNAT'L L. & POL'Y 377, 382 (2009).

¹⁰⁶ *Id.*

¹⁰⁷ *Id.*

¹⁰⁸ *Id.*

¹⁰⁹ *Id.*

¹¹⁰ See *Native Vill. of Kivalina v. ExxonMobil Corp.*, 663 F. Supp. 2d 863, 869 (N.D. Cal. 2009).

¹¹¹ Kilinski, *supra* note 105, at 383 ("[T]he most viable climate change liability plaintiffs include the individuals whose property interests and ways of life no longer exist.").

¹¹² Kilinski, *supra* note 105, at 382.

¹¹³ Kilinski, *supra* note 105, at 410-411.

tims with a quantifiable injury; and as a whole the Plaintiffs' carbon footprint is minimal in comparison to most Americans.¹¹⁴ Yet, even in this ideal global warming case, the district court granted the Defendants' motion to dismiss the federal public nuisance claim for a lack of subject matter jurisdiction.¹¹⁵ The following analysis of public nuisance law generally, and the court's opinion in *Kivalina* specifically, will not only highlight the reasons for the public nuisance claim's failure in the *Kivalina* case, but also explain the inherent limitations of a public nuisance approach to climate change litigation.

V. LEGAL ANALYSIS OF PUBLIC NUISANCE CLAIMS: INEFFECTIVE NEW THEORY FOR CLIMATE CHANGE LITIGATION

The definition of public nuisance varies by state, but the general theory is that public nuisance provides a remedy for "an unreasonable interference with a right common to the general public."¹¹⁶ Additionally, liability is only imposed where the "defendant was in control of the instrumentality alleged to have created the nuisance when the damage occurred."¹¹⁷ Within the legal realm of mass torts, the use of public nuisance as a theory of liability is relatively new.¹¹⁸ Moreover, recent litigation has attempted to dramatically expand the application of public nuisance law to address a broad array of new "nuisances," including everything from firearm violence to lead poisoning in children.¹¹⁹ Traditionally, however, public nuisance law was applied only to discrete and contained injuries, such as point-source river pollution.¹²⁰ Overall, the expanded application of public nuisance has not gained much acceptance in the courts because the broad application generally fails the strict control requirement for

¹¹⁴ Kilinski, *supra* note 105, at 410-411.

¹¹⁵ *Kivalina*, 663 F. Supp. 2d at 868.

¹¹⁶ Randall S. Abate, *Automobile Emissions and Climate Change Impacts: Employing Public Nuisance Doctrine as Part of a "Global Warming Solution" in California*, 40 CONN. L. REV. 591, 599 (2008) (citation and internal quotations omitted). This is the definition employed by California; some states define public nuisance more broadly or more narrowly. *Id.*

¹¹⁷ *State v. Lead Indus. Assoc.*, 951 A.2d 428, 450 (R.I. 2008) (citing *Friends of the Sakonnet v. Dutra*, 738 F. Supp. 623, 633-34 (D.R.I. 1990)).

¹¹⁸ Donald G. Gifford, *Public Nuisance as a Mass Products Liability Tort*, 71 U. CIN. L. REV. 741, 744 (2003).

¹¹⁹ *Id.* at 743.

¹²⁰ *Kivalina*, 663 F. Supp. 2d at 875. The EPA defines point source as, "any discernible, confined and discrete conveyance," such as a pipe or a container. UNITED STATES ENVIRONMENTAL PROTECTION AGENCY, <http://water.epa.gov/polwaste/nps/whatis.cfm> (last visited Feb. 27, 2011). Thus, point source pollution is generally a discharge that takes on a plume shape, with a high concentration of pollutant near the source that diminishes with distance. Nonpoint source pollution, on the other hand, includes all pollutants that build up over time from multiple sources, such as excess fertilizer that washes into a lake due to rain runoff or snowmelt. *Id.* Carbon dioxide in the atmosphere is a type of nonpoint source pollution.

public nuisance.¹²¹ Furthermore, if courts allow plaintiffs to extend public nuisance law too far beyond its traditional parameters, then public nuisance might reach so far as to circumvent products liability entirely.¹²² Thus, courts have taken a strict stance on established boundaries for public nuisance law.¹²³

The Court in *Kivalina* was no exception.¹²⁴ In *Kivalina*, the District Court held that applying public nuisance theory to climate change litigation would stretch public nuisance law beyond its doctrinal limits.¹²⁵ Before beginning on the *Kivalina* analysis, however, the following discussion details the legal elements of a public nuisance claim generally, opening with the threshold requirements for federal jurisdiction.

Federal court jurisdiction is limited to powers that federal statutes and Article III of the Constitution grant to the federal court system.¹²⁶ Thus, there are several threshold requirements that a plaintiff must demonstrate in order to establish jurisdiction in federal court.¹²⁷ If these threshold requirements are not met, a defendant will file a motion to dismiss the case under the Federal Rules of Civil Procedure.¹²⁸ One such motion to dismiss may be made pursuant to Rule 12(b)(1), in which the defendant asserts that the court does not have subject-matter jurisdiction over a plaintiff's claim.¹²⁹ The standard for a motion to dismiss for lack of subject-matter jurisdiction presumes a lack of jurisdiction where there is no affirmative evidence showing otherwise.¹³⁰ Therefore, the burden of proving appropriate jurisdiction rests on the plaintiff.¹³¹ The court must accept the plaintiff's facts as true, however, when evaluating a facial challenge of subject matter jurisdiction.¹³² To affirmatively prove subject-matter jurisdiction, the plaintiff's claim must satisfy two separate Article III requirements for federal jurisdiction, the political question doctrine and the standing requirement.¹³³

The political question doctrine is premised upon protecting separation of powers.¹³⁴ A claim is therefore barred under the political question doctrine

¹²¹ See *Kivalina*, 663 F. Supp. 2d at 876-77; see *State v. Lead Indus. Assoc.*, 951 A.2d 428, 450 (R.I. 2008) (citing *Friends of the Sakonnet v. Dutra*, 738 F. Supp. 623, 633-34 (D.R.I. 1990)).

¹²² *Lead Indus. Assoc.*, 951 A.2d at 456. See Gifford, *supra* note 118, at 747.

¹²³ See Gifford, *supra* note 118, at 747.

¹²⁴ *Kivalina*, 663 F. Supp. 2d at 875.

¹²⁵ *Id.*

¹²⁶ *Id.* at 870.

¹²⁷ *Id.*

¹²⁸ Fed. R. Civ. P. 12(b).

¹²⁹ Fed. R. Civ. P. 12(b)(1).

¹³⁰ *Kivalina*, 663 F. Supp. 2d at 870.

¹³¹ *Id.*

¹³² *Id.*

¹³³ *Id.* at 871-78.

¹³⁴ *Id.* at 871 (quoting *Koohi v. United States*, 976 F.2d 1328, 1331 (9th Cir. 1992))

when resolution of that claim would require the court to substitute a policy judgment for a legal analysis.¹³⁵ In *Baker*, the Supreme Court announced a six-factor test for evaluating whether a claim represents a nonjusticiable political question, the presence of any one factor being sufficient to disqualify the claim under the political question doctrine.¹³⁶ First, the court assesses whether the claim involves an issue that the text of the Constitution has already committed to legislative or executive judgment.¹³⁷ To find textual commitment under this factor, the Constitutional delegation must be of a final and exclusive nature.¹³⁸ A simple mandate to regulate the issue does not constitute exclusivity as contemplated under this factor.¹³⁹ Second, the court must determine whether it possesses a legal standard by which to evaluate the claim.¹⁴⁰ The claim fails under this second factor if no substantive legal basis exists for assessing the claim, meaning the court has inadequate legal tools to formulate a rational and reasoned analysis.¹⁴¹ Third, the court must be able to resolve the claim without first making an initial, non-judicial, policy determination.¹⁴² Fourth, the court must find it possible to announce its judgment on the issue without showing a lack of respect for the other branches of government.¹⁴³ Fifth, the court must not address a claim involving a prior political decision that requires an "unusual need for unquestioning adherence."¹⁴⁴ Sixth, the claim must not present potential for governmental embarrassment due to divergent announcements by various departments.¹⁴⁵

The standing requirement under Article III of the Constitution must also be satisfied for federal jurisdiction to be appropriate.¹⁴⁶ The text of Article III grants the federal judiciary a limited power to address "cases" and "controversies."¹⁴⁷ Therefore, federal standing requires the plaintiff to establish that a case or controversy exists by demonstrating three elements: an injury in fact, causation, and redressability.¹⁴⁸ To prove an injury in fact, the plaintiff must

("The political question doctrine serves to prevent the federal courts from intruding unduly on certain policy choices and value judgments that are constitutionally committed to Congress or the executive branch.").

¹³⁵ *Id.*

¹³⁶ *Id.* (citing *Baker v. Carr*, 369 U.S. 186, 210 (1962)).

¹³⁷ *Id.* (citing *Baker*, 369 U.S. at 210).

¹³⁸ *Id.* at 872.

¹³⁹ *Id.* at 872.

¹⁴⁰ *Id.* at 871 (citing *Baker*, 369 U.S. at 210).

¹⁴¹ *Id.* at 874.

¹⁴² *Id.* at 871-72 (citing *Baker*, 369 U.S. at 210).

