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Move, or Wait for the Flood and Die: Protection of Environmentally Displaced Populations Through a New Relocation Law

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MOVE, OR WAIT FOR THE FLOOD AND DIE: PROTECTION OF ENVIRONMENTALLY DISPLACED POPULATIONS THROUGH A NEW RELOCATION LAW

Jessica Scott^A

“If we’re still here in 10 years time we either wait for the flood and die, or just walk away and go someplace else.” Colleen Swan, Kivalina Council Leader¹

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INTRODUCTION

In the northern part of Alaska, along the Bering Sea, lies the Village of Kivalina, home to almost four hundred indigenous Inupiat

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1. Stephen Sackur, *The Alaskan Village Set to Disappear Under Water in a Decade*, BBC NEWS MAGAZINE (Jul. 29, 2013), <http://www.bbc.co.uk/news/magazine-23346370>.

Eskimos.² Kivalina is found on a remote barrier island that is little more than a strip of sand.³ For hundreds of years, Inupiat Eskimos have used Kivalina as a camp for fishing and hunting.⁴ Directly dependent on their surrounding environment for survival, the Inupiat continue to live a largely subsistence lifestyle, and many could not survive without it.⁵

The last few decades have forced them to try to figure out a new way to survive, however.⁶ Because of human-induced climate change, average global temperature increased by .85 degrees Celsius from 1880 to 2012, and the amount of sea ice has diminished as oceans have warmed.⁷ For the Village of Kivalina, this means that the Arctic ice that has protected their shoreline from powerful storms and crashing waves is receding, resulting in dramatic coastal erosion.⁸ Warming temperatures and rising tides are washing Kivalina away.⁹ The United States Army Corps of Engineers predicts that “Kivalina will be uninhabitable by 2025.”¹⁰

The Village of Kivalina is not alone. In fact, more people are currently displaced because of environmental disasters than war.¹¹ As the consequences of climate change increase in coming years, so will the number of these environmentally displaced populations (EDPs). Yet, people displaced by environmental changes generally do not have the same protections that those displaced because of conflict do. International law addressing refugee rights, the body of law commonly

2. Loren Holmes, *Kivalina: An Arctic Alaskan Village Straddling 2 Worlds*, ALASKAN DISPATCH (Dec. 31, 2012), <http://www.alaskadispatch.com/article/kivalina-arctic-alaskan-village-straddling-2-worlds>.

3. *Id.*

4. *Id.*

5. *Id.*

6. Sackur, *supra* note 1.

7. *Feeling the Heat: Climate Science and the Basis of the Convention*, UNITED NATIONS FRAMEWORK CONVENTION ON CLIMATE CHANGE, http://unfccc.int/essential_background/the_science/items/6064.php (last visited Jun. 22, 2014) [hereinafter *Feeling the Heat*].

8. Sackur, *supra* note 1.

9. *Id.*

10. *Id.*

11. *See generally As Ranks of ‘Environmental Refugees’ Swell Worldwide, Calls Grow for Better Definition, Recognition, Support*, UNITED NATIONS UNIVERSITY INSTITUTE FOR ENVIRONMENT AND HUMAN SECURITY, <http://www.ehs.unu.edu/file/get/3916> (last visited June 22, 2014) [hereinafter U.N. UNIVERSITY INSTITUTE, *Environmental Refugees*]; *see also* INTERNAL DISPLACEMENT MONITORING CENTRE, GLOBAL OVERVIEW 2012 8 (2013), *available at* <http://www.internal-displacement.org/assets/publications/2013/2012-global-overview-corporate-en.pdf> (“In 2012, 28.8 million people were internally displaced due to conflict and war”); INTERNAL DISPLACEMENT MONITORING CENTRE, GLOBAL ESTIMATES 2012 at 6 (2013), *available at* <http://www.internal-displacement.org/assets/publications/2013/2012-global-estimates-corporate-en.pdf> (“32.4 million were displaced due to environmental disasters”).

called upon to protect those displaced because of war, does not provide protections for EDPs.

EDPs desperately need assistance. The most obvious international solution to this problem may be to extend the protections that refugees receive to also cover EDPs, but there are many obstacles to this approach. One significant hurdle is widespread reluctance to expand the definition of “refugee.”¹² Many countries are already worried about existing obligations to protect the refugee populations entering their borders under the current definition of refugee.¹³

Domestic solutions are also lacking. The Village of Kivalina tried to find legal relief by suing multiple oil, energy, and utility companies for damages for the loss of their village due to climate change.¹⁴ The District Court dismissed the case for lack of standing and for being barred as a political question, a decision the Ninth Circuit Court of Appeals later affirmed.¹⁵ Plaintiffs such as Kivalina presently have “what seems like no judicial avenue to obtain relief.”¹⁶ A new legal framework is needed.

This article proposes a new domestic solution for environmental refugees: a legal framework that would create a fund to relocate present or future EDPs when climate change makes their current land uninhabitable. Part I introduces the problem of environmental displacement. Part II includes a case study of the Village of Kivalina, one example of a community of Alaska Natives soon to be displaced from their ancestral lands, and examines the current status of litigation to fund their relocation. Part III considers various proposals to address the problem of environmental displacement and analyzes their likelihood of success. Finally, Part IV proposes a new legal framework to give EDPs the opportunity to be relocated and analyzes its strengths and weaknesses.

