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GLOBAL WARMING, SEA LEVEL RISE AND TORT

*Denis Culley**

*“One generation passeth away, and another generation cometh:
but the earth abideth for ever.”ⁱ*

*“All the rivers run into the sea; yet the sea is not full; unto the
place from whence the rivers come, thither they return again.”ⁱ*

*“The thing that hath been, it is that which shall be; and that
which is done is that which shall be done: and there is no new
thing under the sun.”ⁱⁱ*

It is the aim of the law to attempt to provide remedies for wrongs and to attempt to punish those who have caused harm. What harms may be punished and what remedies exist for what wrong are what a life, indeed, many lifetimes in the law can be spent contemplating.

According to the August 25, 1924 account on the front page of the *New York Times* (“Bomb Blast Injures 13 in Station Crowd”) thirteen persons were injured when one of three men (assumed to be Italians on their way to a celebration on Long Island) carrying packages of fireworks sought to board a Long Island Railroad train and being helped along by a push from a guard on the platform, dropped a package that fell under the wheels of the train and exploded. The tort action that resulted, *Palsgraf v. Long Island Railroad Co.*, 162 N.E 99 (N.Y. 1928), is the most famous case in all of torts.

Generations of students and lawyers have sought to comprehend the nature of causation by reading Judge Cardozo’s majority opinion. The debate between Cardozo’s limited version of causation and Judge Andrew’s much broader minority version of causation is not, and will not ever be, over. The question of how and when the law should act to redress a wrong,

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- i. Ecclesiastes 1:1.
- i. Ecclesiastes 1:7.
- i. Ecclesiastes 1:9.

to attempt to heal with an order or with money is replayed in ever changing venues in every generation.

As a new generation oversees perhaps the final chapters in our relations with the earth, nature and each other, the questions of harm and duty and causation are cast in new terms, but a close observer will note nothing new under the sun.

1. Class Action and Climate Change in Tuvalu

Half way between Hawaii and Australia in the balmy waters of the South Pacific, in an area referred to as Oceania, are nine small coral atolls that taken together are about one tenth the size of Washington D.C.¹ The sovereign nation of Tuvalu² has, according to various accounts³ between ten and twelve thousand inhabitants. The nine atolls that make up Tuvalu rise only a few meters above the surface of the sea.⁴ There are no streams or rivers on Tuvalu and all fresh water must be gathered in catchment basins or created at significant expense using a desalination plant recently constructed by the Japanese government.⁵

Tuvalu is densely populated, with all nine atolls presently occupied.⁶ Fishing and subsistence farming are the main economic activities on the islands.⁷ Unlike neighboring Nauru,⁸ which is “blessed” with mineral deposits, Tuvalu has no known mineral reserves and few exports.⁹

1. CIA, WORLD FACTBOOK 2002, TUVALU available at <http://www.odci.gov/cia/publications/factbook/geos/tv.html> (last visited Jan. 1, 2002).

2. Independence from Britain granted in 1978. *Id.*

3. *Id.* at 2.

4. According to the CIA Factbook, the highest point is an “unnamed location” that is five meters above sea level. *Id.*

5. *Id.*

6. *Id.*

7. *Id.*

8. The world’s smallest Republic, Nauru is also threatened by sea level rise. The environmental problems of Nauru, however are legendary and beyond the scope of this paper. Suffice to say that due to incredibly destructive phosphate mining, Nauru, an island about four times the size of Central Park looks like a pie with the middle scooped out. The entire population lives on a tiny fringe near the rapidly rising sea. LONELY PLANET, NAURU, available at <http://www.lonelyplanet.com/destinations/pacific/nauru/environment.htm> (last visited Nov. 4, 2002).

9. About 1,000 Tuvaluans work at mineral extraction on Nauru (this may account for the one thousand person discrepancy in many population estimates for Tuvalu), but are being repatriated as the very last of the phosphate on Nauru is extracted. CIA, *supra* note 1.

The government of Tuvalu subsists on off shore worker remittances, the sale of stamps and coins and a trust fund set up by Australia, New Zealand and the United Kingdom.¹⁰ Other sources of income are payments from a fishing treaty with the United States, revenue from use of the Tuvalu area code for “900” phone lines and the sale of the “tv” internet domain name.¹¹

This tiny impoverished nation is about to test the very outer limits of law and remedy in an effort to gain compensation for what is being lost as the Pacific Ocean inexorably rises and claims the land that is now Tuvalu.¹²

With the failure of United States to ratify the Kyoto Protocol,¹³ Island States efforts to protect themselves from what they see as global warming induced sea level rise have reached a new level of urgency.

Reacting to this sense of urgency and imminent disaster, a group of two dozen environmental lawyers met in Washington D.C. in August of 2001.¹⁴ The attorneys represented a broad spectrum of the organizations arrayed against marine pollution, species loss and global warming.¹⁵ Basing their strategy on the successful legal actions against big tobacco and the suits brought on behalf of Holocaust survivors, the group began discussions concerning pursuit of a class action on behalf of Island Nations that stand to lose their territory to the sea due to global warming induced sea level rise.¹⁶ With a United Nations’ estimate of the costs associated with global

10. The fund is also supported by Japan and South Korea. *Id.*

11. *Id.*

12. The science and controversy of global warming and sea level rise are addressed below at length.

13. Kyoto Protocol to the Framework Convention on Climate Change, 3d Sess., Agenda Item 5, UN Doc. FCCC/CP/1997/CRP.6 (1997). The particulars of the Protocol (which fill volumes), basically lay out binding legal limits to industrial emissions of greenhouse gases. These limits are usually based on the 1990 emissions nation by nation. Nations are classed into different reduction regimes (advanced industrial nations for example, are in the Annex I regime). Kyoto was the result of intense negotiations and it included many innovative ideas such as emissions trading and credit for “carbon sinks” (ie. young fast growing forests). Kyoto also included strict reporting requirements and sanctions for non-compliance. Alone among industrialized nations, the United States did not ratify the Kyoto Protocol. For an excellent overview of this Convention written by three authors from the US. Department of Environmental Protection and one author from the Natural Resources Division of the U.S. Justice Department, See Clare Breidenich, Daniel Magraw, Anne Rowley & James W. Rubin, *The Kyoto Protocol To The United Nations Framework Convention On Climate Change*, 92 AM. J. INT’L L. 315.

14. Katherine Q. Seelye, *Global Warming May Bring New Variety of Class Action*, N.Y. TIMES, Sept. 5, 2001.

15. For example, lawyers for Greenpeace, the World Wildlife Fund and the Natural Resources Council attended. *Id.*

16. *Id.*

warming put at 300 billion dollars each year, the attorneys involved see the potential for large damage awards and, perhaps even more important, significant publicity for the plight of the Island Nations threatened and the earth at large.¹⁷

The refusal of the Bush Administration to adopt the Kyoto Protocol is a major motivating factor in these potential suits. According to Brian Dunkiel of Burlington, Vermont, a former counsel for Friends of the Earth: "Those who are directly injured in a very concrete way by the impacts of climate change are concluding that they won't get the remedy they need through the political process, whether it's the international or domestic political process."¹⁸

A belief in using the legal process to prod the political process is clear from the statements of the attorneys participating in this effort:

Whenever you have a diverse population being injured and not getting the remedy they need through the political process, or when you need to protect a minority, that's why the courts were set up. Until the courts intervened in the civil rights movement, there was stalemate.¹⁹

Suits could be brought on behalf of the Maldives, Jamaica or other island states.²⁰ Tuvalu was mentioned by the group as perhaps a suitable first plaintiff.²¹ The prediction by some scientists that Tuvalu will disappear completely beneath the sea within fifty years could make Tuvalu's case especially compelling.²²

Potential defendants in the United States, could include the Environmental Protection Agency, the Energy Department (for their failure to properly oversee industries that generate greenhouse gases) or major industries²³ such as power companies.²⁴ No decision was reached as to what sort of tribunal or court in which the attorneys would seek to bring the action on behalf of the island states.²⁵

17. *Id.*

18. *Id.*

19. Brian Dunkiel speaking. *Id.*

20. *Id.*

21. Seelye, *supra* note 14.

22. *Id.*

23. Some of the pre pretrial jockeying may already be underway. See *Western Fuels Association v. Turning Point, Inc.* No. 00-Cv-074 (p. Wyo. 2001) *infra* part 6.

24. Seelye, *supra* note 14.

25. *Id.*

The ideas outlined by the attorneys considering these class action suits have been greeted with reactions ranging from polite skepticism²⁶ to outright scorn.²⁷ Pacific Legal Foundation attorney Ann Hayes put it this way: "They will have a real hard time proving causation . . . you can't even tell what the weather is going to be two days from now; do they honestly think they can attribute some global weather event to some discrete action by a government agency?"²⁸

But there is a realization in the environmental legal community that the most important effects of these suits may not be in actual victory in a court or an award to a plaintiff but in increased awareness of the plight of low lying island states and the threats of global warming generally.²⁹

2. Global Warming

On May 5, 2001, the Associated Press announced that scientists studying the Alaskan Arctic have observed a very noticeable increase in shrubbery on the tundra.³⁰ By examining aerial photos taken over the last fifty years the scientists were able to discern a fifteen percent increase in shrubbery in over half of the range studied.³¹ The scientists said that the photos also showed movement in the northward limit of the treeline.³²

In 1998, for the first time in human history, rainforests in Brazil and Mexico were subject to large-scale forest fires.³³ In Texas, residents sweltered through a record twenty-nine days in a row of temperatures over one hundred degrees Fahrenheit.³⁴ A worldwide outbreak of coral bleaching shocked scientists and coral reproduction rates declined to forty percent of normal in the warmer waters.³⁵ The following year brought a

26. "[T]here is always the possibility that new legal theories can be brought to bear." Dan Esty, Professor of Environmental Law at Yale Law School. *Id.*

27. "Ann Hayes, an environmental lawyer for the Pacific Legal Foundation, called the approach 'nuts.'" *Id.*

28. *Id.*

29. *Id.*

30. The Associated Press, *Researchers Find Shrubby Increasing in Arctic*, available at <http://usatoday.com/news/healthscience/science/enviro/2001-05-30-arctic-warming.htm>.