¹⁴³ *Id.* at 872 (citing *Baker*, 369 U.S. at 210).

¹⁴⁴ *Id.* (citing *Baker*, 369 U.S. at 210).

¹⁴⁵ *Id.* (citing *Baker*, 369 U.S. at 210).

¹⁴⁶ *Id.* at 877.

¹⁴⁷ U.S. CONST. art. III, § 2, cl. 1.

¹⁴⁸ *Kivalina*, 663 F. Supp. 2d at 877.

show a “concrete and particularized invasion of a legally protected interest.”¹⁴⁹ To demonstrate causation, the claim must assert a “fairly traceable connection” between the plaintiff’s injury and the defendant’s conduct.¹⁵⁰ “Fairly traceable” requires the plaintiff to demonstrate a “substantial likelihood that the defendant’s conduct caused (the) plaintiff’s injury in fact,” less than is required in a test for proximate causation.¹⁵¹ With regard to a pollution injury under public nuisance, the plaintiff may establish causation by identifying what specific pollutant caused the injury, identifying a defendant that discharged that specific pollutant, and showing that the injury occurred within the zone of that defendant’s discharge.¹⁵² If the injury falls within the “zone of the polluter,” then the plaintiff may identify the defendant as the “seed of the injury.”¹⁵³ The “seed of the injury” test is adequate for causation unless the defendant can produce an alternative polluter to blame.¹⁵⁴ Finally, redressability requires that the relief sought is likely to remedy the plaintiff’s injury.¹⁵⁵

VI. PUBLIC NUISANCE ANALYSIS IN *Kivalina*

The following discussion examines how courts may apply the elements of public nuisance law to global warming injury claims. This section does so by using the Court’s opinion in *Kivalina* as a case study. On February 26, 2008, the Plaintiffs filed a complaint in the United States District Court for the Northern District of California, seeking monetary damages for global warming injuries caused by the Defendants’ hydrocarbon products.¹⁵⁶ The Defendants subsequently filed several motions to dismiss the complaint, citing the Plaintiffs’ failure to meet threshold requirements under Federal Rules of Civil Procedure 12(b)(1), 12(b)(2) and 12(b)(6).¹⁵⁷ The Court’s opinion focused on the 12(b)(1) motion to dismiss, which alone proved to be determinative.¹⁵⁸ In this motion to dismiss, the Defendants argued that the District Court lacked jurisdiction over the Plaintiffs’ federal public nuisance claim because resolving the claim would require the Court to make a legislative policy judgment, which runs afoul of the political question doctrine.¹⁵⁹ Plaintiffs’ public nuisance claim lacked federal standing under Article III because the alleged injury was not “fairly traceable” to the Defendants’ actions.¹⁶⁰ The Defendants’ motion to dismiss was a facial

¹⁴⁹ *Id.*

¹⁵⁰ *Id.*

¹⁵¹ *Id.* at 878.

¹⁵² *Id.* at 879.

¹⁵³ *Id.*

¹⁵⁴ *Id.*

¹⁵⁵ *Id.* at 877.

¹⁵⁶ *Id.* at 869.

¹⁵⁷ *Id.* at 870.

¹⁵⁸ *Id.* at 870-71.

¹⁵⁹ *Id.* at 870.

¹⁶⁰ *Id.*

challenge under Rule 12(b)(1), so the Court accepted the Plaintiffs' facts as true for evaluation of the claim.¹⁶¹

Under the political question doctrine analysis, the first *Baker* factor assesses whether the claim involves an issue that the text of the Constitution has already committed to legislative or executive judgment.¹⁶² In this case, the District Court noted that although the broad issue of climate change affects foreign policy, which is generally an executive branch responsibility, the mere existence of an international dimension within climate change does not *ipso facto* require judicial abstention on the issue.¹⁶³ Therefore, the District Court held that the Plaintiffs' claim did not implicate the first *Baker* factor.¹⁶⁴

The District Court ultimately ruled in the Defendants' favor, however, finding that the second and third *Baker* factors precluded judicial action on the Plaintiffs' federal public nuisance claim.¹⁶⁵ The second *Baker* factor requires the court to assess whether it possesses a legal standard by which to evaluate the claim.¹⁶⁶ An element of the test for public nuisance is unreasonableness, which requires the fact-finder to balance the "gravity of the harm against the utility of the conduct."¹⁶⁷ Thus, in this instance, the District Court would need to weigh the long-term harms of carbon dioxide emissions and the risk of melting sea ice in Alaska against the energy benefits of the Defendants' products.¹⁶⁸ This assessment would need to contain an evaluation of alternative energy products, including "their reliability as an energy source, safety considerations and the impact of the different alternatives on consumers and business at every level."¹⁶⁹ Thus, the District Court noted that *Kivalina* involved potential "liability and damages on a scale unlike any prior environmental pollution case."¹⁷⁰ Therefore, the legal standards used in other public nuisance cases to compare gravity of harm and utility were inapplicable to *Kivalina*.¹⁷¹ Consequently, the District Court found that it could not deliver a rational legal decision because the Plaintiffs failed to articulate any "judicially discoverable and manageable standards" for the Court to evaluate reasonableness.¹⁷² Therefore, the Court

¹⁶¹ *Id.* at 871.

¹⁶² *Id.* (citing *Baker*, 369 U.S. at 210).

¹⁶³ *Id.* at 873.

¹⁶⁴ *Id.*

¹⁶⁵ *Id.* at 876-77.

¹⁶⁶ *Id.* at 871 (citing *Baker*, 369 U.S. at 210).

¹⁶⁷ *Id.* at 874 (quoting RESTATEMENT (SECOND) OF TORTS § 821 cmt. e (1979)).

¹⁶⁸ *Id.* at 874-875.

¹⁶⁹ *Id.* (citing *Cal. v. Gen. Motors Corp.*, No. C06-05755 MJJ, 2007 WL 2726871, at *8 (N.D. Cal., Sept. 17, 2007); *Cook v. Rockwell Int'l Corp.*, 580 F. Supp. 2d 1071, 1166 (D. Colo. 2006)).

¹⁷⁰ *Id.* at 876.

¹⁷¹ *Id.* at 876.

¹⁷² *Id.* at 875.

held that the second *Baker* factor favored non-justiciability.¹⁷³

Similarly, the third *Baker* factor requires the court to be able to resolve the claim without first making an initial, non-judicial, policy determination.¹⁷⁴ The District Court determined that the third *Baker* factor also supported non-justiciability because of the “seemingly arbitrary selection of Defendants” in this case.¹⁷⁵ The Defendants in *Kivalina* are large contributors to global warming but they are not the *sole* contributors to global warming.¹⁷⁶ Therefore, the Court determined that the Plaintiffs were asking for a policy judgment that the Defendants should bear the full cost of global warming’s effects.¹⁷⁷ Under this evaluation, the Court declared that the second and third *Baker* factors were conclusive and that it lacked jurisdiction over the nuisance claim as a non-justiciable political question.¹⁷⁸

As for federal standing in this case, the Court found that the connection between the Plaintiffs’ injury and the Defendants’ emissions was far too tenuous in time and distance for the Court to classify the injury as within the zone of the polluter.¹⁷⁹ Therefore, the Court held that the Plaintiffs failed to establish causation through the “seed of the injury” test.¹⁸⁰ Additionally, the Defendants were not the sole contributors to the Plaintiffs’ injury; therefore, the “seed” of the Plaintiffs’ injury was not “fairly traceable” to the Defendants.¹⁸¹ Thus, the Court held that the Plaintiffs’ public nuisance claim was also barred by a lack of federal standing.¹⁸²

Because the Plaintiffs relied on the federal public nuisance claim as the basis for jurisdiction in federal court, the court dismissed their entire case for lack of subject matter jurisdiction.¹⁸³ The Plaintiffs’ complaint, however, included several other supplemental claims, including civil conspiracy and concert of action claims.¹⁸⁴ The Plaintiffs’ complaint presented extensive factual support for those claims, generally demonstrating that the Defendants conspired to deceive the public with regard to the existence of global warming, in particular the direct link between human carbon dioxide emissions and climate change.¹⁸⁵ While the District Court declined to exercise supplemental jurisdiction over

¹⁷³ *Id.* at 876.

¹⁷⁴ *Id.* at 871-72 (citing *Baker*, 369 U.S. at 210).

¹⁷⁵ *Id.* at n.4.

¹⁷⁶ *Id.* at 877.

¹⁷⁷ *Id.*

¹⁷⁸ *Id.* at 876-77.

¹⁷⁹ *Id.* at 881-882.

¹⁸⁰ *Id.* at 880-881.

¹⁸¹ *Id.* at 879-880.

¹⁸² *Id.* at 882.

¹⁸³ Complaint, *supra* note 19, at 2.

¹⁸⁴ *Id.* at 66.

¹⁸⁵ *Id.* at 47-62. The Plaintiffs’ complaint includes fifteen pages of facts that directly support the allegations that the Defendants conspired to obscure the truth of global warming.

these state law claims and dismissed them without addressing their merits,¹⁸⁶ these claims and their evidentiary support may be significant for future climate change litigation. Specifically, the conspiracy and concert of action claims may have value for future plaintiffs presenting their climate change cases under a products liability theory.