I. THE PROBLEM: ENVIRONMENTAL DISPLACEMENT

Environmentally displaced populations have been defined as “persons who are displaced within their own country of habitual resi-

12. See U.N. UNIVERSITY INSTITUTE, *Environmental Refugees*, *supra* note 11.

13. See *id.*

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

15. Native Vill. of Kivalina v. ExxonMobil Corp. (*Kivalina II*), 696 F.3d 849 (9th Cir. 2012).

16. Nicole Johnson, *Native Village of Kivalina v. ExxonMobil Corp: Say Goodbye to Federal Public Nuisance Claims for Greenhouse Gas Emissions*, 40 *ECOLOGY L.Q.* 557, 563 (2013).

dence or who have crossed an international border and for whom environmental degradation, deterioration or destruction is a major cause of their displacement, although not necessarily the sole one.”¹⁷ Climate change is one cause of environmental displacement; other causes include development projects, industrial accidents, environmental degradation, the aftermath of war, and lack of natural resources.¹⁸ Specific examples of these causes include those forced to flee their homes because of nuclear disasters such as Chernobyl, citizens who had to leave their former communities because of instruments of war such as Agent Orange, and those in coastal communities who must move because of climate change-induced sea rise.¹⁹ Each of these scenarios presents unique challenges, and they can require broad legal approaches to ensure protection for those they displace.

Effects of climate change, such as desertification and sea level rise, have already caused migration around the world.²⁰ Climate-induced migration is expected to continue to increase in the coming years. Though the figures are disputed, the Intergovernmental Panel on Climate Change and the Stern Review estimate that between 150 million and 200 million people could be permanently displaced due to extreme environmental events by 2050, and further estimate that the total number of people displaced due to climate change could at least triple by 2030.²¹

Though no country will be immune from these effects, certain populations will be harder hit than others. Indigenous peoples, in particular, are especially vulnerable to the effects of climate change. As Professors Randall Abate and Elizabeth Kronk explain, there are a number of commonalities found among indigenous peoples that make this so, including “the location of indigenous communities,” “a unique connection to the land for legal, spiritual and cultural reasons,” and “a history of colonization and oppression that has potentially increased

17. Norman Myers, *Environmentally-Induced Displacements: The State of the Art*, in ENVIRONMENTALLY-INDUCED POPULATION DISPLACEMENTS AND ENVIRONMENTAL IMPACTS RESULTING FROM MASS MIGRATIONS 21, 56 (U.N. High Comm’r for Refugees et al. eds., 1996), available at http://publications.iom.int/bookstore/free/Environmentally_Induced.pdf.

18. See generally, Aurelie Lopez, *The Protection of Environmentally-Displaced Persons in International Law*, 37 ENVTL. L. 365, 366-76 (2007) (providing a detailed examination of environmental degradation, environmental disasters, industrial accidents, and the aftermath of war).

19. *Id.*

20. GLOBAL HUMANITARIAN FORUM, HUMAN IMPACT REPORT: CLIMATE CHANGE — THE ANATOMY OF A SILENT CRISIS (2009), available at <http://www.ghf-ge.org/human-impact-report.pdf>.

21. *Id.* at 49 (internal citations omitted).

the vulnerability of many indigenous communities”²² This “increased vulnerability”²³ of indigenous peoples to the impacts of climate change indicates that environmental displacement is a potential environmental justice issue.²⁴ It is a striking example of climate *injustice* as well when communities like Kivalina, with subsistence lifestyles that have “contributed little or nothing to global warming,”²⁵ will suffer especially severe harm from it.²⁶

Despite the fact that more people are currently displaced because of environmental disasters than war,²⁷ the United Nations’ definition of “refugee” does not include the environmentally displaced.²⁸ The United Nations Convention Relating to the Status of Refugees (“Convention”) defines “refugee” as a person who, “owing to well-founded fear of being persecuted for reasons of race, religion, nationality, membership of a particular social group or political opinion, is outside the country of his nationality and is unable, or owing to such fear, is unwilling to avail himself of the protection of that country”²⁹ EDPs are notably absent from this definition for failing to meet

22. Randall S. Abate & Elizabeth Ann Kronk, *The Impacts of Climate Change on Indigenous Peoples: Commonality Among Unique Indigenous Communities: An Introduction to Climate Change and Its Impacts on Indigenous Peoples*, 26 TUL. ENVTL. L.J. 179, 181 (2013).

23. *Id.*

24. The U.S. Environmental Protection Agency defines “environmental justice” as “the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies.” *What is Environmental Justice?*, EPA.GOV, <http://www.epa.gov/compliance/ej/> (last updated Mar. 10, 2014). “[Environmental justice] will be achieved when everyone enjoys the same degree of protection from environmental and health hazards and equal access to the decision-making process to have a healthy environment in which to live, learn, and work.” *Id.*

25. Complaint at 87, *Kivalina I*, 663 F. Supp. 2d 863, (No. 4:08-cv-01138-SBA).

26. “Climate injustice” refers to the fact that “the poorest and most vulnerable . . . bear a disproportionate burden from the impacts of climate change.” *Declaration on Climate Justice*, WORLD RESOURCES INSTITUTE, at 1 (Sept. 18, 2013), available at http://www.wri.org/sites/default/files/declaration_on_climate_justice_0_0.pdf. Climate change is “increasingly seen as a justice issue as [it] undermines the realization of a host of internationally recognized human rights, has asymmetrical impacts on the poor and vulnerable, and increasingly requires disproportionate action from developing countries.” Edward Cameron, Tara Shine & Wendi Bevins, *Climate Justice: Equity and Justice Informing a New Climate Agreement* 3 (World Resources Institute, Working Paper Sept. 2013), available at http://www.wri.org/sites/default/files/climate_justice_equity_and_justice_informing_a_new_climate_agreement.pdf.