31. *Id.*

32. "'The treeline is definitely moving. You can see the increase,' said co-author Ken Tape, a research technician at the University of Alaska-Fairbanks Geophysical Institute . . . 'The treeline is moving north.'" *Id.*

33. Ross Gelbspan, *The Global Warming Debate is Over. It's Real, Inexorable, and Headed Our Way*, available at http://www.emagazine.com/september-october_2000/0900feat1.html (last visited Nov. 5, 2002).

34. *Id.*

35. Coral bleaching is a blanching and subsequent die off of coral. David Helvarg,

heat wave to the Midwestern United States that killed 271, Hurricane Floyd causing more than 1 billion dollars in damage to North Carolina and 304 consecutive days with no snow in Boston.³⁶

Citizens of the State of Maine are enduring the worst drought in living memory.³⁷ Southern ladybugs, turkey vultures and Baltimore Orioles have now become common in Central Maine and cherry trees in the City of Portland began flowering this year in early February on south facing sites.³⁸

The above anecdotal evidence seems to fit well with reports from the world of science concerning a new phenomenon in human history. Instead of merely complaining about the weather, humankind, it seems, has finally, irrevocably, done something about it—namely, set in process a condition called “global warming.”

In 1827, Jean-Baptiste Fourier, a French scientist and mathematician, first theorized that certain gases in the atmosphere worked to trap heat in much the same way that glass does in a greenhouse.³⁹ Approximately forty years later, in England, John Tyndall theorized that the ice ages might have been caused by a decline in greenhouse gases such as carbon dioxide.⁴⁰ In 1896, in Sweden, Svante Arrhenius first attempted to calculate the effects of increasing greenhouse gases on global temperatures. His estimate was that doubling the amount of carbon dioxide in the atmosphere would lead to a five to six degree Celsius increase in global temperature.⁴¹

Weather data show an increase in the global temperature of between 0.3 and 0.6 degrees Celsius in the last one hundred years.⁴² While there are some questions about the pace and consequences of global warming, and even a few genuine, unbiased scientific skeptics,⁴³ the great weight of scientific evidence is in line with the oft quoted and understated conclusion

Australia: The Reefs are Going Down Under, available at http://www.emagazine.com/september-october_2000/0900feat1.htm (last visited Nov. 14, 2002).

36. Glebspan, *supra* note 33.

37. Blaine Harnden, *Drought Leaves Maine Stoic but Struggling*, N.Y. TIMES, Mar. 15, 2002 at 1. The article notes that hydrologists are finding water tables lower than they have ever seen them and that last year was the driest year in Maine of the 108 years for which there are records. *Id.*

38. Author's personal experience and observations.

39. John Houghton, GLOBAL WARMING 12 (2d ed. Cambridge Univ. Press 1997) (1994).

40. *Id.*

41. This estimate remains fairly close to the best scientific findings at present. *Id.*

42. WILLIAM H. RODGERS III, ENVIRONMENTAL LAW 12 (2d ed. West Publishing Co. 1994) (1977)

43. The scientific controversy over global warming and some of its economic and political roots are addressed *infra*.

of the prestigious Intergovernmental Panel of Climate Change (IPCC)⁴⁴ – “[e]missions of greenhouse gases and aerosols due to human activities continue to alter the atmosphere in ways that are expected to affect the climate.”⁴⁵

According to the Environmental Protection Agency (EPA) “[g]lobal average surface temperature (the average of near surface air temperature over land, and sea surface temperature) has increased since 1861. Over the 20th century the increase has been 0.6, plus or minus 0.2 degrees Celsius.”⁴⁶ The best scientific evidence relates this change to the corresponding increases in greenhouse gases due to the burning of fossil fuels, increased agriculture, deforestation and other activities associated with the growth of industrialization.⁴⁷ The great majority of the recorded increase in surface temperatures occurred in the last quarter of the twentieth century with the ten warmest years there is data for occurring in ten of the last fifteen years.⁴⁸

The American Geophysical Union has published a thorough and detailed report⁴⁹ drawing data from *in situ* atmospheric samples gathered by NOAA,⁵⁰ dendroclimatic records,⁵¹ studies of air bubbles captured in the polar ice sheets⁵² and studies of ice cores from Vostok, Antarctica.⁵³ Among their conclusions are that “[t]he observed increase of CO₂ in the atmosphere from about 280 ppm in the preindustrial era to about 364 ppm in 1997 has come from fossil fuel combustion and cement production.”⁵⁴ The report notes “[t]here is no known geologic precedent for large increases of atmospheric CO₂ without simultaneous changes in other

44. The IPCC was created in 1988 by the United Nations Environmental Programme (UNEP) in order to “assess the scientific, technical and economic information relevant for the understanding of the risk of human-induced climate change.” Its first report was issued in 1990 and its research continues. ABOUT IPCC *available at* <http://www.ipcc.ch/about/about.htm> (last visited Nov. 5, 2002).

45. DANIEL L. ALBRITTON, ET AL, A REPORT OF WORKING GROUP I OF THE INTERGOVERNMENTAL PANEL ON CLIMATE CHANGE, SUMMARY FOR POLICYMAKERS 5 (2001).

46. *Id.* at 2.

47. United States Environmental Protection Agency, GLOBAL WARMING, *available at* <http://www.epa.gov/oar/globalwarming.nsf/content/climate.html> (last visited Nov. 12, 2002).

48. *Id.* at 2.

49. Tarama S. Ledley, et al., *Climate Change and Greenhouse Gases*, 80 EOS 453 (Sep. 28, 1999), *available at* <http://www.agu.org/eos/elec/99148e.html>.

50. *Id.* at 9

51. *Id.* at 10. Dendrochronology is the reconstruction of historical weather data from the study of tree rings. Author’s note.

52. *Id.* at 9.

53. *Id.* at 11.

54. *Id.* at 2.

components of the carbon cycle and climate system.”⁵⁵ Although the report issues the usual disclaimers that no predictions in this field can be perfectly reliable due to the many variables,⁵⁶ its conclusions are unequivocal:

In summary, the atmospheric concentrations of the principal anthropogenic greenhouse gases (CO₂, CH₄, N₂O, CFC-11, and CFC-12) have increased significantly during the industrial period. Elevated concentrations are predicted to persist in the atmosphere for times ranging to thousands of years. The increased atmospheric levels of these gases, especially CO₂, increase the IR energy absorbed by the atmosphere, thereby producing a warming influence at the Earth’s surface . . . Changes in the climate system that are confidently predicted in response to increases in greenhouse gases include increases in mean surface air temperature, increases in global mean rates of precipitation and evaporation, rising sea level, and changes in the biosphere.⁵⁷

It is the projected changes in sea level and their effects on low lying Island States like Tuvalu that will serve as the “damage” in whatever sort of legal action that might be brought by those seeking legal remedy. The interaction between global warming and ocean levels will be addressed in the next section of the paper.

3. Global Warming and the Sea

Geological and marine fossil evidence shows that in the past 35,000 years there have been significant fluctuations in the sea levels on earth.⁵⁸ These changes are “primarily caused by a melting of land-based glacier ice and the thermal expansion of ocean water.”⁵⁹ In their year 2001 Report on Climate Change, the IPCC explained the role that thermal expansion plays in sea level rise:

55. *Id.* at 5.

56. For example, the report states that the still unknown extent of increase in cloud formation that might be associated with global warming might influence climate (“Clouds reduce the net absorbed short wave radiation in the climate system because of their high reflectivity (a cooling influence); however, they also radiate energy back down to the surface and lower atmosphere (a warming influence).”). *Id.* at 7.

57. *Id.* at 8.

58. LYNNE T. EDGERTON, *THE RISING TIDE*, 17 (Island Press 1991).

59. *Id.* at 18.

As the ocean warms, the density decreases and thus even at constant mass the volume of the ocean increases. This thermal expansion (or steric sea level rise) occurs at all ocean temperatures and is one of the major contributors to sea level changes during the 20th and 21st centuries. Water at higher temperature or under greater pressure (ie. greater depth) expands more for a given heat input, so the global average expansion is affected by the distribution of heat within the ocean.⁶⁰

This rise in sea level, which until fairly recently has been measured by a sparse network of coastal and mid-ocean tidal gauges is now being monitored via satellite using radar altimetry.⁶¹ The global sea level averages ascertained from these measurements show an annual rise of approximately 2.6 mm per year.⁶² Notable, and indeed alarming, though this current trend is, the IPCC notes:

The large heat capacity of the ocean means that there will be considerable delay before the full effects of surface warming are felt throughout the depth of the ocean. As a result, the ocean will not be in equilibrium and global average sea level will continue to rise for centuries after atmospheric greenhouse gas concentrations have stabilized.⁶³

The concomitant effects of the melting of glaciers and the ice caps will, according to the IPCC, greatly increase the sea level rise (.5 meter) that will be due to global warming:

The water contained in glaciers and ice caps (excluding the ice sheets of Antarctica and Greenland) is equivalent to about 0.5 m of global sea level. Glaciers and ice caps are rather sensitive to climate change; rapid changes in their mass are possible, and are capable of producing an important contribution to the rate of sea level rise.⁶⁴

60. *Intergovernmental Panel On Climate Change, Climate Change 2001: The Scientific Basis* 11.2.1, available at <http://www.ipcc.ch/pub/tar/wgl/411.htm>.

61. *Id.* at 11.3.2.3.

62. *Id.*

63. *Id.* at 11.2.1.

64. *Id.* at 11.2.2.