The *Kivalina* opinion announced a broad holding, ultimately making it difficult for future plaintiffs to avoid dismissal if they litigate under a similar federal public nuisance theory.¹⁸⁷ The Court's discussion of the reasons for dismissal, the lack of guiding legal principles, the need for an initial policy judgment, and the attenuated connection between the Defendants' action and the Plaintiff's injury are not unique features of the *Kivalina* case. All climate change public nuisance claims would present these same failings, especially because *Kivalina* presented an exceptionally plaintiff-friendly fact pattern for a climate change case.¹⁸⁸ Therefore, the Court's assessment under the political question doctrine and federal standing requirement has effectively closed the door on other global warming suits seeking damages under a public nuisance theory in the Ninth Circuit. Furthermore, given that no individual or company is in control of carbon dioxide emissions at the time they cause global warming, a plaintiff will find it difficult, and arguably impossible, to ever prove causation under any court's interpretation of the public nuisance standard.¹⁸⁹ Since a more lenient interpretation of the requirements for a public nuisance claim would push public nuisance into the domain of products liability law,¹⁹⁰ public nuisance suits based on climate change injuries are likely to be universally unsuccessful.

VII. LEGAL ANALYSIS OF PRODUCTS LIABILITY CLAIMS: TRADITIONAL THEORY EFFECTIVELY APPLIED TO CLIMATE CHANGE LITIGATION

Unlike public nuisance law, products liability encompasses a comprehensive body of law that has traditionally and specifically dealt with plaintiff actions against manufacturers.¹⁹¹ Products liability is a tort-based state claim and, although no plaintiffs have yet tested products liability as a theory for addressing global warming injuries, plaintiffs harmed by other similarly dangerous products such as tobacco and fuel additives have successfully utilized products liability claims to seek damages from product manufacturers.¹⁹²

In general, products liability doctrine holds the manufacturer of a "defective"

¹⁸⁶ *Kivalina*, 663 F. Supp. 2d at 882-83.

¹⁸⁷ *See id.* at 871-77.

¹⁸⁸ *See supra* pp. 18-19.

¹⁸⁹ *State v. Lead Indus. Assoc.*, 951 A.2d 428, 456 (R.I. 2008); *See Gifford, supra* note 118, at 747.

¹⁹⁰ *Lead Indus. Assoc.*, 951 A.2d at 456; *See Gifford, supra* note 118, at 747.

¹⁹¹ *Gifford, supra* note 118, at 745.

¹⁹² *See In re Methyl Tertiary Butyl Ether (MBTE) Prod. Liab. Litig.*, 175 F. Supp. 2d 593, 599, 606 (S.D.N.Y. 2001).

product subject to liability for any injuries to people or property caused by the defective product.¹⁹³ A products liability claim arises when a product contains a defect that makes it “unreasonably dangerous.”¹⁹⁴ In addition, a plaintiff must demonstrate that the defect occurred when the product was under the defendant’s control and that the defect caused the plaintiff’s injury.¹⁹⁵ Under products liability doctrine, there are three specific types of “defects” that may result in liability: warning defects, design defects, and manufacturing defects.¹⁹⁶ Warning defects are most applicable to this study because they are most likely to result in successful climate change injury claims.

A. *Design Defects Under Products Liability*

A design defect claim generally requires a showing that the specific product’s design is not “reasonably safe” and that the “foreseeable risks of harm posed by the product could have been reduced or avoided by the adoption of a reasonable alternative design.”¹⁹⁷ Features of a product that are dangerous but inherent to its use, such as a knife’s sharp edge, are not considered design defects for the purposes of products liability.¹⁹⁸ In a global warming suit, such as *Kivalina*, the product in question would be the hydrocarbon product manufactured by the defendant and sold to the public. Burning hydrocarbon products releases carbon dioxide, which in turn causes global warming.¹⁹⁹ However, carbon dioxide release is not a design defect because emissions are an inherent part of hydrocarbon products that, like the sharp edge of a knife, may not be considered a design defect under products liability jurisprudence.²⁰⁰ Therefore, it would be difficult to show that a reasonable alternative design exists that could reduce or eliminate the danger of hydrocarbon products.²⁰¹ It may be possible, however, for plaintiffs to utilize a design defect claim in climate change litigation that targets car manufacturers rather than fuel manufacturers.²⁰² There are reasonable alternative car designs that limit or eliminate carbon dioxide emissions, thus harmful emissions are not inherent features of a vehicle’s design.²⁰³

¹⁹³ RESTATEMENT (SECOND) OF TORTS § 402 (1979).

¹⁹⁴ Grossman, *supra* note 22, at 39.

¹⁹⁵ Grossman, *supra* note 22, at 39.

¹⁹⁶ *Caterpillar Tractor Co. v. Beck*, 593 P.2d 871, 878 n. 15 (Alaska 1979); *see also* Grossman, *supra* note 22, at 39.

¹⁹⁷ RESTATEMENT (THIRD) OF PRODS. LIAB. § 2(b) (1998).

¹⁹⁸ Grossman, *supra* note 22, at 44.

¹⁹⁹ *What is Global Warming?*, *supra* note 39.

²⁰⁰ Grossman, *supra* note 22, at 44.

²⁰¹ Grossman, *supra* note 22, at 44.

²⁰² Grossman, *supra* note 22, at 45.

²⁰³ Grossman, *supra* note 22, at 45.

B. *Manufacturing Defects Under Products Liability*

In contrast, a manufacturing defect claim employs the term "defect" in its common usage.²⁰⁴ As such, courts impose liability for a manufacturing defect when the product, as sold or distributed, deviates from its intended design, regardless of the level of care exercised in making the product.²⁰⁵ In the context of hydrocarbon products, manufacturers sell their products with the expectation that they will release damaging carbon dioxide emissions during normal use.²⁰⁶ Therefore, despite being dangerous, hydrocarbon products function as the manufacturer originally intended.²⁰⁷ For this reason, manufacturing defect claims are irrelevant to global warming lawsuits like *Kivalina*.²⁰⁸ As the following section will confirm, the failure to warn claim is the most viable option for global warming litigation under products liability.

VIII. FAILURE TO WARN AS A PRODUCTS LIABILITY CLAIM

A. *Strict Liability*

Failure to warn claims are distinct from other products liability claims because failure to warn claims focus on defects in the manufacturer's conduct rather than defects in the products.²⁰⁹ Products liability claims are state-defined torts claims, so the specific statutory language of products liability may vary by state.²¹⁰ Many states, however, have adopted language that reflects the Second Restatement of Torts on Products Liability.²¹¹ Generally, the Second Restatement indicates that a product's condition is "unreasonably" dangerous and, therefore, defective if the product lacks "adequate" warnings or instructions.²¹² Notably, this phrasing omits any negligence requirement.²¹³ Instead, the Second Restatement articulates that strict liability attaches to all injuries resulting from defective products.²¹⁴ Therefore, in a majority of jurisdictions, plaintiffs need not present any evidence of negligence by the manufacturer in order to prevail on a failure to warn claim.²¹⁵ Additionally, as an indication of the general trend toward strict liability, the Third Restatement of Torts on Products Liability opines that strict liability should be the exclusive theory for products

²⁰⁴ See RESTATEMENT (THIRD) OF PRODS. LIAB. § 2(a) (1998).

²⁰⁵ *Id.*

²⁰⁶ See *What is Global Warming?*, *supra* note 39.

²⁰⁷ Grossman, *supra* note 22, at 40.

²⁰⁸ Grossman, *supra* note 22, at 40.

²⁰⁹ Grossman, *supra* note 22, at 39.

²¹⁰ Allan E. Korpela, Annotation, *Failure to Warn as a Basis for Strict Liability in Tort*, 53 A.L.R.3d 239, 251 (1973).

²¹¹ *Id.*

²¹² *Id.*

²¹³ *Id.*

²¹⁴ *Id.* See RESTATEMENT (SECOND) OF TORTS § 402A (1979).

²¹⁵ *Shanks v. Upjohn Co.*, 835 P.2d 1189, 1199 (Alaska 1992).

liability claims.²¹⁶

B. Reasonableness & Foreseeability

Given that most products have at least some potential or ability to inflict harm, combined with the fact that warnings cannot be required for all products, the standard for evaluating which dangerous products impose a duty to warn on the manufacturer is largely based on a question of reasonableness.²¹⁷ The reasonableness standard for imposing a duty to warn turns on the specific facts of each case; however, the degree of danger and plaintiffs' ability to protect themselves are two factors that prove central to the determination of liability.²¹⁸

The ability to protect oneself is generally measured by foreseeability of a product's danger.²¹⁹ Typically, a manufacturer of a dangerous product owes consumers a duty to warn where the manufacturer knows of – or given insider skill and knowledge, should have known of – the potential dangers posed by the product so as to make the injury “reasonably foreseeable.”²²⁰ “Reasonably foreseeable” in this context does not refer to the specific chain of events that resulted in injury, but instead requires that the manufacturer could have foreseen the general type of risk involved.²²¹ Thus, plaintiffs must show that the manufacturer either had actual notice of the type of risk involved, or that the manufacturer could reasonably infer the general type of risk involved given the characteristics and normal use of the product.²²² Finally, the only applicable exceptions to this test are that the manufacturer owes no duty to warn of *obvious* danger or to warn a technically trained person or expert.²²³

C. Scope of Duty to Warn

Although a duty to warn of a dangerous product often arises between a seller and the direct buyer of the product, a duty to warn is not confined to this immediate relationship.²²⁴ Courts have held that manufacturers also owe a duty to warn third parties who are exposed to foreseeable risk from their products.²²⁵

²¹⁶ Gifford, *supra* note 118, at 744-45 (2003) (citing RESTATEMENT (THIRD) OF TORTS: PRODS. LIAB. (1998)).