27. U.N. UNIVERSITY INSTITUTE, *Environmental Refugees*, *supra* note 11.

28. Convention Relating to the Status of Refugees art. 1, July 28, 1951, 19 U.S.T. 6259, 6261, 189 U.N.T.S. 137, 152, available at <http://www1.umn.edu/humanrts/instreet/v1crs.htm>.

29. *Id.*

both of its primary elements. The first element EDPs fail to meet is that they are rarely displaced because of situations arising out of a fear of persecution for reasons of race, religion, nationality, membership in a particular social group, or political opinion; by definition, the major cause of their displacement is environmental.³⁰ EDPs also generally fail the “outside the country” element of the definition, as they often do not cross national borders.³¹

EDPs can currently be granted refugee status only in specific, unusual circumstances: if they meet the definition of refugee, and the persecution they fear takes the form of environmental destruction.³² There are arguably at least two circumstances in which EDPs receive protection under the 1967 Protocol Relating to the Status of Refugees.³³ The traditional international legal definition of “refugee” may cover them, first, when

a government systematically imposes the risks and burdens of decisions impacting environmental quality on members of a particular race, religion, nationality, social group or political opinion on account of one or more of these protected factors [and, second,] where the relevant authority refuses to mitigate or mitigates inadequately environmental disasters, whether of human origin or not, and in so doing “targets” a group based on one of the listed factors.³⁴

Nevertheless, most EDPs are not covered by the Refugee Convention, and thus receive no legal protection under refugee law.³⁵

30. See Myers, *supra* note 17, at 21.

31. Dario Carminati, *Climate Change and Displacement: Protecting Whom, Protecting How?*, PROFESSIONALS IN HUMANITARIAN ASSISTANCE AND PROTECTION (June 10, 2013), <http://phap.org/articles/climate-change-and-displacement-protecting-whom-protecting-how>; Jane McAdam, *What to Do About Climate Migration*, THE INTERPRETER (July 21, 2013), <http://www.lowyinterpreter.org/post/2013/07/01/What-to-do-about-climate-migration.aspx>. Even when dealing with conflict-caused rather than environmental displacement, international refugee law does not apply to internally displaced persons (IDPs), populations that are displaced within a country's borders. Instead, States are obligated to protect internally displaced persons (IDPs) who have been displaced because of “armed conflict, situations of generalized violence or violations of human rights” just as they are all of their citizens. See Protection Cluster Working Group & Early Recovery Cluster Working Group, *Protection of Conflict-Induced IDPs: Assessment for Action*, UNITED NATIONS HIGH COMMISSIONER FOR REFUGEES, vii-viii (2008), available at <http://www.unhcr.org/protect/PROTECTION/48849ac12.pdf>. This obligation may make it seem unnecessary for them to have the protections provided refugees, but nations often do not fulfill their duty to protect IDPs, with it falling to humanitarian organizations to encourage and assist states in doing so. *Id.*

32. Lopez, *supra* note 18, at 388.

33. Christopher M. Kozoll, Note, *Poisoning the Well: Persecution, the Environment, and Refugee Status*, 15 COLO. J. INT'L ENVTL. L. & POL'Y 271, 273 (2004).

34. *Id.* at 273-74.

35. Lopez, *supra* note 18, at 388-89.

II. CASE STUDY: KIVALINA

The Native Village of Kivalina is perhaps the preeminent example of soon-to-be EDPs in the U.S. In fact, Kivalina has been called “the birthplace of America’s first climate change refugees.”³⁶ Found in northern Alaska, on the Chukchi Sea, Kivalina is the home of approximately 400 indigenous Inupiat people.³⁷ For generations, the residents have lived a subsistence lifestyle, largely dependent on the ocean for survival, but also protected from it by Arctic ice.³⁸

But now the Arctic ice is melting due to climate change. According to the U.S. Army Corps of Engineers, coastal ice is forming later in the year than it has historically, making the community “more susceptible to erosion from storms for a longer period.”³⁹ So bad is the erosion that buildings have been lost to it, including housing.⁴⁰ Although multiple protective measures, including sea walls, have been built, they are failing, and “[e]xtreme damage is expected” by 2020.⁴¹ The U.S. Government Accountability Office (GAO) reported that “the right combination of storm events could flood the entire village at any time,” and “[r]emaining on the island . . . is no longer a viable option for the community.”⁴² Storms that threaten flooding have already forced the community to temporarily evacuate their village in past years.⁴³

Though permanent relocation appears to be the only option, it is an extremely expensive solution. The Army Corps of Engineers projected that permanent relocation would cost between \$95 million and \$125 million, while the GAO estimated costs of \$100 million to \$400 million.⁴⁴ Part of the reason for the wide range of estimates is that a

36. Sackur, *supra* note 1.

37. Holmes, *supra* note 2.

38. Sackur, *supra* note 1.

39. United States Army Corps of Engineers Alaska District, Alaska Baseline Erosion Assessment AVETA Report, 4-6 (2009), available at http://www.climatechange.alaska.gov/docs/iaw_USACE_erosion_rpt.pdf [hereinafter U.S. Army Corps of Engineers, AVETA Report].