Other researchers have predicted glacial melt as having a potentially far larger effect on sea level rise.⁶⁵ Commenting on the findings of the IPCC at the American Association for the Advancement of Science's 2002 annual meeting in Boston, Mark Meier and Mark Dyurgerov, researchers from the University of Colorado at Boulder, noted that by not factoring in the possible rapid melting of the world's largest temperate glaciers (in Canada and Alaska) and increased precipitation over these glaciers, the IPCC may have underestimated by half the scale of sea level rise by the year 2100.⁶⁶ Meier also stated that IPCC underestimated the likely future melting in Greenland and Antarctica where the current temperatures are low enough to prevent major melting.⁶⁷

Along with data and theory pointing to ongoing and continued gradual sea level rise due to global warming, there are researchers who point out that a very rapid rise due to disintegration of the West Antarctic Ice Sheet (WAIS) is possible:

A major source of uncertainty about sea level rise is the future behavior of the Greenland and Antarctic ice sheets. For example, disintegration of the West Antarctic Ice Sheet (WAIS) – which lies grounded on land below sea level – could eventually raise sea level by 4 to 6 meters.⁶⁸

The effects of such a sudden rise, up to six times the size of the sea level rise predicted due to thermal mass expansion, on islands that are only a few meters above sea level is clear. A mere 50cm rise in sea levels would inundate fifty per cent of America's coastal wetlands.⁶⁹ The Union of Concerned Scientists report noted above gives some sense of how huge an effect relatively small sea level rises can have – “a rise in sea level of 30 to 90 cm would increase the size of the 100-year floodplain in the United States by 10,000 to 20,000 km.”⁷⁰

Faced with rising seas that might swell to a height of between half a meter and six meters and well beyond, it is easy to understand the concerns of low lying Island Nations such as the coral atolls in the South Pacific.

65. Damian Carrington, Predicted Global Sea Level Rise Swells (Feb. 19, 2002), available at <http://www.newscitist.com/news/news.jsp?id=ns9999195>.

66. *Id.*

67. *Id.*

68. *Union of Concerned Scientists, Early Warning Signs of Global Warming: Sea Level Rise and Coastal Flooding*, available at http://www.ucusa.org/warming/gw_seas.html (last visited Oct. 23, 2002).

69. *Id.*

70. Citing a Federal Emergency Management Report from 1991. *Id.*

Many of these islands have no land more than a few meters over sea level⁷¹ (and most of the habitable and arable land is well below that height), and as is the case on most land masses, the major population centers are near the coast.

The present, ongoing and future effects of the global warming induced rise in sea levels and its specific effect on one Island Nation, Tuvalu, will be considered below. First, however, in order to understand some of the legitimate scientific disagreement concerning global warming and sea level rise, and especially to understand the legal and political maneuvering that this crisis has set off, it is important to review the claims of those who deny the realities of global warming or the ongoing effects on Island Nations or, in some cases, both.

4. Global Warming Skeptics

That the issue of global warming and the science of global warming have become politicized is really not surprising. Billions of dollars of corporate profits, and the fate of many of earth's life forms, including humans, are at stake.

The American Petroleum Institute (API)⁷² has been one of the industrial organizations at the forefront of forces allied to question global warming science and to resist measures to take action to slow or reverse global warming. A recent global climate statement by API titled "What is global climate change?" casts the question of global warming and possible responses like the Kyoto Accord⁷³ in frankly economic terms:

Amid widespread public confusion over the likely causes and severity of climate change, there is an international debate over actions the nations of the world should take to limit greenhouse emissions. . . . At its core, the debate is about whether enough is known about climate change to warrant the lost jobs, higher consumer prices and a weakened U.S. economy that would make only slight progress toward solving climate change.⁷⁴

71. According to the CIA World Factbook the highest point on Tuvalu is 5 meters above sea level. *CIA - The World Factbook 2002*, available at <http://www.cia.gov/cia/publications/factbook.geos/tv.html> (last updated Jan. 1, 2002).

72. The American Petroleum Institute, with its headquarters in Washington D.C. and offices in 27 states represents its more than 400 members on issues affecting the oil and gas industry. *About API*, available at <http://api-ec.api.org/aboutapi/index.cfm?bitmask=001010000000000000> (last visited Oct. 22, 2002).

73. Kyoto Protocol, *supra* note 13.

74. American Petroleum Institute, *The Big Picture, What is Global Climate Change?*

While the API concedes that “scientists have observed a slight increase in temperature on the surface of the earth”⁷⁵ and that “[s]ome attribute this to an increased concentration of greenhouse gases in the atmosphere,”⁷⁶ readers are told that “[t]hese gases mainly come from nature through creation of water vapor, carbon dioxide and ozone, the most abundant contributors to the greenhouse effect.”⁷⁷

While the API focuses much of its energy on exposing the culpability of nature for the emission of greenhouse gases and the resulting (alleged) increases in global temperatures, the brunt of its criticism is directed at the Kyoto Protocol.⁷⁸ According to the API, the Kyoto Protocol would require reductions in greenhouse gas emissions to five percent below 1990 emissions which would “force a drop in energy use of approximately 20 percent by the year 2010”⁷⁹ and correspondingly would mean “30 percent below currently projected emissions for the U.S. in 2010.”⁸⁰ Despite all of the reduction in fuel use and greenhouse gas emissions, the measures called for in the Kyoto Protocol, according to “credible” research cited by API “would lower temperatures by just 1/20th of a degree Centigrade by the year 2050.”⁸¹ Summing up its opposition to the Kyoto Protocol, and any measure beyond “simple things, like insulating homes, installing energy efficient windows, furnaces or air conditioners, tuning up the car, or replacing old cars . . . ”⁸² the API states:

So, the debate continues, boiled down to two essential questions: Is there already evidence that human beings are changing the climate? And secondly, if the temperature does rise, will there be harmful effects in various countries over the coming decades? The answers are not easy. . . . Policy makers must ask themselves, then what do we know now about climate change. And what should be done in the short run, given what we know.⁸³

available at <http://www.api.org/globalclimate/bigpicture.htm> (last visited Oct. 22, 2002).

75. *Id.*

76. *Id.*

77. *Id.*

78. Kyoto Protocol, *supra* note 13.

79. American Petroleum Institute, *supra* note 74.

80. *Id.*

81. *Id.*

82. *Id.*

83. *Id.*

While the API obviously wants to restrain what it sees as extreme governmental action to remedy what it believes is not clearly a pressing problem, other commentators and interested parties go much further.

Jon Perdue, writing for *The New Australian* compares contemporary proponents of global warming theory to writers for Pravda in the old Soviet Union.⁸⁴ He goes on to characterize those predicting ecological damage due to global warming as “environmental doomsayers . . . scare mongering to free up federal research funds”⁸⁵ and members of the “sky is falling school of environmentalism.”⁸⁶ He specifically attacks the IPCC reports, saying; “environmental scientists are forgoing accepted scientific methodology and peer review in favor of computer soothsaying. Computer modeling has supplanted actual experimentation and hypothesis testing in the science of climate change.”⁸⁷ The resulting “scientific tarot reading” is compared to the efforts of the local weather man, who it is noted “uses computer models to the predict the weather also, and he never attempts predicting more than five days ahead.”⁸⁸

Jon Perdue closes out his critique of global warming science in a vein similar to many industrial critics. After stating that predictions of the IPCC and others are erroneous or hysterical he goes on to grant that there will be some global warming, but that it is not such a bad thing:

Since the temperature of the Holocene Maximum is close to what global warming models project for the Earth by 2100, how mankind faired during the era is instructive. The most striking fact is that it was during this period that the Agricultural Revolution began in the Middle East, laying the foundation for civilization Since CO₂ stimulates plant growth and lessens the need for water, we could also expect more bountiful harvests over the next couple of centuries. This is certainly not bad news to the developing nations of the world struggling to feed their populations. Far from being a self-induced disaster, global warming . . . could yield positive benefits. It is a predictable, quantifiable process.⁸⁹ But it has been turned into a secular

84. Jon Perdue, *Global Warming is Hot Air*, THE NEW AUSTRALIAN (Mar. 15–21 1999), available at <http://www.newaus.com.au/newsIIIgw.html>.

85. *Id.*

86. *Id.*

87. *Id.*

88. *Id.*

89. This certainly seems to contradict the above criticism of global warming prediction science.

religion by the same ilk of doomsayers that first grunted disdainfully upon seeing the invention of the wheel.⁹⁰

The positive effects of global warming also feature prominently in the work of Thomas Gale Moore.⁹¹ In his essay titled "The Effects of Global Warming Will be Beneficial" he states that a "rise in worldwide temperatures will go virtually unnoticed by inhabitants of the industrial countries."⁹² Those effects that are noticeable will be mostly positive as:

A warmer climate will lower transportation costs: less snow and ice will torment truckers and automobile drivers; fewer winter storms will disrupt air travel; a lower incidence of storms and less fog will make water transportation less risky. A warmer climate could, however, change the nature and location of tourism. Many ski resorts, for example, might face less reliably cold weather and shorter seasons. . . . On the other hand, new tourist opportunities might develop in Alaska, northern Canada, and other locales at higher latitudes or in upper elevations.⁹³

This embrace of global warming as a panacea for most human economic problems is summed up in a section heading titled simply "Warmer is Better" and it is noted therein that "It is much easier for a rich country such as the Untied States to adapt to any long-term shift in weather than it is for poor countries. . ." and so, for the U.S. at least climate change is all for the best.⁹⁴

Between and among the two camps—the large, mainstream global warming is underway and it is not good and the far smaller, but very outspoken contingent that maintains that global warming is 1) a hoax, 2) not serious, 3) overstated or 4) unavoidable, but generally benign or even

90. Perdue, *supra* note 84.

91. DAVID BENDER & BRUNO LEONE, GLOBAL WARMING, OPPOSING VIEWPOINTS 93 (Greenhaven Press, Inc. 1997).

92. *Id.* at 95.

93. *Id.*

94. *Id.* at 97.

a great benefit to the biosphere—there is a third camp⁹⁵ that believes in both global warming *and* global cooling.

William H. Calvin presents a theory based on changes in the flow and direction of the North Atlantic Current that accounts for previous dramatic changes in the earth's climate and predicts that global warming will lead to global cooling due to a failure of ocean flushing (the method by which saltier waters sink and create ocean currents) caused perhaps, by glacial melt.⁹⁶

Out in the Pacific Ocean where Island Nations perch a few meters above what they certainly perceive as a rising sea, the various schools of academic theory are giving way to realization that entire nations may vanish within this century.