²¹⁷ Korpela, *supra* note 210, at 51.

²¹⁸ Korpela, *supra* note 210, at 51-52.

²¹⁹ Korpela, *supra* note 210, at 52.

²²⁰ Hall v. Du Pont de Nemours & Co., 345 F. Supp. 353, 362 (E.D.N.Y. 1972); *Upjohn*, 835 P.2d at 1199-200; Korpela, *supra* note 210, at 51.

²²¹ Hall, 345 F. Supp. at 362-65 (holding that injuries to children caused by accidental explosions of blasting caps were a foreseeable risk of the “use and circulation of blasting caps” despite the fact that children were not intended users of the product).

²²² *Id.* at 362.

²²³ Korpela, *supra* note 210, at 51.

²²⁴ Robles v. Shoreside Petroleum, Inc., 29 P.3d 838, 842 (Alaska 2001).

²²⁵ *In re Methyl Tertiary Butyl Ether (MBTE) Prod. Liab. Litig.*, 175 F. Supp. 2d 593, 625 (S.D.N.Y. 2001).

For example, in litigation addressing well water contamination by the harmful fuel additive MTBE, the plaintiffs did not allege that their injury resulted from their own use of the fuel product.²²⁶ The Court, however, held that the allegations were “sufficient to show that the harm suffered by the plaintiffs was a foreseeable result of defendants’ placement of gasoline containing MTBE in the marketplace.”²²⁷ Some courts have even expanded the manufacturer’s duty to warn to include the general public.²²⁸ Furthermore, other courts may presume a duty to warn where plaintiffs can establish all other elements of the failure to warn claim.²²⁹

The rationale for a far-reaching duty to warn is based on the manufacturer’s superior knowledge of the product’s dangers, which necessarily affords manufacturers the best chance of avoiding injury and mitigating the costs of liability.²³⁰ Further, the extension of liability to include injury of indirect parties is consistent with, and limited by, the foreseeability requirement.²³¹

D. Causation Element

Finally, the last element of a failure to warn claim, and likely the most difficult hurdle for plaintiffs, is the element of causation.²³² Causation is a required element for any tort-based claim and, generally, proof of causation involves a two-prong inquiry requiring the plaintiff to demonstrate that the defendant was both a cause-in-fact and a proximate cause of the injury.²³³

1. Cause-In-Fact

To satisfy the first prong of causation and demonstrate cause-in-fact, the plaintiff must prove by a preponderance of the evidence that the harm would not have occurred *but for* the defendant’s conduct.²³⁴ This test for cause-in-fact, commonly known as the “but-for” test, is generally effective because it allows courts to hold all culpable parties accountable while excluding parties

²²⁶ *Id.*

²²⁷ *Id.*

²²⁸ *Hall v. Du Pont de Nemours & Co.*, 345 F. Supp. 353, 360 (E.D.N.Y. 1972) (“[M]anufacturers . . . have a duty to users, consumers, and in some circumstances to the general public or portions of it, to produce products with appropriate warnings . . .”).

²²⁹ *Id.* at 361 (“In most products liability cases the court does not have to make an explicit determination that the defendant owed the plaintiff a duty . . .”).

²³⁰ *Robles v. Shoreside Petroleum, Inc.*, 29 P.3d 838, 843 (Alaska 2001) (citing *Lamb v. Manitowoc Co.*, 570 N.W.2d 65, 68 (Iowa 1997)).

²³¹ *Hall*, 345 F. Supp. at 361.

²³² Grossman, *supra* note 22, at 24.

²³³ See Grossman, *supra* note 22, at 22.

²³⁴ David W. Robertson, *Causation in the Restatement (Third) of Torts: Three Arguable Mistakes*, 44 WAKE FOREST L. REV. 1007, 1008-09, 1011 (2009) (citing RESTATEMENT (THIRD) OF TORTS: LIAB. FOR PHYSICAL HARM § 26 (Proposed Final Draft No. 1, 2005)).

that were not significantly responsible for the injury.²³⁵ However, there are a few specific circumstances where the but-for test fails to satisfactorily account for causation and culpability.²³⁶ Thus, courts have adopted alternative tests to address such situations.²³⁷

The first circumstance in which the but-for test fails to account for causation arises where the harm is the result of actions by multiple wrongdoers that are each necessary to cause the injury, known as multiple necessary causes.²³⁸ In this case, courts apply the doctrine of joint and several liability, allowing the plaintiff to recover 100% of the damages from any one defendant, relieving the plaintiff of the need to apportion liability among defendants.²³⁹

The second circumstance arises when actions by multiple wrongdoers are each individually sufficient to cause the harm, known as multiple sufficient causes.²⁴⁰ When multiple sufficient causes exist, no single action is a but-for cause, but only because another party duplicated the wrongful act.²⁴¹ The Second and Third Restatements of Torts addressed this loophole by substituting an alternative test for multiple sufficient causes situations.²⁴² The Second Restatement uses the “substantial factor” test for cause-in-fact, which imposes liability on any defendant that was a substantial factor in causing the harm.²⁴³ The Third Restatement’s version of the multiple sufficient causes test is even further relaxed, indicating that any act that alone would be a but-for cause is within the scope of liability so long as it contributes more than just trivially to causing the injury.²⁴⁴ As states adopt the Third Restatement’s broad expression of the cause-in-fact standard, proving liability will become easier for plaintiffs.²⁴⁵

A third circumstance where the but-for test fails to satisfactorily account for culpability is when multiple actors breach a duty of care to the plaintiff, but the plaintiff has no way of identifying which particular wrongdoer actually caused the plaintiff’s injury, and the breaches do not otherwise constitute multiple sufficient or multiple necessary causes of the injury.²⁴⁶ In this kind of situation, and where there is no preemptive legislation on the issue, the theory of enterprise liability creates joint liability among the involved wrongdoers.²⁴⁷ Gener-

²³⁵ *Id.* at 1011.

²³⁶ *See infra* pp. 32-24.

²³⁷ *Id.* at 1008-09, 1011.

²³⁸ *Id.* at 1014. This situation is also sometimes called “joint and several liability”. *Id.*

²³⁹ *Id.* at 1021.

²⁴⁰ *Id.* 1017-18.

²⁴¹ *See id.* at 1011.

²⁴² *Id.* at 1017.

²⁴³ *Id.*

²⁴⁴ *Id.* at 1017-18.

²⁴⁵ *Id.* at 1017, 1021.

²⁴⁶ *Hall v. Du Pont de Nemours & Co.*, 345 F. Supp. 353, 374, 378 (E.D.N.Y. 1972).

²⁴⁷ *Id.*

ally, without enterprise liability, plaintiffs have the burden of proving that the injury-causing product is more likely than not a product of the specific defendant.²⁴⁸ However, when enterprise liability is available, the burden of identifying the particular injury-causing defendant shifts from the plaintiff to the entire group of wrongdoers.²⁴⁹ Enterprise liability is only available, however, where three factors are present.²⁵⁰ First, the defendants must operate as a unit with joint control over the risk by adhering to an industry-wide standard or custom.²⁵¹ Second, each defendant's breach of duty to the plaintiff must be substantially similar in nature and concurrent in time.²⁵² Finally, the plaintiff must attach substantially the entire industry to the litigation.²⁵³ If these factors are met then the court may impose liability on all of the defendants under the enterprise theory, despite the plaintiff's inability trace his or her injuries to a specific manufacturer.²⁵⁴ Thus, to establish causation through enterprise liability, the plaintiff must simply show that the injury-causing product is more likely than not the product of *any one* of the named defendants.²⁵⁵ Defendants may then defend themselves by demonstrating that they in particular were not responsible for the plaintiff's injury.²⁵⁶ Enterprise liability is premised on the fact that manufacturers are optimally positioned to avoid the harm and imposition of joint liability is the most effective way to distribute costs.²⁵⁷ Furthermore, where industry-wide practices create unreasonable risks, "the issue of who 'caused' the injury is distinctly secondary to the fact that the entire group engaged in joint hazardous conduct."²⁵⁸

A final legal doctrine available to create joint liability among multiple responsible parties is the concept of *concerted action*.²⁵⁹ If multiple defendants act together in a way that advances a common scheme, they may be considered one "causal unit" for liability purposes.²⁶⁰ Thus, defendants that individually may not meet the standard of but-for causation may still be held jointly liable

²⁴⁸ *Id.* at 379.

²⁴⁹ *Id.* at 379-80.

²⁵⁰ *Id.* at 373-79.

²⁵¹ *Id.* at 373-74.

²⁵² *Id.* at 378-79.

²⁵³ *Id.*

²⁵⁴ *Id.*

²⁵⁵ *Id.*

²⁵⁶ *Id.* at 378.

²⁵⁷ *Id.* at 377-78 ("In other situations—typically water or air pollution by multiple emitters—the only feasible method of ascertaining risks, imposing safeguards and spreading costs is through joint liability or other methods of joint risk control.").