40. *Id.*

41. *Id.*

42. U.S. Gov’t. ACCOUNTABILITY OFFICE, GAO-04-142, ALASKA NATIVE VILLAGES: MOST ARE AFFECTED BY FLOODING AND EROSION, BUT FEW QUALIFY FOR FEDERAL ASSISTANCE 32 (2003), available at <http://www.gao.gov/new.items/d04142.pdf>.

43. U.S. Gov’t ACCOUNTABILITY OFFICE, GAO-09-551, ALASKA NATIVE VILLAGES: LIMITED PROGRESS HAS BEEN MADE ON RELOCATING VILLAGES THREATENED BY FLOODING AND EROSION 17 (2009), available at <http://www.gao.gov/new.items/d09551.pdf>.

44. U.S. ARMY CORPS OF ENGINEERS, ALASKA DISTRICT, ALASKA VILLAGE EROSION TECHNICAL ASSISTANCE PROGRAM: AN EXAMINATION OF EROSION ISSUES IN THE COMMUNITIES OF BETHEL, DILLINGHAM, KAKTOVIK, KIVALINA, NEWTOK, SHISHMAREF, AND UNALAKLEET 24-25 (2006), available at http://housemajority.org/coms/cli/AVETA_Report.pdf [hereinafter

relocation site has not yet been selected.⁴⁵ Residents hope to find a site near their current village that would enable them to continue living their traditional subsistence lifestyle by ensuring access to the ocean.⁴⁶ However, a gravel pad would be required to build on much of the surrounding area to ensure the new village is above the floodplain, and the gravel, which cannot be found locally, would have to be shipped there.⁴⁷ The remote location and harsh weather conditions further drive up costs for equipment and materials.⁴⁸

Desperate for a solution to this costly problem, and finding none in statutory law, the Village of Kivalina turned to the federal common law of public nuisance and other claims.⁴⁹ On February 26, 2008, Kivalina filed a complaint in the United States District Court for the Northern District of California against multiple energy producers for allegedly producing “substantial” greenhouse gas emissions that contributed to climate change and Kivalina’s massive erosion problem.⁵⁰

The defendants moved to dismiss the action for lack of subject-matter jurisdiction pursuant to rules 12(b)(1) and 12(b)(6) of the Federal Rules of Civil Procedure.⁵¹ They argued that Kivalina raised “inherently nonjusticiable political questions because to adjudicate its claims, the court would have to determine the point at which greenhouse gas emissions become excessive without guidance from the political branches.”⁵² They also argued that Kivalina lacked standing because they could not sufficiently demonstrate that the defendants caused the injury.⁵³

The District Court agreed with the defendants. It held that the political question doctrine prevented it from considering Kivalina’s federal public nuisance claim.⁵⁴ The court found that it was the executive branch or the legislative branch that should determine an acceptable limit on the defendants’ greenhouse gas emissions and who should

U.S. ARMY CORP OF ENGINEERS, EROSION ISSUES]; U.S. GOV’T. ACCOUNTABILITY OFFICE, *supra* note 39.

45. *Id.* at 27.

46. *Id.* at 32.

47. *Id.*

48. *Id.*

49. Complaint at 3, *Kivalina I*, 663 F. Supp. 2d 863. (No. 4:08-cv-01138-SBA). In addition to federal common law public nuisance, the Village of Kivalina based its complaint on state private and public nuisance, civil conspiracy, and concert of action. *Id.*

50. *Id.*

51. *Kivalina I*, 663 F. Supp. 2d at 868.

52. *Kivalina II*, 696 F.3d at 854.

53. *Id.*

54. *Kivalina I*, 663 F. Supp. 2d at 876-77.

bear the cost of climate change.⁵⁵ The court also held that Kivalina lacked Article III standing to bring a public nuisance suit because they could not sufficiently demonstrate the defendants' conduct caused their injury and because the injury was too remote.⁵⁶

After Kivalina appealed, the United States Court of Appeals for the Ninth Circuit affirmed the District Court's decision. The appellate court relied heavily on the United States Supreme Court's decision in *American Electric Power Co. v. Connecticut*,⁵⁷ which held that the Clean Air Act (CAA) displaced federal public nuisance claims.⁵⁸ The Court of Appeals decision reads in part, "The Supreme Court has already determined that Congress has directly addressed the issue of domestic greenhouse gas emissions from stationary sources and has therefore displaced federal common law."⁵⁹ As the CAA provides no relief for damages either, this decision makes it hard to imagine any climate change-induced EDP who would be able to find legal relief under domestic law.⁶⁰

III. SOME PROPOSED INTERNATIONAL SOLUTIONS AND THEIR LIKELIHOOD OF SUCCESS

Though a legal framework to address the concerns of EDPs does not yet exist, a number of solutions have been proposed at the global level, including an expansion of the current definition of "refugee" to include those who flee their homes due to degraded environmental conditions, or the creation of a new international law addressing environmental migrants.⁶¹ As will be explained below, neither of these approaches is apt to succeed currently.

55. *Id.*

56. *Id.* at 880-82.

57. 131 S. Ct. 2527, 2537 (2011). In *American Electric Power Co.*, various states, the city of New York, and three land trusts filed a lawsuit against massive emitters of greenhouse gases alleging a public nuisance. The plaintiffs sought injunctive relief in asking the court to impose emissions caps. The Supreme Court there held that the Clean Air Act displaces any federal common law claim to abate such emissions. *Am. Elec. Power Co. v. Conn.*, 131 S. Ct. 2527, 2537 (2011).