5. Effects of Sea Level Rise on Island Nations

In March of 2001, high tides sent seawater washing through Tarawa, the capital of Kiribati, a small South Pacific Island Nation.⁹⁷ Earlier that month islanders on Papua New Guinea's Duke of York Island were forced to move to East New Britain because of rising sea levels.⁹⁸ According to the United Nations Environment Programme, low lying Island Nations in the Pacific face a loss of over ten-percent of their national wealth due to flooding in the next fifty years.⁹⁹ The same study predicts worldwide losses due to global warming at over 300 billion dollars over the same time period.¹⁰⁰

95. Opinions in this arena, as in others, multiply with time. For example, in what might be considered a manifesto for a "fourth camp" in the global warming debate, Jay Michaelson, a graduate of Yale Law School and Columbia University who now works for the firm of Joseph Levy & Company in Tel Aviv published a lengthy law review article calling for a global "Manhattan Project" (named after the huge government sponsored secret project that developed the atom bomb during world war II) to "Geoengineer" the climate. Among the proposals he puts forth are creating "miniature, artificial 'Mount Pinatubos' by allowing airplanes to release dust particles into the upper atmosphere" and "artificially stimulating phytoplankton growth with iron "fertilizer" in parts of the Earth's oceans." See Jay Michaelson, *Geoengineering: A Climate Change Manhattan Project*, 17 STAN. ENVTL. L.J. 73, 105–106 (1998).

96. William H. Calvin, *The Great Climate Flip-Flop*, ATLANTIC MONTHLY (Jan. 1998), available at <http://www.theatlantic.com/issues/98jan/climate.htm>.

97. Earth Crash Earth Spirit, *Flooding Due to Rising Sea Levels Caused by Global Warming Already Severely Impacting South Pacific Nations of Kiribati, Marshall Islands, Cook Island, Tuvalu, Low-Lying Papua New Guinea Islands*, available at <http://eces.org/articles/static/98221680021892.shtml>.

98. *Id.*

99. *Id.*

100. *Id.*

On tiny Tuvalu, whose entire land area is only 26 square kilometers, the ocean is a constant threat to the very survival of the landmass.¹⁰¹ Sea level rise combined with increased storm surges have led to a battle of attrition with the sea, described by Stephanie Kriner:

The Tuvalu motu of Tepuka Savilivili has lost its coconut trees and sandbanks. Burial grounds near the coasts of many Pacific islands are crumbling into the ocean as surf sweeps over battered headstones. Storm surges also seem to have grown more common in recent years, eroding protective barriers, destroying bridges and roads and flooding homes and plantations. As the sea edges further inland, salty water has seeped into the ground on some of Tuvalu's islands, contaminating soil where Tuvaluans plant crops such as taro, pulaka and yams. Instead, farmers are forced to grow their crops in tin containers filled with compost. Others have moved further inland or even left the island altogether.¹⁰²

Faced with what the Tuvaluan government sees as a losing battle with the sea, the relocation of the entire populace is now actively contemplated according to the previous Tuvaluan Prime Minister, Ionatana Ionatana.¹⁰³

The present Prime Minister of Tuvalu, Koloa Talake, has declared the population potential environmental refugees.¹⁰⁴ "Flooding is already coming right into the middle of the islands, destroying food crops and trees . . . A number of people from Tuvalu have already emigrated to avoid being drowned by rising sea levels and the New Zealand government has given us a quota of immigrants it can take."¹⁰⁵ After being refused refuge by Australia, Tuvalu is currently trying to work out an agreement to evacuate its entire population of 11,000 people to New Zealand.¹⁰⁶

Once again, as with all scientific, political and legal issues surrounding global warming and sea level rise, there is controversy and a countervailing view. Writing for the Cato Institute, Patrick J. Michaels, author of *The Satanic Gases*, maintained that "the sea level around Tuvalu has been

101. Stephanie Kriner, *Disaster Relief News Stories—Pacific Nation Fears Global Warming* (Mar. 6, 2002), available at <http://www.disasterrelief.org/Disasters/000228Tuvalu/>.

102. *Id.*

103. *Id.*

104. Jack Taylor, *South Pacific Islands Threaten Legal Action Over Rising Waters: Global Warming Blamed*, NATIONAL POST (Mar. 4, 2002), available at 2002 WL 15262721.

105. *Id.*

106. KRINER, *supra* note 101.

falling precipitously for the last half-century.”¹⁰⁷ He calls the “Tuvalu story” an “icon of environmental and political deceit” and sums up the real source of Tuvalu’s problems so – “Tuvalu sucks.”¹⁰⁸ He points out that there are no rivers or other good sources of fresh water on Tuvalu and accuses the “environmentally sensitive natives” of cutting most of the island vegetation for fuel and digging up the beaches for building materials.¹⁰⁹ He indicts both Tuvalu and its possible place of refuge, New Zealand so:

In short, Tuvalu is a Tuvalu-made ecological disaster that is now an economic disaster. The natives want out because they wrecked the place. And why does New Zealand want them in? Perhaps because the socialist-green coalition government of Prime Minister Helen Clark sees 10,991 votes, largely without skills or jobs, bought and paid for with plane tickets and nurtured with welfare.¹¹⁰

6. Is There a Legal Response to Global Warming and Sea Level Rise?

Baron Wormser, the past Poet Laureate of the State of Maine once said that “Every age has its mania.”¹¹¹ Legal action could certainly be seen as the mania of the present age. No problem seems beyond the reach of creative tort.¹¹² In a time where legal action is seen as appropriate to insertion in all conflicts and the approach to right all wrongs, every tragedy contains within it crime or a lawsuit.¹¹³

Perhaps the opening salvo in the upcoming global warming legal wars was fought in an unlikely jurisdiction, far from the sea. In a commercial defamation lawsuit (labeled a SLAPP¹¹⁴ by the non-profit environmental

107. Patrick J. Michaels, *Don't Boo-Hoo for Tuvalu* (Nov. 10, 2001), available at <http://www.cato.org/dailys/11-10-01.html>.

108. *Id.*

109. *Id.*

110. *Id.*

111. Personal conversation with the author.

112. For example, *Mayo v. Satan and His Staff*, 54 F.R.D. 282 (Dist. Ct. W.D. Penn. 1971). Plaintiff alleged Satan has placed deliberate obstacles in his path and caused plaintiff's downfall. *Id.* at 283. Dismissed, in part because “plaintiff has failed to include with his complaint the required form of instructions for the United States Marshal for directions as to service of process.” *Id.*

113. “If your only tool is a hammer, everything looks like a nail.” Attributed to Mark Twain.

114. Acronym for “Strategic Lawsuit Against Public Participation.”

action groups named)¹¹⁵ brought in the United States District Court for the District of Wyoming, the Western Fuels Association brought a claim under section 43 of the Lanham Act.¹¹⁶ The complaint alleged “false and misleading factual representations made by the Defendants through a commercial Internet Web site maintained by Defendant . . . and from an educational advertisement . . . published in the *New York Times* on December 31, 1999.”¹¹⁷ The Western Fuels Association, which operates the Powder River coal fields in the Powder River Basin of Wyoming, accused the defendant environmental groups of making “false and misleading statements” which cast its product (coal fired electricity) “in an unwholesome and unfavorable light, thereby promoting a competing product (“renewable” energy sources for electric generation).”¹¹⁸ The Western Fuels Association sought both damages and an injunction “precluding Defendants from continuing to publish false and misleading statements on the Internet and other channels of interstate commercial advertising regarding the impact of burning fossil fuels.”¹¹⁹

While the suit was dismissed by the District Court, it should be noted that the victory was predominantly procedural. A motion to dismiss for improper venue and lack of personal jurisdiction was granted by the court after finding that the Western Fuels Association argument that the Defendant’s ad could be viewed on the Turning Point website by Wyoming residents failed the “contacts” test laid out in *Cybersell, Inc. v. Cybersell, Inc.*, 130 F.3d 414 (9th Cir. 1997).¹²⁰ The legal struggles over who is at fault for the damage that global warming will wreak in the upcoming decades and most importantly, who, if anyone, will pay the price of that damage is now in its earliest stage of genesis.

Since the meeting in August 2001, of a working group of American environmental attorneys associated with various groups opposed to environmental degradation,¹²¹ the Maldives, Kiribati and Tuvalu have begun serious planning of legal action against major polluting nations and

115. *Cohen, Milstein, Hausfeld & Toll, Case Watch, Federal Judge Dismisses Coal Industry Suit Attempting to Prevent Debate Over Global Warming*, available at <http://www.cmht.com/casewatch/csesc.wglobalslapp.htm>.

116. 15 U.S.C. §1125 (1991).

117. *Western Fuels. v. Turning Point Inc.*, Case No. 00-CV-074-D (D. Wyo. 2001), available at <http://www.westernfuels.org/news/lanhem.htm>.

118. *Id.* at ¶ 15.

119. *Id.* at ¶ 72.

120. See generally *Western Fuels Association, “‘Judge Dismisses Western Fuels’ ‘Turning Point Project’ Lawsuit for Improper Venue,”* available at <http://www.westernfuels.org/news/lanhem2.htm>.

121. Seelye, *supra* note 14.

large polluting corporations.¹²² Tuvalu has engaged two legal firms, one each in the United States and Australia.¹²³ The speculation at this point is that an action will be brought in the International Court of Justice.¹²⁴

What causes of action might exist and where these causes might possibly find a forum for adjudication is the subject of the rest of this paper.

7. What Law? What Cause of Action? What Court?

When considering an action under international law it is instructive to consider the sources of that law. Basically there are four traditional sources of international law, treaties, custom, general principles of law and the decisions of courts and tribunals (including arbitrations).¹²⁵ One other, perhaps promising source, the *Alien Tort Claims Act*¹²⁶ will also be considered. To some degree these sources overlap and reinforce each other.¹²⁷ They can also serve to undermine each other.¹²⁸

I will consider each one of these sources of law as a possible support for a cause of action by Tuvalu. I will also seek to consider what court, if any, might take jurisdiction under the various theories.