²⁵⁸ *Id.* at 372.

²⁵⁹ Robertson, *supra* note 234, at 1011.

²⁶⁰ Robertson, *supra* note 234, at 1011-12 ("All those who, in pursuance of a common plan or design to commit a tortious act, actively take part in it, or further it by cooperation or request, or who lend aid or encouragement to the wrongdoer, or ratify and adopt the wrong-

for harm that results from a group activity.²⁶¹ For example, in *Warren v. Parkhurst*, twenty-six defendants were held liable for polluting a creek, despite the fact that each individual defendant was only responsible for minimal discharges that alone did not significantly impact the creek, because in total the discharges resulted in significant harm.²⁶² In this way, courts have broadly applied the concerted action doctrine creating a plaintiff-friendly standard.²⁶³

2. Proximate Cause

The second causation prong is proximate cause.²⁶⁴ In the context of failure to warn, the proximate cause inquiry is unique from other areas of tort law.²⁶⁵ Proximate cause exists under a failure to warn claim if an adequate warning from the defendants would have averted the plaintiff's harm.²⁶⁶ In other words, the central question for proximate cause is whether the user would have ignored a warning had it been given.²⁶⁷ However, it is difficult for a plaintiff to prove deterrence based only on a hypothetical warning and speculation.²⁶⁸ Thus, to aid plaintiffs in proving causation, many jurisdictions have adopted burden-shifting regimes that create either a presumption or an inference in favor of proximate cause.²⁶⁹

The actual treatment of this presumption or inference of proximate cause varies somewhat by jurisdiction.²⁷⁰ Some jurisdictions have a mandatory rebuttable presumption of proximate cause, whereby defendants bear the burden of production.²⁷¹ Unless a defendant affirmatively demonstrates that a warning would not be heeded, a plaintiff effectively establishes proximate causation.²⁷² Other jurisdictions, however, employ a permissive presumption of proximate cause, where the defendant's failure to rebut the presumption transforms the question of whether a warning would have been effective into a question of fact

doer's acts done for their benefit, are [causally responsible for the results of the common activity].").

²⁶¹ Robertson, *supra* note 234, at 1012.

²⁶² Robertson, *supra* note 234 (citing *Warren v. Parkhurst*, 92 N.Y.S. 725, 725-27 (Sup. Ct. 1904), *aff'd*, 93 N.Y.S. 1009 (App. Div. 1905), *aff'd*, 78 N.E. 579 (N.Y. 1906)).

²⁶³ Robertson, *supra* note 234.

²⁶⁴ Benjamin J. Jones, Annotation, *Presumption or Inference, in Products Liability Action Based on Failure to Warn, that User of a Product Would have Heeded an Adequate Warning had One been Given*, 38 A.L.R.5th 683, 13 (1996).

²⁶⁵ *Id.* at 13-14.

²⁶⁶ *Id.* at 14.

²⁶⁷ *See id.*

²⁶⁸ *Id.*

²⁶⁹ *Id.*

²⁷⁰ *Id.*

²⁷¹ *Id.*

²⁷² *Id.*

that must be evaluated by the jury.²⁷³ A third theory, the inference theory of proximate causation, is closely related to the permissive presumption theory. Jurisdictions employing the inference theory allow jurors to "draw an 'inference' that an adequate warning would have been heeded, absent negating evidence."²⁷⁴

Many jurisdictions adopted the presumption or inference theories of proximate causation based on the guidance of the Second Restatement of Torts.²⁷⁵ Alternatively, some jurisdictions that reject the Second Restatement generally, still embrace a presumption or inference theory of proximate causation for policy reasons.²⁷⁶ A presumption of proximate causation for failure to warn promotes the policy goal of enhanced consumer safety.²⁷⁷ For instance, courts generally reward manufacturers for providing adequate warnings by assigning a presumption against proximate causation where a warning was given.²⁷⁸ This presumption makes it exceptionally difficult for a plaintiff to prove a defendant's liability for any injury when the defendant provided a warning.²⁷⁹ Therefore, to remain consistent, courts impose the opposite presumption—a presumption in favor of proximate cause—if a manufacturer fails to provide a warning about a dangerous product.²⁸⁰ This kind of presumption would appropriately deter manufacturers from disregarding their duty to warn consumers about dangerous products.²⁸¹

A presumption or inference in favor of proximate causation may be overcome or rebutted if a defendant can produce affirmative evidence demonstrating that a warning would have been ineffective at preventing the injury.²⁸² Specifically, courts generally acknowledge two scenarios sufficient to rebut a presumption of proximate cause.²⁸³ First, where the defendant can prove that the plaintiff knew of the danger prior to injury, usually the defendant can effectively rebut the presumption of causation.²⁸⁴ Second, where the actions of a third party intervened in the causal chain of events, the intervening acts may rebut the presumption of proximate causation.²⁸⁵ An intervening act relieves a manufacturer from liability only if the manufacturer could not anticipate the

²⁷³ *Id.*

²⁷⁴ *Id.* at 31.

²⁷⁵ *Id.* at 14.

²⁷⁶ *Id.*

²⁷⁷ *Id.* See RESTATEMENT (SECOND) OF TORTS § 402(a) (1979).

²⁷⁸ *Id.*

²⁷⁹ *Id.*

²⁸⁰ *Id.*

²⁸¹ *Id.*

²⁸² *Id.*

²⁸³ See *id.* at 14-15.

²⁸⁴ *Id.* at 15.

²⁸⁵ *Id.*

third party's actions.²⁸⁶ Furthermore, under strict liability a qualifying intervening act does not automatically rebut the presumption of proximate causation but instead proximate causation becomes a question for the fact-finder.²⁸⁷

IX. ALASKA STATE LAW - FAILURE TO WARN AS A PRODUCTS LIABILITY CLAIM

Because products liability doctrines vary significantly between states, it is worth focusing on the specific version of products liability law that would likely apply to a failure to warn claim brought in *Kivalina*.²⁸⁸ In *Kivalina*, the Plaintiff's injury occurred entirely in Alaska;²⁸⁹ therefore the case has a significant relationship with the state, and Alaska state law would likely be applied to any *Kivalina* state claims.²⁹⁰

Alaska holds a manufacturer strictly liable for failure to warn when its "product as marketed poses a risk of injury to one who uses the product in a reasonably foreseeable manner," yet the product lacks adequate warnings.²⁹¹ An adequate warning would clearly illustrate the scope of the danger and fairly communicate the degree or gravity of the potential harm to sufficiently alert a "reasonably prudent person" to the threat.²⁹² Under strict liability, a defendant can only avoid liability for proximately caused injuries by proving that, at the time of distribution, the risk posed by the product was "scientifically unknowable."²⁹³ Defendants cannot avoid liability through faultless manufacture and design.²⁹⁴

Moreover, Alaska state law does not employ a cost-benefit analysis to determine whether a product is "unreasonably dangerous," requiring a duty to warn.²⁹⁵ Instead, the law presumes that the cost of providing an adequate warning is minimal compared to the consequences of no warning or an inadequate warning.²⁹⁶ Thus, the court always assesses this balance in favor of requiring

²⁸⁶ Hall v. Du Pont de Nemours & Co., 345 F. Supp. 353, 367 (E.D.N.Y. 1972).

²⁸⁷ *Id.* at 367, 370.

²⁸⁸ See Allan E. Korpela, Annotation, *Failure to Warn as a Basis for Strict Liability in Tort*, 53 A.L.R.3d 239, 251 (1973).

²⁸⁹ Native Vill. of Kivalina v. ExxonMobil Corp., 663 F. Supp. 2d 863, 868-69 (N.D. Cal. 2009).

²⁹⁰ RESTATEMENT (SECOND) OF CONFLICT OF LAWS § 6(2) (1971) (establishing the broad theory that conflicts of law rules require application of the local law "of the state of most significant relationship").

²⁹¹ Shanks v. Upjohn Co., 835 P.2d 1189, 1199-00 (Alaska 1992); see also Robles v. Shoreside Petroleum, Inc., 29 P.3d 838, 842 (Alaska 2001).

²⁹² *Upjohn*, 835 P.2d at 1200.

²⁹³ *Id.*

²⁹⁴ See Prince v. Parachutes, Inc., 685 P.2d 83, 88 (Alaska 1984).

²⁹⁵ *Upjohn*, 835 P.2d at 1200.