58. *Kivalina II*, 696 F.3d at 856-58.

59. *Id.* at 856 (citing *Am. Elec. Power Co.*, 131 S. Ct. at 2537).

60. Johnson, *supra* note 16, at 561.

61. As Professor Randall Abate points out, a "Green Climate Fund" exists at the international level that is used to fund climate change mitigation and adaptation projects, which theoretically could include relocation for environmental migrants. However, this fund is applied exclusively to projects in developing countries, making it unavailable to environmental migrants in the United States. Randall Abate, *Corporate Responsibility and Climate Justice: A Proposal for a Polluter-Financed Relocation Fund for Federally Recognized Tribes Imperiled by Climate Change*, 25 *FORDHAM ENVTL. L. REV.* 10 (2013)

Some argue for addressing the lack of protections for EDPs through enlarging current international refugee law to include the environmentally displaced among those who enjoy refugee status.⁶² An obvious method to do this would be to alter the definition of “refugee” in existing law. For example, the definition of refugee could be expanded to include “any person who owing (1) to well-founded fear of being persecuted for reasons of race, religion, nationality, membership of a particular social group, or political opinion, or (2) to degraded environmental conditions threatening his life, health, means of subsistence, or use of natural resources, is outside the country of his nationality and is unable or, owing to such fear, is unwilling to avail himself of the protection of that country.”⁶³

Another proposal is to create new international law addressing environmental migrants. The argument has been made for an “International Coordinating Mechanism for Environmental Displacement (ICMED) [that would] coordinate the work of organizations that currently focus on various facets of the problem.”⁶⁴ One scholar argues for “the elaboration of a new document that would focus not only on protecting those individuals who are forced to leave their homes due to environmental displacement, but also would require specific obligations from state parties to prevent the root causes from occurring.”⁶⁵ The 2005 World Conference on Disaster Reduction in Kobe, Japan, produced a declaration that implies such a duty, and some in the international community have promoted international guidelines on internal displacement, but the international community is still far from creating any document formalizing such a duty.⁶⁶

(citing Rep. of the Conf. of the Parties, 17th Sess., Mar. 15, 2012, U.N. Doc. FCCC/CP/2011/9/Add.1, 63, http://unfccc.int/resource/docs/2011/cop17/eng/09a_01.pdf).

62. Jessica Cooper, *Environmental Refugees: Meeting the Requirements of the Refugee Definition*, 6 N.Y.U. ENVTL. L.J. 480, 494 (1998). Other forced migration experts are opposed to this solution. *E.g.*, McAdam, *supra* note 28.

63. *Id.* Cooper makes the argument that such an expansion is unnecessary as environmentally displaced populations are, in fact, already protected under the current definition of refugee. *Id.* However, no international legal body has adopted this view. *Id.*

64. Tracey King, Note, *Environmental Displacement: Coordinating Efforts to Find Solutions*, 18 GEO. INT'L ENVTL. L. REV. 543, 559 (2006).

65. Lopez, *supra* note 18, at 402 (citing Dana Zartner Falstrom, *Stemming the Flow of Environmental Displacement: Creating a Convention to Protect Persons and Preserve the Environment*, 13 COLO. J. INT'L ENVTL. L. & POL'Y 1, 21 (2001)).

66. UNITED NATIONS UNIVERSITY INSTITUTE FOR ENVIRONMENT AND HUMAN SECURITY, *supra* note 11. This document, called The Hyogo Declaration, reads, in part, “States have the primary responsibility to protect the people and property on their territory from hazards, and thus, it is vital to give high priority to disaster risk reduction in national policy, consistent with their capacities and the resources available to them.” Hyogo Declaration, World Conference on Disaster Reduction, 18-22 January 2005, Kobe, Hyogo,

There are a number of potential problems with these approaches, making them currently unrealistic solutions. An expansion of the definition of “refugee” is unlikely for several reasons, the first being that it has not been changed in over fifty years “and, with every passing year, it becomes less likely that it will[, in part because for over five decades] the legal framework of the Refugee System has developed around the 1951 refugee definition.”⁶⁷ Moreover, even for the refugees currently covered under the Convention, many nations are not providing adequate protection or respecting their obligations under the Convention, often because they claim to be overwhelmed by the numbers of refugees coming into their countries, or have domestic problems that make it challenging to absorb migrant populations.⁶⁸ International organizations are also overwhelmed by the needs of refugees under the current definition.⁶⁹ An important durable solution for refugees is being permanently resettled in another country when they cannot return home, but this is only available to 1% of current refugees.⁷⁰ Some have argued that increasing the number of people to whom refugee status is accorded may actually weaken the protections that all refugees receive.⁷¹

Japan, UNITED NATIONS OFFICE FOR DISASTER RISK REDUCTION, available at <http://www.unisdr.org/wcdr/intergover/official-doc/L-docs/Hyogo-declaration-english.pdf>. See also The Hyogo Framework of Action 2005-2015: Building the Resilience of Nations and Communities of Disasters, World Conference on Disaster Reduction, 18-22 January 2005, Kobe, Hyogo, Japan, U.N. OFFICE FOR DISASTER RISK REDUCTION, available at <http://www.unisdr.org/wcdr/intergover/official-doc/L-docs/Hyogo-framework-for-action-english.pdf>.