A. *The Law of the Sea*

As there is no specific environmental treaty between the United States, Australia or the other industrial powers and Tuvalu, the Law of the Sea Treaty will be examined as the closest possible source of a treaty

122. Taylor, *supra* note 104.

123. *Id.* The Australian firm is Slater and Gordon based in Melbourne. The American firm is as yet unnamed. *Id.*

124. *Id.*

125. GERHARD VON GLAHN, *LAW AMONG NATIONS* 12–24 (Bruce Nichols ed., Macmillan Publishing Co., 1992) (1965).

126. 28 U.S.C. § 1350 (1988).

127. For example, the ruling of courts or international arbitrators are often guided by the Law of Nations rather than by some municipal code or a previous ruling of the same court.

128. In the *Island of Palmas Arbitration*, the 1898 peace treaty ending the Spanish-American War ceded Miangas (also known as Palmas) to the United States. When the American Governor from Moros first visited the island in 1906 he found a Dutch flag and the Dutch government maintained that it had sovereignty over the island. After lengthy diplomatic maneuvers the issue was submitted to a single arbiter who ruled in favor of Holland. The arbiter ruled that the continuous administration of the Dutch gave them superior and sovereign rights to the island notwithstanding the provisions of the treaty with its previous owner, Spain. VON GLAHN, *supra* note 125, at 371.

based cause of action and possible jurisdiction in a potential dispute over liability for damages resulting from sea level rise.

The United Nations Convention on the Law of the Sea (UNCLOS),¹²⁹ is predicated on a number of principles contained in earlier compilations of rules related to navigation and use of the high seas.¹³⁰ Some of these previous collections were purely private agreements that gained widespread authority through common usage and thus attained the status of custom.¹³¹ The earliest of these agreements was the *Lex Rhodia*¹³² codified in the seventh century and the *Consolato del Mare*,¹³³ which governed in the Mediterranean.

The oldest collection of rules of the sea in the Atlantic Ocean was the *Rolles d'Oleron* written in Old French in the twelfth century.¹³⁴ The British *Black Book of Admiralty*¹³⁵ and the *Sea Code of Wisby*, which governed maritime matters for northern Europe, were subsumed and modified by later conventions such as the *London Convention of 1841* and the *1856 Declaration of Paris Concerning War at Sea*.¹³⁶

These agreements set out basic rights to navigate the high seas, resolved some fishery disputes, and provided some source of authority for the resolution of other disputes.¹³⁷ Another feature that these agreements shared, to a greater or lesser degree, was the notion that the high seas were common property that could not be owned and were open to all states.¹³⁸

This notion of common property, or *res communis*, has been a feature of virtually all subsequent treaties dealing with the sea.¹³⁹ It has also been applied to modern treaties dealing with, as yet, unappropriated areas on earth¹⁴⁰ and elsewhere.¹⁴¹

129. Available at http://www.un.org/Depts/los.convention_agreements/texts.unclos/part12.htm

130. VON GLAHN, *supra* note 125 at 478.

131. *Id.* Note the interplay between treaty and custom.

132. *Id.* (Rhodian Sea law).

133. *Id.* Literally the "consulate of the sea" — a collection of rulings by captains and merchants who were appointed judges in various ports.

134. *Id.*

135. *Id.*

136. *Id.* at 479.

137. *Id.*

138. *Id.*

139. *Id.*

140. The Antarctic Treaty, December 1, 1959 available at http://www.dpi.anl.gov/dpi2/hist_docs/treaties/anarctic.htm.

141. G.A. Res. 23002, U.N. GAOR, Agreement Governing the Activities of States on the moon and Other Celestial Bodies, (Dec. 18, 1979).

In contemporary times the UNCLOS treaties drafted at United Nations Conventions in 1958, 1960 and 1973–1982 have supplied some basis for law at sea.¹⁴² One hundred and fifty nine states have signed the UNCLOS treaty.¹⁴³ Notably, the United States, the Federal Republic of Germany, The United Kingdom and Israel chose not to become signatories at the time of UNCLOS III.¹⁴⁴ Nevertheless, except for matters relating to deep seabed mineral mining that are outside the scope of this paper, the nations of the world have generally held the terms of UNCLOS to be legitimate and it has functioned as customary law.¹⁴⁵

Part XII of UNCLOS, titled Protection and Preservation of the Marine Environment,¹⁴⁶ calls for States to take “all measures consistent with this Convention that are necessary to prevent, reduce and control pollution of the marine environment from any source.”¹⁴⁷ It specifically enjoins nations not to “cause pollution to other States and their environment”¹⁴⁸ and to “minimize to the fullest possible extent the release of toxic, harmful or noxious substances, especially those which are persistent, from land-based sources, from through the atmosphere or by dumping.”¹⁴⁹

While this section seems clear enough in its prohibition of international pollution, enforcement of UNCLOS provisions, especially with a non-signatory like the U.S.¹⁵⁰ is very difficult. Part XV of UNCLOS sets out “General Provisions” for settlement of disputes,¹⁵¹ which emphasize informal, state-to-state settlements.¹⁵² Failing an informal resolution, States are given four forum options:

142. Von Glahn, *supra* note 125, at 482.

143. *Id.* at 485.

144. *Id.*

145. *Id.* 478–496.

146. UNCLOS, *supra* note 129, at arts. 192–237.

147. *Id.* article 194 §1.

148. *Id.* at § 2.

149. *Id.* at § 3. As noted above and will be noted throughout this paper, causation will always be a large hurdle in any global warming based action. Nevertheless this section contains a fairly accurate description of the methodology of greenhouse gas release and its long-term effects. Although “dumping” is generally not what emissions from smokestacks or internal combustion engines are generally called, it is functionally what happens.

Consider this, at one time the large cities of America found their streets and ditches clogged with horse manure from the carriage and dray traffic. The Herculean (think Aegean Stables) effort of clearing the streets and ditches was obviated when the crap was literally put into the sky via auto exhaust. Author note.

150. The U.S. Senate has refused to ratify UNCLOS. DONNA R. CHRISTIA & RICHARD G. HIDRETH, COASTAL AND OCEAN MANAGEMENT LAW, 312 (2ed. West Publishing Group 1999).

151. UNCLOS, *supra* note 128, at arts. 279–299.

152. *Id.* at art. 280.

- a. the International Tribunal for the Law of the Sea established in accordance with Annex VI;
- b. the International Court of Justice;
- c. an arbitral tribunal constituted in accordance with Annex VII;
- d. a special arbitral tribunal constituted in accordance with Annex VIII for one or more of the categories of disputes specified therein.¹⁵³

The "Tribunal" mentioned above sits in Hamburg¹⁵⁴ and is composed of twenty-one members "elected from among persons enjoying the highest reputation for fairness and integrity and of recognized competence."¹⁵⁵ Under UNCLOS the decisions of the panel have no power of *stare decisis*¹⁵⁶ and all decisions are final.¹⁵⁷

There is no mechanism for collection of damages awarded by the Tribunal, and as noted above, the United States and a number of other industrial powers are not signatories of UNCLOS.¹⁵⁸ Nevertheless, an action before the Tribunal might meet one of the two goals of the working group of environmental lawyers mentioned above,¹⁵⁹ namely that of providing publicity for the plight of Tuvalu and other similarly situated nations and perhaps provoke some movement in international or municipal law to offer an actual remedy to those facing loss due to global warming.

It is also possible that a judgement from the UNCLOS Tribunal, or even the possibility of a judgement, could lead to either an independent arbitration similar to the *Trail Smelter case* examined below or "ex gratia payments."¹⁶⁰

153. *Id.* at art. 287 § 1.

154. *Id.* at Annex VI, art. 1 § 1.

155. *Id.* at art. 2 § 1.

156. *Id.* at art. 33 § 1.

157. *Id.* at § 1.

158. *Id.* at art. 21. Although the Tribunal exists primarily to have jurisdiction over "all disputes and all applications submitted to it in accordance with this Convention" it can take jurisdiction of "all matters specifically provided for in any other agreement which confers jurisdiction on the Tribunal."

159. Katherine Q. Seelye, *Global Warming May Bring New Variety of Class Action*, N.Y. TIMES, Sept. 5, 2001 at A14.

160. Constance O'Keefe, *Transboundary Pollution and the Strict Liability Issue: The Work of the International Law Commission on the Topic of International Liability for Injuries Consequences Arising Out of Acts Not Prohibited by International Law*, 18 DENV. J. INT'L & POL'Y 145, 178 (Winter 1990). *Ex Gratia* payments are generally made, nation to nation, when "acknowledging legal liability might be politically unacceptable to the nation involved." An example cited by O'Keefe is the "Fukuryu Maru" incident in 1954 when United States H-bomb testing near the Marshall Islands injured some Japanese

The Arbitral Tribunal mentioned in Part XV (sub c) above basically sets up a panel composed of one member from each state to the dispute and three other members appointed by agreement between the parties.¹⁶¹ As with the Annex VI Tribunal described above, the decisions of the Arbitral Tribunal are final, but are only enforceable by mutual agreement of the parties. The same applies to the “Special Arbitration Tribunal” established under Annex VIII on UNCLOS.¹⁶² As with the above-mentioned UNCLOS tribunals, the International Court of Justice¹⁶³ has no method of enforcing a judgement (short of U.N. sanctions) or ruling under UNCLOS.

While a lack of enforcement power inherent in the UNCLOS tribunals is not fatal to the cause of those seeking to redress the sea level rise damages Tuvalu and other states might incur,¹⁶⁴ attorneys might also consider avenues available under customary and general principles of law in other forums.

B. Customary Law & Tribunals

Customary law and the tribunals, both municipal and international, under which issues such as sea level rise damage might be addressed are so interrelated that they will be dealt with together below.