²⁹⁶ Ross Labs. v. Thies, 725 P.2d 1076, 1079 (1986).

adequate warnings.²⁹⁷ This absence of a balancing test is one of the major advantages of filing a failure to warn claim over a public nuisance claim.²⁹⁸

Alaska has not explicitly adopted §388 of the Second Restatement of Torts concerning a duty to warn third parties and direct consumers.²⁹⁹ Alaska case law suggests, however, that a duty to warn third parties exists where a supplier or manufacturer has notice of a defect.³⁰⁰ Additionally, when an intermediary between the manufacturer and the end user has little or no involvement with the consumer, Alaska courts have held that manufacturers have a duty to warn end users directly.³⁰¹

Finally, Alaska courts indicate that strict liability for failure to warn is intended to deter manufacturers from marketing dangerous products and to force manufacturers to bear the costs of litigation.³⁰² This approach assumes that manufacturers are in the best position to avoid the initial harm and to defray the additional costs of liability by raising product prices and purchasing insurance.³⁰³ Additionally, internalization of a product's true costs has the beneficial effect of deterring customer use of dangerous products.³⁰⁴

X. POLITICAL QUESTION DOCTRINE & STANDING REQUIREMENT UNDER FAILURE TO WARN

The threshold subject matter jurisdiction requirements for litigation in federal court are the same across claims.³⁰⁵ In contrast with public nuisance claims, which often run afoul of the political question doctrine and federal standing requirement,³⁰⁶ products liability claims should be able to avoid these threshold subject matter jurisdiction issues for two reasons. First, products liability claims are typically litigated in state court rather than in federal court, and state courts do not employ the political question doctrine or the federal standing requirement as threshold conditions for jurisdiction.³⁰⁷ Unlike public nuisance

²⁹⁷ *Id.*

²⁹⁸ *Native Vill. of Kivalina v. ExxonMobil Corp.*, 663 F. Supp. 2d 863, 874 (N.D. Cal. 2009).

²⁹⁹ *Robles v. Shoreside Petroleum, Inc.*, 29 P.3d 838, 842 (Alaska 2001).

³⁰⁰ *Robles*, 29 P.3d at 842 (explaining that, even where manufacturers have passed control of their product to another party, the manufacturer retains liability for injuries resulting from their product if they have "actual or constructive notice" of the defect).

³⁰¹ *Upjohn*, 835 P.2d at 1195.

³⁰² *Id.* at 1196.

³⁰³ *Id.*

³⁰⁴ *Id.*

³⁰⁵ U.S. CONST. art. III, § 2, cl. 1; 28 U.S.C. §1332(a)(2), (4) (2001).

³⁰⁶ *See generally* *Native Vill. of Kivalina v. ExxonMobil Corp., et al.*, 663 F. Supp. 2d 863 (N.D. Cal. 2009) (holding that the public nuisance claim violates the political question doctrine and fails to meet the federal standing requirement in broad terms, essentially precluding future application of public nuisance in climate change litigation).

³⁰⁷ *See* U.S. CONST. art. III, § 2, cl. 1; 28 U.S.C. §1332(a)(2), (4) (2001).

claims, products liability claims are not federal claims, so they require diversity jurisdiction to be litigated in federal court.³⁰⁸

Second, the political question doctrine does not generally displace products liability claims unless the topic has been federally preempted,³⁰⁹ and federal preemption of state law is limited to a few defined instances.³¹⁰ Preemption only occurs if: 1) Congressional action is clearly intended to preempt state law,³¹¹ 2) Congress foreclosed any need for supplementary state regulation through the comprehensive nature of existing federal law on the subject,³¹² or 3) a state court ruling on the subject would create a conflict between state and federal law and hinder Congressional action.³¹³ Thus, if a plaintiff with diversity jurisdiction chooses to file a products liability claim in federal court, the products liability claim should not conflict with the political question doctrine unless one of the three above circumstances applies.³¹⁴

XI. KIVALINA EVALUATED AS A FAILURE TO WARN CLAIM

In the case of *Kivalina*, the Plaintiffs based their unsuccessful suit on a federal public nuisance claim.³¹⁵ What would have resulted, however, had the Plaintiffs relied on a products liability failure to warn claim instead? The following section applies the aforementioned doctrine of failure to warn to the specific facts of *Kivalina* and concludes that a failure to warn theory of liability is well suited for addressing the injuries stated in *Kivalina*. By extension, this section also demonstrates that the theory of failure to warn is an appropriate—and likely successful—basis for litigating global warming suits generally.

A. Federal Standing Requirement

The court dismissed the Plaintiffs' claim in *Kivalina* for failure to establish federal subject-matter jurisdiction based on the political question doctrine and the federal standing requirement.³¹⁶ A products liability claim under *Kivalina*, however, would not necessarily implicate those threshold requirements because

³⁰⁸ *Id.*

³⁰⁹ *In re Methyl Tertiary Butyl Ether (MTBE) Prod. Liab. Litig.*, 438 F. Supp. 2d 291, 300 n.56 (S.D.N.Y. 2006).

³¹⁰ Grossman, *supra* note 22, at 37.

³¹¹ Grossman, *supra* note 22, at 37. (citing *Rice v. Santa Fe Elevator Corp.*, 331 U.S. 218, 230 (1947)) (“[F]ederal law preempts state law. . . [when] it is the ‘clear and manifest purpose of Congress.’”).

³¹² Grossman, *supra* note 22, at 37.

³¹³ Grossman, *supra* note 22, at 37. (citing *Hillsborough Cnty. v. Automated Med. Lab., Inc.*, 471 U.S. 707, 713 (1985)) (“[F]ederal law preempts state law. . . [when] a state law ‘actually conflicts with a . . . federal statute’ in that it ‘stands as an obstacle to the accomplishment and execution of the full purposes and objectives of Congress.’”).

³¹⁴ See Grossman, *supra* note 22, at 37.

³¹⁵ *Native Vill. of Kivalina v. ExxonMobil Corp.*, 663 F. Supp. 2d 863 (N.D. Cal. 2009).

³¹⁶ *Id.*

the plaintiffs would likely file their claim in state court rather than federal court.³¹⁷ Nevertheless, assuming that the Plaintiffs filed their products liability claim in federal court, and assuming diversity jurisdiction, the products liability claim would be subject to the same federal standing analysis as the original *Kivalina* claim.³¹⁸

Federal standing for a failure to warn claim requires the plaintiff to establish an injury in fact, causation, and redressability.³¹⁹ In *Kivalina*, the injury, at a minimum, includes the significant cost of relocating the entire village.³²⁰ Thus, injury in fact is established.

For the Plaintiffs in *Kivalina*, causation under the federal standing requirement demands a "fairly traceable connection" between the need to relocate the village and the Defendants' failure to warn the public about the dangers of its hydrocarbon product.³²¹ Specifically, causation requires a "substantial likelihood" that the absence of a warning on hydrocarbon products, explaining that their use results in global warming, caused the melting of the sea ice that surrounded the island of Kivalina.³²² Scientific studies of global warming and its effects adequately establish a general causal link between carbon dioxide emissions from hydrocarbon products and the melting of sea ice.³²³ Therefore, the only remaining step needed to prove a causal connection is whether consumers of hydrocarbon products would have heeded a warning regarding the danger of global warming.³²⁴ In most jurisdictions, the question of proximate cause would be presumed or inferred in favor of the Plaintiffs.³²⁵ Therefore, the Plaintiffs should easily meet the threshold requirement for causation based solely on the scientific connection between carbon dioxide, global warming and melting sea ice.³²⁶

Lastly, the Plaintiffs meet the redressability requirement because they seek monetary damages for the costs of their relocation, and monetary relief is the best remedy for their injuries.³²⁷ In all, the Plaintiffs would likely establish federal standing successfully under a failure to warn theory of products liability.

³¹⁷ See U.S. CONST. art. III, § 2, cl. 1; 28 U.S.C. §1332(a)(2), (4) (2001).

³¹⁸ Grossman, *supra* note 22, at 40; *In re Methyl Tertiary Butyl Ether Prod. (MTBE) Liab. Litig.*, 175 F. Supp. 2d 593, 606-07 (S.D.N.Y. 2001).

³¹⁹ *Kivalina*, 663 F. Supp. 2d at 877.

³²⁰ See *id.* at 869.

³²¹ See *id.* at 877.

³²² See *id.* at 878.

³²³ Grossman, *supra* note 22, at 23.

³²⁴ Jones, *supra* note 264, at 14.

³²⁵ *Id.*

³²⁶ See *Kivalina*, 663 F. Supp. 2d at 878.

³²⁷ See *id.* at 877.

B. Political Question Doctrine & Federal Preemption

With regard to global warming, Congress has yet to pass any comprehensive energy or climate legislation.³²⁸ This lack of government action leaves ample room for products liability litigation to address global warming injuries without violating the federal preemption or political question doctrines.³²⁹ For purposes of this note, it is unnecessary to go through the six-factor political question test because, with products liability, there usually must be federal preemption in order for a court to find a nonjusticiable political question.³³⁰ In the case of a *Kivalina* failure to warn claim, there has been no federal preemption because 1) there has been no statement of preemption by Congress; 2) Congress has not adopted comprehensive regulations regarding global warming, let alone legislation that requires a warning on hydrocarbon products; and 3) this litigation will not create a conflict between state and federal law because there is no federal law addressing global warming injuries.³³¹ Therefore, unlike a public nuisance claim, a failure to warn claim under *Kivalina* should survive all threshold requirements necessary for federal jurisdiction.

C. Failure to Warn Elements

As discussed above, a failure to warn claim under *Kivalina* should survive all threshold requirements, and then, even if filed in federal court, that claim would likely be litigated under Alaska law.³³² Therefore, to the extent that specific concepts of products liability law have been adopted in Alaska, the following analysis will apply Alaska law.