67. Cooper, *supra* note 62, at 499-500.

68. U.S. Comm. for Refugees and Immigrants, *A Race to the Bottom*, World Refugee Survey 2008 (U.S. Committee for Refugees and Immigrants, 2008), available at: http://www.uscrr.org/2010Website/5_Resources/5_5_Refugee_Warehousing/5_5_4_Archived_World_Refugee_Surveys/5_5_4_6_World_Refugee_Survey_2008/5_5_4_6_2_Articles/The_Race_to_the_Bottom.pdf.

69. See U.N. UNIVERSITY INSTITUTE, *Environmental Refugees*, *supra* note 11.

70. Refugee Council USA, “Refugee Resettlement,” <http://www.rcusa.org/index.php?page=refugee-resettlement> (last visited June 15, 2014). In the United States, after the Department of Homeland Security has granted certain individuals refugee status, the State Department and non-government organizations (NGOs) work together to oversee their legal entry into the country. *Id.* In recent years, the United States has had the goal of resettling between 50,000-70,000 refugees each year. *Id.* Once refugees have arrived, the Office of Refugee Resettlement in the Department of Health and Human Services works with NGOs to provide additional services to resettled refugees to help them adjust to their new home and become self-sufficient. *Id.* Though the needs of refugees are different from the needs of individuals who are permanently relocated within their own country, the refugee resettlement program is a longstanding example of the U.S. successfully relocating individuals in need.

71. King, *supra* note 64, at 553-54 (citing Gregory S. McCue, Note, *Environmental Refugees: Applying International Law to Involuntary Migration*, 6 GEO. INT’L ENVTL. L. REV. 151, 161 (1993) (“UNHCR operates on a limited budget, and the organization fears

Regarding the proposition of a new instrument of international law, this undertaking would require an extremely costly and time-consuming process and, as with most international law, compliance and enforcement are apt to pose additional problems.⁷² As one scholar points out, “taking into consideration the unwillingness of states to compromise their sovereignty, and acknowledging the reluctance of the United States to agree to . . . the Kyoto Protocol, it would seem unlikely that a new global agreement could be reached specifically in relation to climate change displacement.”⁷³

Finally, the great majority of environmental displacement will be internal, resulting in different protections being required than those that would typically be needed for refugees, who are forced to cross national borders.⁷⁴ Thus, there are apt to be limited benefits for EDPs from an expansion of the definition of “refugee” because the goal of international refugee law is to protect those who cross national borders, not people who are displaced within their own country.⁷⁵

An initiative launched in October 2012 demonstrates how difficult it is to come up with a global solution to the problem of environmental displacement. The governments of Switzerland and Norway launched the Nansen Initiative, “a state-led, bottom-up consultative process intended to build consensus on the development of a protection agenda addressing the needs of people displaced across international borders in the context of natural disasters, including the effects of climate change.”⁷⁶ Leading up to this initiative, the United Nations High Commissioner on Refugees had worked to get States on board with the development of an international framework on displacement caused by natural disasters and climate change.⁷⁷ However, only Norway, Switzerland, Costa Rica, Germany, and Mexico agreed.⁷⁸ This

that such an expansion would strain its already limited resources, as such resources would necessarily be dedicated to protecting a larger number of people”).

72. Lopez, *supra* note 18, at 406.

73. Angela Williams, *Turning the Tide: Recognizing Climate Refugees in International Law*, 30 L. & POL’Y 502, 517 (2008).

74. King, *supra* note 64, at 554.

75. Lopez, *supra* note 18, at 392 (citing David Keane, Note, *The Environmental Causes and Consequences of Migration: A Search for the Meaning of “Environmental Refugees,”* 16 GEO. INT’L ENVTL. L. REV. 209, 217 (2004) (internal citations omitted)).

76. *About Us*, THE NANSEN INITIATIVE, <http://www.nanseninitiative.org/> (last visited June 22, 2014).

77. Jane McAdam, *Creating New Norms? The Nansen Initiative on Disaster-Induced Cross-Border Displacement*, APMEN (Apr. 1, 2013), <http://apmen.iom.int/en/m/editorials/item/104-creating-new-norms-the-nansen-initiative-on-disaster-induced-cross-border-displacement>.

78. *Id.*

process demonstrates just how reluctant States are to cede any control to international organizations regarding protection of EDPs.⁷⁹

The Nansen Initiative is a small first step. It has begun with regional consultations in regions most affected by climate change.⁸⁰ Importantly, the goal of the Nansen Initiative is not to create new legal standards. However, “[w]here appropriate, it will facilitate the elaboration of such standards at domestic, regional and global levels at a later stage.”⁸¹ This “tentative” approach “seems to be the only feasible [global] strategy at this point in time.”⁸²

Given the difficulty of achieving progress on the global level and the fact that most environmental displacement (though certainly not all) will be domestic, it is important to focus on domestic solutions. There is quite a bit that the United States, for one, could do to ensure that its EDPs are protected.

IV. A DOMESTIC SOLUTION: A LEGAL FRAMEWORK TO RELOCATE EDPs

One critical additional protection for EDPs will be relocation opportunities. As the Kivalina case study demonstrates, relocation can be very expensive, and many of those most vulnerable to climate change will not be able to afford relocation without some sort of assistance. This solution is not as out of reach as it may seem. In fact, a statutory framework already exists in the United States to provide permanent relocation to those who can no longer remain in their homes due to health risks from environmental contamination in certain narrow circumstances: Sections 101 and 104(i) of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA).⁸³

A. Sections 101 and 104(i) of CERCLA

After the infamous Love Canal environmental crisis in Niagara Falls, New York, the environmental movement in the United States reached a turning point.⁸⁴ Residents of Love Canal, with Lois Gibbs as

79. *Id.*

80. NANSEN INITIATIVE, *supra* note 76.

81. *Id.*

82. McAdam, *supra* note 77.

83. 42 U.S.C. §§ 9601–9675 (2006).