Custom as a source of international law has ancient roots that predate Roman law and that was incorporated into it.¹⁶⁵ Customary law often serves in international law as a sort of gap filler in treaty disputes.¹⁶⁶ Customary law can also result from treaties, as was noted above in

fishermen and contaminated a traditional fishing resource of Japan. The United States government sent \$2 million to Japan to be “distributed in an equitable manner at the discretion of the Japanese Government.” *Id.* at 177. Another, more recent incident where *ex gratia* payments were offered is the downing of Iran Air Flight 655 by the U.S.S. Vincennes in 1988. In that case, President Reagan’s offer of *ex gratia* payment was refused and Iran asked the International Court of Justice to consider the case. *Id.* at 178.

161. UNCLOS, *supra* note 129, at Annex VII, art. 3.

162. *Id.* at Annex VIII, arts. 1–5. The Special Arbitration Tribunal which can only cover issue related to fisheries, protecting the marine environment, marine research and navigation also consists of five members, but these members must be experts in their field chosen from a list created by various United Nations and International Maritime organizations. *Id.*

163. *See infra* Section B, at note 172.

164. Publicity, public sympathy and international shaming are also legitimate goals as noted above.

165. MARK W. JANIS, AN INTRODUCTION TO INTERNATIONAL LAW, 41–42 (Aspen Law & Business 3rd ed. 1999) (quoting The Institutes of Justinian, The Elements of Roman Law 45 (1956)) *Id.* “Roman law knew an [u]nwritten law consist[ing] of rules approved by usage; for long-continued custom approved by consent of those who use it imitates a statute.” *Id.*

166. JANIS, *supra* note 165, at 42–3.

reference to the United States general attitude of observing UNCLOS despite not being a signatory.

Customary law can function in both international courts and municipal courts as a basis for decisions based upon a "general law of society."¹⁶⁷ The most famous case applying customary law in the United States Supreme Court is *The Paquete Habana*.¹⁶⁸

During the course of the Spanish American War two fishing vessels owned by a Spanish subject living in Havana, Cuba, were seized and their cargoes of fish sold as prizes of war.¹⁶⁹ The Supreme Court ruled that unarmed fishing vessels were exempt from seizure by a belligerent during time of war.¹⁷⁰ Its reasoning was not based on any treaty or a then effective statute. Instead the Court reasoned that ancient usage (citing British documents from 1403 drafted for King Henry IV) among nations concerning coastal fishing vessels had "gradually ripened into a rule of international law."¹⁷¹

In the present situation, parties seeking relief in a municipal or international court under customary law for damage alleged to be caused by greenhouse gas emission could perhaps reason by analogy from cases like the *Trail Smelter Arbitration*¹⁷² wherein a smelting operation in Trail, British Columbia was damaging crops and timber in the State of Washington via toxic fumes. The Convention negotiated by the United States and Canada to resolve the legal issues involved in the dispute had binding authority to rule and was given authority by both sides to enforce its decision.¹⁷³ It should be noted that this dispute was first submitted to the International Court of Justice (ICJ).¹⁷⁴ The initial report of the ICJ was rejected and years of wrangling ensued before the creation of the Convention.¹⁷⁵

The ICJ, a post war incarnation of the Permanent Court of International Justice is a creation of the United Nations.¹⁷⁶ This fifteen-member

167. United States v. Smith, 18 U.S. 153, 161 (1820).

168. 175 U.S. 677 (1900).

169. VON GLAHN, *supra* note 125, at 47-9.

170. *Id.* at 48.

171. *Id.*

172. Charlotte Elizabeth Glnka, *Global Imperative—An Effective System of Resolution Techniques for Internatinal Environmental Disputes: The Canada—United States Example*, 14 SUFFOLK TRANSNAT'L L.J. 127, 143-44 (1990).

173. *Id.* at 144.

174. *Id.*

175. *Id.*

176. International Court of Justice, *General Information—The Court at a Glance*, available at <http://www.icj-cij.org/icjwww/igeneralinformation/icjgnnot.html> (last visited

court sits in Peace Palace at The Hague in the Netherlands.¹⁷⁷ States,¹⁷⁸ the 189 members of the United Nations, plus Switzerland may bring cases to the court.¹⁷⁹ States must accept the jurisdiction of the ICJ in order for a case to be heard.¹⁸⁰ This can be done by a special agreement, a jurisdictional clause,¹⁸¹ or through “declarations” made by 64 nations to date accepting jurisdiction if another nation that has also declared brings an action.¹⁸²

There are a number of problems with attempting to bring a cause of action in the ICJ. First, only States can bring a case in the ICJ.¹⁸³ Second, even those states that have made a declaration accepting jurisdiction often have made specific exclusions of certain categories of dispute.¹⁸⁴ Finally, like the UNCLOS Tribunals, the ICJ has no method short of United Nations sanctions (which typically are reserved for the most unusual and extreme situations) to enforce a judgement.¹⁸⁵

Nevertheless, a judgment from the ICJ carries great moral weight and ICJ judgements are very often put into effect by the parties. A judgment in favor of a claim brought by Tuvalu or another Island State threatened by global warming induced sea level rise would at the very least serve the function of alerting the world to the seriousness of the problem and the gravity with which it is regarded.

C. General Principles of Nonconsensual International Law

At its most basic level, nonconsensual international law is natural law that is deemed binding upon nations. The first area of nonconsensual international law that I will examine as possible support for a cause of action for nations threatened by global warming induced sea level rise is The Law of Nations.

The Law of Nations is a European concept that assumes a type of individual right and equality of inherent sovereignty for all nations.¹⁸⁶

Nov. 5, 2002).

177. *Id.*

178. Tuvalu became a member of the United Nations in September of 2000.

179. International Court of Justice, *supra* note 176.

180. *Id.*

181. For example a treaty provision. *Id.*

182. *Id.*

183. *Id.*

184. *Id.*

185. *Id.*

186. Denis Culley, *American Indian Sovereignty and the Law of Nations* (May 2002) (unpublished manuscript, on file with author).

Alberico Geniti, an Italian Protestant who fled England to avoid religious persecution is often cited as its first conceptualizer.¹⁸⁷ While working as a professor of Civil Law at Oxford he published his treatise, *De jure belli* in 1598.¹⁸⁸ The roots of the Law of Nations are located by some scholars in Roman law,¹⁸⁹ but evidence of law between and among nations, in war and peace, is found in the Hebrew Bible,¹⁹⁰ the Koran,¹⁹¹ and the Hindu code of Manu.¹⁹²

What modern scholars call the "Law of Nations" or the "*Jus Gentium*" is, however, generally traced to the work of Grotius¹⁹³ and his literary heir, Emmerich de Vattel.¹⁹⁴

Grotius' work was, in part, a reaction to the antagonism and conflict generated by the Reformation that was in the process of consuming Europe in the Thirty Years War.¹⁹⁵ The convulsions of this period, which did not end (or at least pause) until the Peace of Westphalia were described in his *Prolegomena*:

I saw prevailing throughout the Christian world a license in making war of which even barbarous nations should be ashamed; men resorting to arms for trivial or for no reasons at all, when arms were once taken up no reverence for divine or human law, exactly as if a single edict had released a madness driving men to all kinds of crime.¹⁹⁶

187. *Id.*

188. J.L. BRIERLY, *THE LAW OF NATIONS* 27 (Sir Humphrey Waldock eds., 6th ed., Oxford Univ. Press 1963)

189. *Id.* at 19.

190. *Deuteronomy* 20:10 "When you advance to attack on any town, first offer it terms of peace. If it accepts these and opens its gates to you, all the people to be found in it shall do forced labor for you and be subject to you. But if it refuses peace and offers resistance, you must lay siege to it."

191. *Koran* 47.4 "So when you meet in battle those who disbelieve, then smite the necks until when you have overcome them, then make them prisoners, and afterwards wither set them free as a favor or let them ransom themselves until the war terminates."

192. The code of Manu, compiled about 100 B.C., but assumed to be much older, forbids a soldier to strike an enemy who is sleeping, naked, has lost his coat of arms or is overcome with grief. ARTHUR NUSSBAUM, *A CONCISE HISTORY OF THE LAW OF NATIONS* 3-4 (The Macmillan Company 1954).

193. GROTIUS wrote *DE JURE BELLI AC PACIS*, in 1623 and 1624. *Id.* at 105.

194. E. DE VATTEL, *LE DROIT DES GENS, OU PRINCIPES DE LA LOI NATURELLE, APPLIQUES A CONDUITE ET AUX AFFAIRES DES NATIONS ET DES SOUVERAINS*, (Charles G. Fenwick trans., 1758, Oceania Publications Inc. 1964) (1758).

195. Cornelius F. Murphy, *The Groatian Vision of World Order*, 76 *AM. J. INT'L L.* 477, 478 (1982).

196. BRIERLY, *supra* note 188, at 29.

Grotius' vision stood for hope that the national and religious rivalries that resulted from the fragmentation of the Christian world and the rise of nationalism could be regulated by some universal principles.¹⁹⁷ His vision of international order was based on the theory of state sovereignty and individual humanity being inherent and identical in natural law.¹⁹⁸

Emmerich de Vattel, a Swiss diplomat who served in Saxony built upon Grotius' concept of sovereign equality:

Since men are by nature equal, and their individual rights and obligations the same, as coming equally from nature, Nations, which are composed of men and may be regarded as so many free persons living together in a state or nature, are by nature equal and hold from nature the same obligations and the same rights. Strength or weakness, in this case, counts for nothing. A dwarf is as much a man as a giant is; a small Republic is no less a Sovereign State than the most powerful Kingdom.¹⁹⁹

Like Grotius and other theorists in the field of the Law of Nations, de Vattel attempted to find, in natural law, justification for observance of treaties,²⁰⁰ a law of the sea,²⁰¹ and the rights of sovereigns.²⁰²

Treaties and the Law of Nations are, by definition the bodies of law upon which the ICJ bases its decisions.²⁰³ The Law of Nations has never been clearly defined²⁰⁴ and its ambiguity in American law is further confused by the fact that Article 1, §8, cl. 10 of the United States Constitution gives Congress the authority "[t]o define and punish Piracies and Felonies committed on the High Seas, and Offenses against the Law of Nations."²⁰⁵

197. Murphy, *supra* note 195, at 492.

198. *Id.* at 483.