1. Reasonably Foreseeable Risk of Injury

For purposes of a products liability claim in *Kivalina*, the “products” are the hydrocarbon products sold by the Defendants. Thus, to allege a failure to warn claim, the Plaintiffs must demonstrate that those hydrocarbon products pose a risk of injury when they are used in a reasonably foreseeable manner.³³³ Be-

³²⁸ Martin Chávez, *Is it Time for Plan B in 2011? National Climate Action Without Climate Legislation*, NATIONAL GEOGRAPHIC, THE GREAT ENERGY CHALLENGE BLOG (Jan. 14, 2011), <http://www.greatenergychallengeblog.com/blog/2011/01/14/is-it-time-for-a-plan-b-in-2011-national-climate-action-without-climate-legislation>.

³²⁹ *Kivalina*, 663 F. Supp. 2d at 871 (quoting *Koochi v. United States*, 976 F.2d 1328, 1331 (9th Cir. 1992)).

³³⁰ *In re Methyl Tertiary Butyl Ether Prod. (MTBE) Liab. Litig.*, 438 F. Supp. 2d 291, 300 n. 56 (S.D.N.Y. 2006).

³³¹ Grossman, *supra* note 22, at 37 (citing *Rice v. Santa Fe Elevator Corp.*, 331 U.S. 218, 230 (1947)).

³³² RESTATEMENT (SECOND) CONFLICT OF LAWS §6(2); *See Kivalina*, 663 F. Supp. 2d 863.

³³³ *Shanks v. Upjohn Co.*, 835 P.2d 1189, 1199-200 (Alaska 1992); *see also Robles v. Shoreside Petroleum, Inc.*, 29 P.3d 838, 842 (Alaska 2001).

cause the Defendants sell hydrocarbon products with the intent that consumers will burn the products for energy, this use is reasonably foreseeable.³³⁴ Further, the Plaintiffs' injuries – melting of sea ice and rising sea level – were reasonably foreseeable because the Defendants sell their products despite the fact that the release of carbon dioxide is an inherent and well-known consequence of the burning process;³³⁵ scientists have causally linked the release of carbon dioxide to global warming;³³⁶ and scientific studies confirm that global warming results in various severe environmental changes including the melting of sea ice, rising of sea level and alteration of weather patterns.³³⁷ This causal chain establishes a risk of injury to the Plaintiffs from the intended use of the product.

Furthermore, to prove reasonable foreseeability of the risk, the Plaintiffs may simply present evidence of the Defendants' active role in publicizing deceptive opinions regarding the existence of climate change.³³⁸ This conspiracy evidence powerfully illustrates that the Defendants knew about the connection between hydrocarbon products and global warming.³³⁹ In any case, extensive climate change science confirms that, at the very least, the Defendants *should have* known about the causal connection between their products and global warming.³⁴⁰

Given these facts, it is clear that the intended use of the Defendants' products causes global warming injuries like those suffered by the Plaintiffs, and the Defendants knew, or should have known, about the risk their product created for the Plaintiffs. Therefore, the Plaintiffs could easily establish this first set of elements for a failure to warn claim based on their climate change injuries.³⁴¹

2. Failure to Provide an Adequate Warning & Strict Liability

The lack of an adequate warning on the Defendant's dangerous hydrocarbon products is the next element required for a failure to warn claim under *Kivalina*.³⁴² Under the *Kivalina* facts, this element would not be a point of dispute.³⁴³ Even now, no hydrocarbon products include any sort of warning regarding the danger of carbon dioxide emissions and their connection to global warming and its effects.³⁴⁴ The Plaintiffs need not demonstrate that the danger of hydrocarbon products outweighs the cost of providing the warning because

³³⁴ *What is Global Warming?*, *supra* note 39.

³³⁵ *Id.*

³³⁶ Grossman, *supra* note 22, at 23.

³³⁷ *What is Global Warming?*, *supra* note 39.

³³⁸ Complaint, *supra* note 19, at 47-62.

³³⁹ *See id.*

³⁴⁰ *See* Wearst, *supra* note 46.

³⁴¹ *See* Shanks v. Upjohn Co., 835 P.2d 1189, 1199-00 (Alaska 1992); *see also* Robles v. Shoreside Petroleum, Inc., 29 P.3d 838, 842 (Alaska 2001).

³⁴² *See* Upjohn Co., 835 P.2d at 1199-200; *see also* Robles, 29 P.3d at 842.

³⁴³ *See* Upjohn Co., 835 P.2d at 1199-200; *see also* Robles, 29 P.3d at 842.

³⁴⁴ *See* Upjohn Co., 835 P.2d at 1199-200; *see also* Robles, 29 P.3d at 842.

the court presumes that the cost of a warning is negligible in relation to any danger.³⁴⁵ Additionally, strict liability applies to the Defendants' failure to warn, meaning the Plaintiffs' claim need not demonstrate that the Defendants acted negligently when they failed to include warnings with their hydrocarbon products.³⁴⁶

3. Scope of the Duty

To determine the scope of the manufacturer's duty in *Kivalina*, the court would likely follow precedent established in *MTBE* litigation.³⁴⁷ In *MTBE*, the court did not specify the exact party that manufacturers needed to warn.³⁴⁸ Instead, the court held that for purposes of the claim, the defendant's placement of the dangerous product in the marketplace was sufficient to impose liability on those manufacturers for their general failure to warn.³⁴⁹ Alternatively, the court may find that the Defendants owed a duty to the general public to warn of the danger of hydrocarbon products because,³⁵⁰ as discussed earlier, climate change science has put the Defendants on notice of the danger of their products, and the scope of the danger involves the public at-large.³⁵¹ Finally, the Plaintiffs in *Kivalina* may not even need to address the extent of the Defendants' duty to warn because the court may simply presume that the duty exists.³⁵²

Furthermore, several policy considerations favor a broad scope of liability for the Defendants in *Kivalina*. First, because the Defendants actively misled the public regarding the dangers of global warming, the Defendants' knowledge of the danger posed by their products was, and still is, far superior to the public's knowledge.³⁵³ Thus, the Defendants were in the best position to mitigate the injury to the Plaintiffs.³⁵⁴ Specifically, they were in a much better position to mitigate the injury than the Plaintiffs themselves.³⁵⁵ Second, the Defendants in this case have the ability to defray the costs of the Plaintiffs' injury through increased product prices and insurance coverage.³⁵⁶ As major corporations, the Defendants can absorb the Plaintiffs' relocation costs and

³⁴⁵ See *Ross Labs. v. Thies*, 725 P.2d 1076, 1079 (1986).

³⁴⁶ *Upjohn Co.*, 835 P.2d at 1199.

³⁴⁷ *In re Methyl Tertiary Butyl Ether (MTBE) Prod. Liab. Litig.*, 175 F. Supp. 2d 593 (S.D.N.Y. 2001).

³⁴⁸ See *id.* at 625.

³⁴⁹ *Id.*

³⁵⁰ See *Hall v. Du Pont de Nemours & Co.*, 345 F. Supp. 353, 360 (E.D.N.Y. 1972).

³⁵¹ See *History*, INTERGOVERNMENTAL PANEL ON CLIMATE CHANGE, http://www.ipcc.ch/organization/organization_history.shtml (last visited Jan. 28, 2011).

³⁵² See *Hall*, 345 F. Supp. at 361.

³⁵³ Complaint *supra* note 19.

³⁵⁴ See *Robles v. Shoreside Petroleum, Inc.*, 29 P.3d 838, 843 (Alaska 2001) (citing *Lamb v. Manitowoc Co.*, 570 N.W.2d 65, 68 (Iowa 1997)).

³⁵⁵ *Id.*

³⁵⁶ See *Shanks v. Upjohn Co.*, 835 P.2d 1189, 1196 (Alaska 1992).

recoup the expense by charging consumers higher prices for hydrocarbon products.³⁵⁷ Most importantly, by imposing liability for global warming injuries on the Defendants, the court will eventually ensure that the consumer price of hydrocarbon products incorporates the monetary costs of global warming.³⁵⁸ Once hydrocarbon products reflect their true cost, the increase in price will deter future use of fossil fuels and encourage use of alternative energy products.³⁵⁹

Lastly, in the case of *Kivalina*, neither of the two exceptions to the duty to warn apply because the danger was not obvious, and the Plaintiffs were not experts in global warming or fossil fuels.³⁶⁰ The danger of hydrocarbon products is certainly not obvious to the public given the recent polls that indicate that 37% of Americans do not believe that global warming is occurring, and many less understand the science that connects human-generated carbon dioxide to global warming effects such as melting sea ice.³⁶¹ Therefore, with only the causation element left to assess, the evidence in favor of the Plaintiffs' claim appears to satisfy all other elements necessary to establish the Defendants' liability for failure to warn.

4. Causation

The last element that the Plaintiffs must demonstrate for a successful failure to warn claim is causation.³⁶² To fulfill the causation element, Plaintiffs would need to prove that the Defendants' failure to warn the public that hydrocarbon products cause global warming-related injuries was both a cause-in-fact and a proximate cause of the Plaintiffs' injury.³⁶³

a. Cause-In-Fact

The Plaintiffs' first step to establishing cause-in-fact would be to classify the *Kivalina* circumstances to determine which cause-in-fact test to apply.³⁶⁴ In *Kivalina* there were multiple wrongdoers who all failed to warn users of the danger of their hydrocarbon products.³⁶⁵ The question becomes whether each Defendant's failure to warn was necessary to cause the Plaintiffs' injury, or whether each Defendant's failure to warn was by itself sufficient to cause the

³⁵⁷ See *id.*

³⁵⁸ See *Upjohn Co.*, 835 P.2d at 1196.