84. EPA Region 2 Podcast, *History of Love Canal and the Superfund Program Podcast*, EPA.GOV, May 21, 1980, transcript available at http://www.epa.gov/region2/mediacenter/pdfs/lovecanal_podcast.pdf.

their most vocal advocate, brought the growing problem of toxic waste to the public's attention.⁸⁵ The Love Canal community was dealing with the aftermath of an industrial dump in their town; chemicals left in leaking drum containers were leaching into the soil in backyards and basements of homes and the public school.⁸⁶ Though CERCLA did not yet exist, the United States Environmental Protection Agency (EPA) eventually permanently relocated 7,700 residents living at the contamination site.⁸⁷ As the nation began to come to terms with this crisis, Congress enacted CERCLA in 1980 to ensure that funds would be available for the cleanup of other similarly contaminated sites.⁸⁸

CERCLA established requirements for hazardous waste sites, statutory liability of parties responsible for releases of hazardous waste at these sites, and a trust fund for cleanups when no responsible party could be identified.⁸⁹ This "Superfund" was paid for primarily by a tax on the chemical and petroleum industries.⁹⁰ Within five years, \$1.6 billion dollars went into the Superfund.⁹¹ CERCLA authorizes use of these funds for two types of response actions for cleanups: short-term removals and long-term "remedies" or "remedial actions."⁹²

CERCLA's definition of the second type of response actions, long-term "remedies" or "remedial actions," includes the costs of permanent relocation in certain circumstances:

The terms "remedy" or "remedial action" means those actions consistent with permanent remedy taken instead of or in addition to removal actions in the event of a release or threatened release of a hazardous substance into the environment, to prevent or minimize

85. *Id.*

86. Eckardt C. Beck, *The Love Canal Tragedy*, EPA J. (Jan. 1979), available at <http://www2.epa.gov/aboutepa/love-canal-tragedy>.

87. *History of Love Canal and the Superfund Program Podcast*, *supra* note 82.

88. *CERCLA Overview*, EPA.GOV, <http://www.epa.gov/superfund/policy/cercla.htm> (last updated Dec. 12, 2011).

89. CERCLA §§ 9601–9675.

90. *CERCLA Overview*, *supra* note 88. Revenues from the General Fund of the U.S. Treasury were also used to finance the Superfund initially; DAVID M. BEARDEN, CONG. RESEARCH SERV., R41039, COMPREHENSIVE ENVIRONMENTAL RESPONSE, COMPENSATION, AND LIABILITY ACT: A SUMMARY OF SUPERFUND CLEANUP AUTHORITIES AND RELATED PROVISIONS OF THE ACT, 1 (2012), available at <https://www.fas.org/sgp/crs/misc/R41039.pdf>.

91. *CERCLA Overview*, *supra* note 88. Congress has subsequently allowed the Superfund tax to expire, and increased contributions from general taxpayer revenues to make up some of the shortfall. BEARDEN, *supra* note 88. However, EPA "officials and environmentalists say the Superfund program has been chronically underfinanced" since 1995 when the Superfund tax expired. John M. Broder, *Without Superfund Tax, Stimulus Aids Cleanups*, N.Y. TIMES, April 26, 2009, at A16, available at http://www.nytimes.com/2009/04/26/science/earth/26superfund.html?_r=0.

92. *CERCLA Overview*, *supra* note 88.

the release of hazardous substances so that they do not migrate to cause substantial danger to present or future public health or welfare or the environment. . . . The term includes the costs of permanent relocation of residents and businesses and community facilities where the President determines that, alone or in combination with other measures, such relocation is more cost-effective than and environmentally preferable to the transportation, storage, treatment, destruction, or secure disposition offsite of hazardous substances, or may otherwise be necessary to protect the public health or welfare⁹³

Additionally, CERCLA Section 104(i)(11) provides,

If a health assessment or other study carried out under this subsection contains a finding that the exposure concerned presents a significant risk to human health, the President shall take such steps as may be necessary to reduce such exposure and eliminate or substantially mitigate the significant risk to human health. Such steps may include the use of any authority under this chapter, including, but not limited to . . . (B) permanent or temporary relocation of individuals.⁹⁴

EPA has developed implementing regulations and policy documents further explaining how these authorities might be used.⁹⁵ The National Oil and Hazardous Substances Contingency Plan (NCP)⁹⁶ states that “[t]emporary or permanent relocation of residents, businesses, and community facilities may be provided where it is determined necessary to protect human health and the environment.”⁹⁷ Remedies must meet five requirements to ensure compliance with CERCLA.⁹⁸ The remedies must:

1. Protect human health and the environment;
2. Comply with applicable or relevant and appropriate requirements (ARARs) unless a waiver is justified;
3. Be cost-effective;
4. Utilize permanent solutions and alternative treatment technologies or resource recovery technologies to the maximum extent practicable; and

93. CERCLA § 101(24).

94. CERCLA § 104(i)(11).

95. Many of these documents can be found on EPA’s website at: <http://www.epa.gov/superfund/community/relocation/>.

96. This constitutes CERCLA’s implementing regulations.

97. National Oil and Hazardous Substances Contingency Plan Appendix D to Part 300 – Appropriate Actions and Methods of Remedying Releases, 40 C.F.R. § 300, App. D(g) (1990).