199. DE VATTEL, *supra* note 193, at 7.

200. *Id.* Volume II, Book IV, Chapter II, at 346–361.

201. *Id.* Volume I, Book I, Chapter XXIII, at 106–110.

202. *Id.* Volume I, Book I, Chapters I to IV, at 11–27.

203. International Court of Justice, *supra* note 176.

204. According to Blackstone violations of safe conduct, the immunity of ambassadors and piracy were the only violations of the "natural law" expressed in the Law of Nations. Marc Rosen, *The Alien Tort Claims Act and the Foreign Sovereign Immunities Act: A Policy Solution*, 6 CARDOZO J. INT'L & COMP. L. 461, 466 (1998).

205. The authority of this seldom cited clause of the Constitution was first exercised in 1790 to try and execute Thomas Bird in Portland, Maine. Bird was found guilty of piracy for his role in the murder of Captain John Conner on a merchant ship off the coast of Africa. Bird, who had served under Conner shot him after Conner had beaten the ship's Chief mate to death for sleeping on duty. He was convicted in a one day trial conducted by Judge David Sewall in District Court in May of 1790 and hung in Portland in front of a crowd of

In the two hundred years after the trial and execution of Thomas Bird²⁰⁶ very little law has been made by Congress or the United States courts under Article 1, §8, cl.10, the "Offenses Clause."

In the nineteenth century the Offenses Clause was used once by the Supreme Court to uphold a federal statute punishing counterfeiting of foreign currency or securities.²⁰⁷ The Offenses Clause was used in this century to uphold portions of the District of Columbia municipal code dealing with protests near embassies²⁰⁸ and a federal statute with the same effect.²⁰⁹

By far the most important use of the Offenses Clause was during World War II in a case examining the use of military tribunals for accused saboteurs of German heritage who were captured and charged with "unlawful belligerency" not long after exiting a German submarine and landing on Long Island via inflatable rafts.²¹⁰ The *Quirin* precedent underlies the approach of George Bush in his military order of November 13, 2001 to "detain and subject to a military tribunal certain terrorists."²¹¹ *Quirin* had also served as precedent in the case that upheld the constitutionality of internment of American citizens of Japanese descent.²¹² The possible utility of relying on this moribund constitutional clause in conjunction with a jurisdictional provision from the Judiciary Act of 1789²¹³ will be discussed in this paper's final section dealing with courts for torts.

D. *Jus Cogens*

Before concluding a consideration of nonconsensual international law there is an area of law, regarded as close to natural law and customary law, that is thought to be so fundamental that it invalidates rules drawn from

3,000 people later that year. Portland Political Trail, *Portland Locations with National Political Significance*, available at <http://www.usm.maine.edu/~rklotz/exhibits/revtrail.htm> (last visited Mar. 10, 2002).

206. There is a modest monument depicting the hanging, erected by the Jordan Meat Company, in the parking lot of the fire station near the intersection of Congress and Bramhall Street in Portland, Maine.

207. *U.S. v. Arjona*, 120 U.S. 479 (1887).

208. *Boos v. Barry*, 485 U.S. 312 (1988); *See also* *Jewish Defense League v. Washington*, 347 F. Supp. 1300 (D.D.C. 1972).

209. *Frend v. United States*, 100 F.2d (D.C. Cir. 1938).

210. *In re Quirin*, 317 U.S. 1 (1942).

211. Interpreter Releases, *Controversial Presidential Order Allows Detention, Military Tribunals for Noncitizen Terrorists*, 78 NO. 45 Interpreter Releases 1775.

212. *Hirabayashi v. U.S.* 320 U.S. 81 (1943).

213. Now codified as 28 U.S.C. § 1350.

treaties and even municipal law.²¹⁴ *Jus cogens*, sometimes also referred to as “peremptory law,” is said to function like natural law and like constitutional law in that it is so basic to national and international law that even positive law and treaties that defy it are invalid.²¹⁵ An example of *jus cogens* in the U.S. Federal courts is the *Siderman* case²¹⁶ wherein the court states that “the right to be free from official torture is fundamental and universal, a right deserving of the highest status under international law, a norm of *jus cogens*.”²¹⁷

The theory of *jus cogens* has been widely interpreted to expand traditional international law.²¹⁸ Although the ICJ and other international tribunals, along with municipal courts and legislative bodies worldwide, have not recognized a right to a healthy environment, some commentators feel that there “is a trend moving in that direction”²¹⁹ under *jus cogens*.

However, an objective look at *jus cogens* reveals that it is actually far narrower than customary law, and by its very nature fairly conservative. A good four-part test for what might pass for *jus cogens* was laid out by Eva M. Kornicker Uhlmann:

To reach a consensus on a catalogue of criteria for the ICJ and other international tribunals to identify *jus cogens* . . . there are four criteria that a norm must possess . . . First, the object and purpose of the norm must be the protection of a state community interest. Second, the norm must have a foundation in morality. Third, the norm must be of an absolute nature. Fourth, the vast majority of states must agree to the peremptory nature of the international norm.²²⁰

So while the evolutionary adaptability and absolute authority of *jus cogens* may be attractive for those seeking creation of a new cause of

214. MARK W. JANIS, AN INTRODUCTION TO INTERNATIONAL LAW, 62 (3d ed. Aspen Law & Business 1999).

215. *Id.* at 64.

216. *Siderman de Blake v. Republic of Argentina*, 965 F.2d 699 (9th Cir. 1992).

217. *Id.* at 717.

218. For example the “right to a healthy environment” has been declared by commentators *jus cogens*. Lynn Berat, *Defending the Right to a Healthy Environment: Toward A Crime of Geocide in International Law*, 11 B.U. INT’L L.J. 327, 339 (1993).

219. John Lee, *The Underlying Legal Theory to Support a Well-Defined Human Right to a Healthy Environment as a Principle of Customary International Law*, 25 COLUM. J. ENVTL. L. 283, 311 (2000).

220. Eva M. Kornicker Uhlmann, *State Community Interests, Jus Cogens and Protection of the Global Environment: Developing Criteria For Peremptory Norms*, 11 GEO. INT’L ENVTL. L. REV. 101, 104 (1998).

action,²²¹ it has not proven to be a silver bullet for adjudication of human rights or environmental wrongs.²²²

In pioneering legal action, such as that contemplated by Tuvalu and its advocates, where causation itself and serious barriers of sovereign immunity, or *forum non conveniens*, loom large, *jus cogens* would not seem the appropriate theory to use in breaking new legal ground. While there are areas of adjudication that might be amenable to use of *jus cogens* to lead the law (space law might be one),²²³ in general, *jus cogens* will follow the law—often at a great distance.²²⁴ Functionally, *jus cogens* is a floor below which nations and the law may not go. What is needed by Tuvalu and similarly situated island states is a ladder to which they might cling, or even climb, in bringing the law to new heights in order to arrest the loss of their homeland, ameliorate the damage or, at the least, receive compensation or publicity for their loss.

The final section of this paper will examine what, I believe, is the best method now available to Tuvalu and others to get a cause of action into a competent court and have some chance of seeing it to conclusion, or at least having the cause issue recognized by observers in the legal world and beyond. The law that contains this promise is the Alien Tort Claims Act.²²⁵

E. The Alien Tort Claims Act

The first United States Congress as part of the Judiciary Act of 1789 granted federal jurisdiction over suits “by aliens where principles of international law are in issue” under §9(b), 1 Stat. 73, 77 (1789).²²⁶ This

221. For example, in the case of Tuvalu, an action for “loss of sovereignty.”

222. For example, the ICJ has never declared a treaty void because of a violation of *jus cogens*. Uhlmann, *supra* note 220, at n.13.

223. For example the U.N. Treaty on the treatment of Astronauts and objects stranded in space or on the surface of the moon could be seen as type of “instantaneous *jus cogens*” because it meets all four requirements of the Uhlmann test above and preempts the field at birth. Agreement on the Rescue of Astronauts, the Return of Astronauts and the Return of Objects Launched into Outer Space, Apr. 22, 1968, 19 U.S.T. 7570.

224. Writing about the heartbreaking failure of *jus cogens* in efforts to adjudicate issues relating to the war in Bosnia-Herzegovina, Mark Weisburd put it this way: “As law, *jus cogens* fails. Its content is inevitably uncertain . . . Correspondingly, its claims to legitimacy in international law is murky. It is applied as a characterization to rules which, if treated as though they really were non-derogable, would do more harm than good in many contexts.” Mark Weisburd, *The Emptiness of the Concept of Jus Cogens, As Illustrated by the War in Bosnia-Herzegovina*, 17 MICH. J. INT’LL. 1,50 (1995).

225. 28 U.S.C. § 1350.

226. *Filgarta v. Pena-Irala*, 630 F.2d 876, 885 (2nd Cir. 1980). Judge Kaufman recounting history of the ATCA.

grant of jurisdiction was made to remedy the failure of the Articles of Confederation to provide a remedy to aliens for wrongful acts committed against them in the United States.²²⁷ The framers of the Constitution attached great importance to providing a forum for addressing wrongs against aliens in order to avoid minor wrongs from escalating into international incidents.²²⁸ That denial of justice to foreigners infringed on the sovereignty of other nations was clear to the framers, as was its risk as expressed by Alexander Hamilton in the *Federalist Papers*: “[t]he denial or perversion of justice by the . . . courts . . . is with reason classed among the just causes of war, it will follow that the federal judiciary ought to have cognizance of all causes in which the citizens of other countries are concerned.”²²⁹ De Vattel himself addressed this issue in his chapter on “Rules with Respect to Foreigners”:

A sovereign may not allow the right of entrance into his territory granted to foreigners to prove detrimental to them; in receiving them he agrees to protect them as his own subjects and to see that they enjoy, as far as depends on him, perfect security. Thus we see that every sovereign who has granted asylum to a foreigner considers himself no less offended by injuries which may be done to the foreigner than if they were done to his own subjects.²³⁰

The modern version of section 9 (b) of the Judiciary Act of 1789 is the so called “*Alien Tort Claims Act*” (ATCA).²³¹ This federal statute states: “The district courts shall have original jurisdiction of any civil action by an alien for a tort only, committed in violation of the law of nations or a treaty of the United States.”²³² Although the statute, on its face, seems straightforward, simple and utilitarian, it was invoked infrequently in the first one hundred and ninety years of the republic.²³³ Chief Justice Marshall interpreted the statute so narrowly that federal jurisdiction would only be suitable when interests of the United States government were

227. Marc Rosen, *The Alien Tort Claims Act and the Foreign Sovereign Immunities Act: A Policy Solution*, 6 CARDOZO J. INT’L & COMP. L. 461, 464 (1998).