³⁵⁹ See *id.*

³⁶⁰ Korpela, *supra* note 210, at 51.

³⁶¹ LEISEROWITZ, *supra* note 21, at 3.

³⁶² Grossman, *supra* note 22, at 24.

³⁶³ See Grossman, *supra* note 22, at 24.

³⁶⁴ See Robertson, *supra* note 234, at 1008-09, 1011.

³⁶⁵ See *Native Vill. of Kivalina v. ExxonMobil Corp.*, 663 F. Supp. 2d 863 (N.D. Cal. 2009).

harm.³⁶⁶ Given the complex facts of global warming, this is a difficult question to answer. Therefore, the most suitable theory for establishing cause-in-fact may be neither multiple sufficient causation, nor multiple necessary causation. In this case, the most effective approach for establishing cause-in-fact would likely be an alternative theory of causation, through either enterprise liability or concert of action.³⁶⁷

b. *Enterprise Liability*

The Plaintiffs in *Kivalina* should be able to establish the first requirement for enterprise liability because the Defendants all belong to the fossil fuel industry, which has collectively adhered to the industry-wide standard of not providing warnings.³⁶⁸ Additionally, enterprise liability is an appropriate theory for *Kivalina* because it is impossible to trace the melting sea ice back to a specific carbon dioxide emission, meaning it would be impossible to determine which specific Defendant is responsible for the Plaintiffs' injury.³⁶⁹ Furthermore, the Defendants' collective failure to warn was substantially concurrent in time because the Defendants' duty to warn arose at the same time.³⁷⁰ Once science established a causal connection between carbon dioxide and global warming, all hydrocarbon product manufacturers knew or should have known of their duty to warn and, therefore, the Defendant's concurrently became strictly liable for their failure to warn.³⁷¹ Further, the Defendants' failure to warn was substantially similar in nature because the danger in all instances was the same – the potential harm from the effects of global warming.³⁷² Overall, the *Kivalina* facts indicate that, as long as the Plaintiffs name substantially the entire fossil fuel industry as defendants, then the Plaintiffs would be able to establish cause-in-fact under the enterprise liability theory.³⁷³ Furthermore, the policy behind enterprise liability was to specifically address cases such as *Kivalina*, where there are “multiple emitters [and] the only feasible method of ascertaining risks, imposing safeguards and spreading costs is through joint liability or other methods of joint risk control.”³⁷⁴

After the Plaintiffs establish enterprise liability, the burden of proof would shift to the Defendants, who then would have the chance to individually exonerate themselves by demonstrating that they in particular were not responsible

³⁶⁶ See Robertson, *supra* note 234, at 1017, 1021.

³⁶⁷ See *Hall v. Du Pont de Nemours & Co.*, 345 F. Supp. 353, 374, 378 (E.D.N.Y. 1972); see Robertson, *supra* note 234, at 1011.

³⁶⁸ *Hall*, 345 F. Supp. at 373-74.

³⁶⁹ See *id.* at 378-79.

³⁷⁰ See *id.*

³⁷¹ See *id.*

³⁷² See *id.*

³⁷³ See *id.*

³⁷⁴ See *id.* at 377-78.

for the Plaintiffs' injuries.³⁷⁵ Given that an inherent characteristic of global warming is the inability to separate individual carbon dioxide emissions, it is extremely unlikely that a Defendant would, at this stage, be able to rebut the presumption.³⁷⁶

c. *Concert in Action*

The other theory by which the Plaintiffs could establish cause-in-fact is the doctrine of concert in action.³⁷⁷ The Defendants in *Kivalina* pursued a "common plan" to mislead the public regarding the existence of global warming.³⁷⁸ The Defendants cooperated as an industry to establish front groups for the purpose of contradicting sound global warming science, promoting misunderstanding regarding the reality of global warming.³⁷⁹ Furthermore, the Defendants collectively omitted to warn the public of the dangers of hydrocarbon products and their role in global warming.³⁸⁰ As in *Warren v. Parkhurst*, it is likely that the Plaintiffs could demonstrate that the concerted action of the Defendants was a cause-in-fact of the melting sea ice and the Plaintiffs' injury.³⁸¹ Therefore, the Defendants should be held jointly liable for their mutual failure to warn the Plaintiffs.³⁸²

d. *Proximate Causation*

The second prong of causation is proximate cause, and under a *Kivalina* failure to warn claim, it is likely that the court would presume or infer proximate cause in favor of the Plaintiffs.³⁸³ This presumption theory would relieve the Plaintiffs of the need to affirmatively prove proximate causation and would either shift the burden to the Defendants to rebut the presumption, or send the question to the jury for a determination that does not require the Plaintiffs to show affirmative proof of proximate causation.³⁸⁴

On the other hand, if the court does not apply a presumption or inference in favor of proximate causation, then under a *Kivalina* failure to warn claim the

³⁷⁵ See *id.* at 378.

³⁷⁶ See *id.* at 378-79.

³⁷⁷ See Robertson, *supra* note 234, at 1011.

³⁷⁸ See Robertson, *supra* note 234, at 1011-12.

³⁷⁹ Complaint *supra* note 19 at 47-62 ("There has been a long campaign by power, coal, and oil companies to mislead the public about the science of global warming.").

³⁸⁰ See Robertson, *supra* note 234, at 1011-12.

³⁸¹ See Robertson, *supra* note 234, at 1012 (2009) (citing *Warren v. Parkhurst*, 92 N.Y.S. 725 (Sup. Ct. 1904), *aff'd*, 93 N.Y.S. 1009 (App. Div. 1905), *aff'd*, 78 N.E. 579 (N.Y. 1906)) (holding mill owners jointly liable for the full pollution of the plaintiff's stream because, despite only nominal discharges by each defendant, the mill owners were "deliberately acting with the others," resulting in the injury).

³⁸² See *id.*

³⁸³ Jones, *supra* note 264, at 14.

³⁸⁴ Jones, *supra* note 264, at 14.

Plaintiffs would generally need to establish that a warning on hydrocarbon products would have averted the Plaintiffs' global warming injuries.³⁸⁵ While this may be difficult, it would not be impossible. 37% of Americans do not believe in global warming and 50% do not understand that global warming is caused by human activities, thus they also do not recognize the danger posed by hydrocarbon products.³⁸⁶ This lack of awareness illustrates that many Americans may *need* a warning on hydrocarbon products before they will accept the science behind global warming. Furthermore, the general public's inability to acknowledge global warming is likely a direct result of the Defendants' campaign to mislead the public regarding global warming.³⁸⁷ Finally, the Plaintiffs could use recent state efforts to curb carbon dioxide emissions as evidence of how the public at-large may react once the reality of global warming is understood.³⁸⁸ Although this is not definitive evidence that customers would heed a warning if provided, it does show that a segment of the population, which understands the consequences of global warming, has taken affirmative steps toward reducing carbon dioxide emissions.³⁸⁹ Thus, by extension, state action illustrates that the public would heed a warning that hydrocarbon products cause global warming injuries by reducing their own hydrocarbon product intake. In conclusion, the Plaintiffs could satisfy the proximate cause element if the court were to operate under a presumption theory. But even if no presumption or inference applies, then the Plaintiffs might still have enough evidence to affirmatively establish proximate cause.

Overall, the above analysis illustrates that, in the case of *Kivalina*, the Plaintiffs' lawsuit would have had a better chance of success under a products liability theory than the original public nuisance theory. Moreover, the *Kivalina* analysis shows that, as a theory of liability, failure to warn is generally well suited for addressing climate change injuries caused by Defendants like those in *Kivalina*. Additionally, the comparison between products liability and public nuisance law demonstrates that products liability is, on the whole, a much more viable theory for future climate change litigation.³⁹⁰

XII. CONCLUSION

Kivalina is only the beginning. With no government remedy on the horizon, and climate change casualties affecting more of the United States' population every day, climate change lawsuits will inevitably become common. This same

³⁸⁵ See Jones, *supra* note 264, at 14.

³⁸⁶ LEISEROWITZ, *supra* note 21, at 7.

³⁸⁷ See Complaint *supra* note 19 at 47-62.

³⁸⁸ See Wendy Koch, *States Take Lead in Efforts to Fight Climate Change*, USA TODAY (Jan. 24, 2011 12:15 PM), <http://content.usatoday.com/communities/greenhouse/post/2011/01/states-tackle-global-warming-cut-greenhouse-gas-emissions/1>.

³⁸⁹ See *id.*

³⁹⁰ See *State v. Lead Industries Assoc.*, 951 A.2d 428, 456 (R.I. 2008).

scenario has played out before, and in the cases of asbestos and tobacco, most early lawsuits were unsuccessful.³⁹¹ Yet, in each instance, growing public awareness of the harms eventually led to successful lawsuits.³⁹² Here, a products liability action against the fossil fuel industry could tip the balance toward a collective recognition of the reality of climate change and a successful climate change lawsuit. The clear evidence of conspiracy by the fossil fuel industry may finally break through the web of doubt that has held the nation immobile for decades, inciting the public to take crucial first steps to address climate change, and allowing victims like the residents of Kivalina to finally attain appropriate reparation for their injuries.

³⁹¹ SHEARER, *supra* note 2, at 41.

³⁹² SHEARER, *supra* note 2, at 41.