228. *Id.* at 465.

229. *Id.*

230. De Vattel, *supra* note 194 Book I, chapter VIII, § 104 at 145.

231. 28 U.S.C. § 1350 (2002) (originally enacted as Act of June 25, 1948, ch. 646, § 1, 62 Stat. 934 (1911)).

232. *Id.*

233. Rosen, *supra* note 226, at 3.

directly implicated.²³⁴ Also, as noted above, the eighteenth century view of the Law of Nations, as expressed by Blackstone, was narrowly limited.²³⁵ Although the Supreme Court, in a case involving a death sentence for piracy,²³⁶ gave a definition of the Law of Nations that included reference to the works of Grotius, Lord Bacon, Bochar and others, little case law was created relating to torts by and against aliens.

This cramped reading of the Act ended in 1980 with the decision of the Court of Appeals for the Second Circuit in a case involving torture in the Republic of Paraguay.²³⁷

The *Filartiga* case involved torture and murder in Paraguay committed by an Inspector General of the police in Asuncion, Paraguay.²³⁸ After an unsuccessful attempt to bring a claim in a Paraguayan court²³⁹ the plaintiffs moved to America, where, they eventually discovered, the Inspector General had moved also.²⁴⁰ The plaintiffs filed a suit for the tort of wrongful death in United States District Court which was subsequently dismissed for want of subject matter jurisdiction.²⁴¹ On appeal, Judge Kaufman of the United States Court of Appeals for the Second Circuit held that "deliberate torture perpetrated under the color of official authority violates universally accepted norms of international law of human rights."²⁴² The court found jurisdiction under 28 U.S.C. § 1350 due to a violation, by the defendant, of "universally accepted norms of the international law of human rights."²⁴³

The plaintiffs portrayed the tort in *Filartiga* as "arising under wrongful death statutes; the UN Charter; the Universal Declaration on Human Rights . . . and practices constituting the customary international law of human rights and the law of nations."²⁴⁴

234. *Id.* at 468.

235. *Id.* at 466. In Blackstone's view only violations of safe conduct, the rights of ambassadors and the crime of piracy violated the law of Nations. *Id.*

236. *United States v. Smith*, 18 U.S. (5 Wheat).

237. *Filartiga v. Pena-Irala*, 630 F.2d 876 (1980).

238. *Id.* at 878.

239. *Id.* The attorney who tried to commence criminal action was arrested and shackled to a wall in police headquarters, threatened with murder and disbarred. *Id.*

240. *Id.* at 879.

241. *Id.* at 876.

242. *Id.*

243. *Id.* at 878.

244. *Id.* at 879.

After citing *Smith*²⁴⁵ and *The Paquete Habana*²⁴⁶ case and relevant international agreements such as the Universal Declaration of Human Rights²⁴⁷ Judge Kaufman concluded that “official torture is now prohibited by the law of nations.”²⁴⁸ He went on to state that “The constitutional basis for the Alien Tort Statute is the law of nations, which has always been part of the federal common law.”²⁴⁹ This conscious incorporation of the large body of law known as the “law of nations” into the federal common law breathed new life into the ATCA.

Whereas the ATCA has not been tested in the Supreme Court, Judge Kaufman’s ruling delineates the new breadth of the Act. He sets the boundaries pretty wide, with dicta stating “[f]ederal jurisdiction over cases involving international law is clear”²⁵⁰ and “we believe it is sufficient here to construe the Alien Tort Statute, not as granting new rights to aliens, but simply as opening the federal courts for adjudication of the rights already recognized by international law.”²⁵¹

Perhaps the greatest contribution to the revitalization of the ATCA and the relevance of the Law of Nations in American courts by Judge Kaufman was his declaration that “[I]t is clear that courts must interpret international law not as it was in 1789, but as it has evolved and exists among the nations of the world today.”²⁵²

Sixteen years later, in the same court, the case of *Kadic v. Karadzic*²⁵³ tested the adequacy of international law and the Law of Nations to support jurisdiction for a tort brought under the ATCA and found jurisdiction under the international law of war and the evolving standards citing by Judge Kaufman in *Filartiga*.²⁵⁴

A very important holding in *Kadic* came in response to an investigation of whether a “Srpska” (a self proclaimed Serbian Republic in Bosnia-Herzegovina during war there) was a state.²⁵⁵ Jurisdiction hinged on this

245. *Smith*, 18 U.S. (5 Wheat).

246. *Paquete Habana*, 175 U.S. (1900), this case, dealing with the Law of War element of the Law of Nations is described above under “B. Customary Law & Tribunals.” *Id.*

247. *Pena-Irala*, 630 F.2d 876 (1980).

248. *Id.* at 884.

249. *Id.* at 885.

250. *Id.* at 887.

251. *Id.*

252. *Id.* at 881. Thus finding that the Law of Nations as the “Constitutional basis for the *Alien Tort Claims Act*” in the federal common law grows along with international law. Author’s note.

253. *Karadzic*, 70 F.3d 232 (1996).

254. *Id.* at 239.

255. *Id.* at 237.

definition because the District Court had held that "acts committed by non-state actors do not violate the law of nations."²⁵⁶

Judge Newman, writing for the Court refused to be bound by antiquated notions of international law and held:

We do not agree that the law of nations, as understood in the modern era, confines its reach to state action. Instead, we hold that certain forms of conduct violate the law of nations whether undertaken by those acting under the auspices of a state or only as private individuals.²⁵⁷

The question of "Srpska as State", along with the issue of "States only" as parties under the Law of Nations became moot.

In 1997 a leader of the Amunbme Tribal Council sued a transnational corporation for environmental torts, human rights abuses, and cultural genocide related to the corporation's operation of an open pit copper, gold and silver mine in Irian Jaya, Indonesia.²⁵⁸

Because the case was filed in the United States District Court for the Eastern District of Louisiana, Beanal was subject to Louisiana procedural rules concerning class certification.²⁵⁹ Having made his complaint as a "leader of the Amungme" but not on behalf of the Amungme as a class, the suit was much more difficult to maintain.²⁶⁰ Nevertheless, this case was an important victory for parties seeking to bring international environmental law suits in federal courts under ATCA for two reasons.

Relying on *Kadic* the court ruled that "state action is not required for all international torts."²⁶¹ This meant that non state actors could be sued in tort for environmental transgressions under the ATCA.

The second important ruling in *Beanal* was that although *Beanal* failed to allege violation of a specific treaty, the court was willing to consider customary law and common usage as obligatory international norms.²⁶² In other words, the court was willing to find, if it existed, an international environmental tort under the Law of Nations.²⁶³

256. *Id.* at 239.

257. *Id.*

258. *Beanal v. Freeport-McMoran, Inc.*, 969 F. Supp 362, 366 (E.D. La. 1997).

259. *Id.* at 367.

260. Only damage experienced personally by *Beanal* could be used to support the suit. *Beanal's* motion to extend time to seek class certification was four days late. *Id.*

261. *Id.* at 371.

262. *Id.* at 383.

263. Again, it was not *Beanal's* failure to cite a treaty in support of the tort, but a failure to show convincing evidence of international usage and customary law sufficient to

Building on this trend, the Law of Nations, alone, was held sufficient to support a tort in a 2001 case²⁶⁴ related to a kidnapping by the United States Drug Enforcement Agency where no treaty was offered as support for the action.

The suggestion in *Beanal*, that as the customary law changes, the Law of Nations changes, and with it, supportable torts under ATCA, is what gives the advocates for Tuvalu and similarly situated Island Nations their best opportunity to get their case into a competent court that could actually enforce its rulings.

Conclusion

Given that the political process has failed Tuvalu²⁶⁵ and that the loss they face, according to the best science available is total, there are good reasons to consider bringing an international tort for environmental damage.²⁶⁶

The existence of the Kyoto Accord as customary law, and the United States refusal to join the Accord could be used to support a tort against environmental regulators in the United States, and the United States government itself. Whereas *Kadic* and *Beanal* have found that non state actors can be sued in tort under ATCA, heavy industry in the United States and abroad could also be parties to a suit.

In the end, whatever court, Federal or international, in which Tuvalu might manage to bring a suit, causation will remain the largest problem. To use *Palsgraf* as a metaphor, the explosion is very far away and the package is being dislodged by all of us in the industrial world each time we start our car or turn on a light switch.

Nevertheless, win or lose, a high profile case in either the ICJ or a District court in America would remind the world that our actions, and our inactions, are having consequences and that a people in their place can very definitely be erased for good due to the byproducts of consumption.

support a claim under a violation of the Law of Nations that was fatal to *Beanal*'s claim. *Id.* at 382.

264. *Alvarez-Machan v. United States*, 266 F.3d 1045 (2001).

265. Advocacy and pleas have failed to interest the world's industrial powers in greatly reducing greenhouse emissions to prevent future flooding and the United States, in particular, has refused to adopt the reasonable targets of the Kyoto Accord.

266. Given the recent history of ATCA litigation (*Filartiga* and *Kadic*) it would make sense to portray the tort, at least in part, in terms of a violation of human rights.