98. CERCLA § 121.

5. Satisfy the preference for treatment as a principal element or justify why the preference was not met.⁹⁹

The NCP identifies nine criteria used to analyze alternative remedies to ensure that the remedy ultimately selected is “protective of human health and the environment, . . . maintain[s] protection over time, and . . . minimize[s] untreated waste.”¹⁰⁰ The evaluation criteria are (1) “protection of human health and the environment,” (2) “compliance with ARARs,” (3) “long-term effectiveness and permanence,” (4) “reduction of toxicity, mobility, or volume through treatment,” (5) “short-term effectiveness,” (6) “implementability,” (7) “cost,” (8) “state agency acceptance, and” (9) “community acceptance.”¹⁰¹

Fifteen years after CERCLA became law, former EPA Assistant Administrator for Solid Waste and Emergency Response Elliot Laws issued a memorandum asking EPA regional offices to work with headquarters to establish a nationally consistent relocation policy. His objective was “to address the health threats posed by Superfund sites in a manner reflective of community interests, and to make cost-effective and technically sound response decisions.”¹⁰² The memorandum reiterated that “relocation is an acceptable response action in the Superfund program.”¹⁰³ It asked for “lessons learned” and offered an “opportunity to designate sites as ‘pilots’ where the use of relocation may be thoroughly explored.”¹⁰⁴

Four years later, in 1999, the Agency issued its Interim Policy on the Use of Permanent Relocations as Part of Superfund Remedial Actions.¹⁰⁵ This Policy emphasized that permanent relocation will usually not be a component of a potential remedy “[b]ecause of CERCLA’s preference for cleanup.”¹⁰⁶ It also clarified when permanent relocation might be appropriate:

Generally, the primary reasons for conducting a permanent relocation would be to address an immediate risk to human health (where an engineering solution is not readily available) or where the struc-

99. Timothy Fields, Jr., *Interim Policy on the Use of Permanent Relocations as Part of Superfund Remedial Actions* 4-5 (June 30, 1999) (citing CERCLA § 121), available at <http://www.epa.gov/superfund/community/relocation/intpol.pdf> [hereinafter *Memorandum on Interim Policy*].

100. *Id.* at 5 (citing 40 C.F.R. § 300.430(a) (1990)).

101. *Id.*

102. Elliott P. Laws, *Relocation of Residents Affected by Superfund Sites*, 2 (May 11, 1995), available at <http://www.epa.gov/superfund/community/relocation/memo.pdf>.

103. *Id.*

104. *Id.*

105. *Id.*

106. *Id.* at 6.

tures (e.g., homes or businesses) are an impediment to implementing a protective cleanup.¹⁰⁷

When EPA determines that permanent relocations under CERCLA are appropriate, the U.S. Army Corps of Engineers typically acquires the homes and assists with the relocation.¹⁰⁸ Acquisitions are carried out in accordance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (URA), as amended, 42 U.S.C. § 4601 et seq.¹⁰⁹ The purpose of the URA includes providing “uniform, fair and equitable treatment of persons whose real property is acquired or who are displaced in connection with federally funded projects” and ensuring “relocation assistance is provided to displaced persons to lessen the emotional and financial impact of the displacement.”¹¹⁰

Though rare,¹¹¹ several scenarios have arisen where EPA has determined that permanent relocation is indeed appropriate.¹¹² The most studied of these is the Escambia Wood Treating Company (ETC) permanent relocation, which EPA selected as a relocation pilot project in 1995.¹¹³ Wood treating wastes caused contamination at the site,

107. Laws, *supra* note 102, at 6.

108. Office of Superfund Remediation and Tech. Innovation, *United States Environmental Protection Agency, OSWER 9230.0-108, Superfund Permanent Relocation Statement of Work Template and Users' Guide*, U.S. ENVTL. PROT. AGENCY 1, 10 (2004), available at <http://www.epa.gov/superfund/community/relocation/modelsov.pdf>.

109. *Id.*

110. *Overview of the Uniform Act (URA)*, HUD.GOV, http://portal.hud.gov/hudportal/HUD?src=/program_offices/comm_planning/affordablehousing/training/web/relocation/overview (last visited June 22, 2014).

111. Lindsay Knake, *EPA Attorney: Resident Relocation from Superfund Sites Rare Occurrence*, MLIVE.COM, http://www.mlive.com/news/saginaw/index.ssf/2011/04/dioxin_community_action_group.html (last updated April 19, 2011, 8:51 AM).

112. *E.g.*, U.S. Env'tl. Prot. Agency Region 2, *Record of Decision, Operable Unit One, Eighteen Mile Creek Superfund Site, Niagara County, New York* 28 (2013), available at http://www.epa.gov/r02earth/superfund/npl/18milecreek/pdf/rod_ou1_eighteenmilecreek.pdf (describing the acquisition of six homes and the permanent relocation of their residents due to soil contaminated with PCBs and inorganic contaminants); U. S. Env'tl. Prot. Agency Region 6, *Record of Decision, Operable Unit Four, Chat Piles, Other Mine and Mill Waste, and Smelter Waste, Tar Creek Superfund Site, Ottawa County, Oklahoma* 28 (2008), available at http://www.epa.gov/region6/6sf/oklahoma/tar_creek/ok_tar_creek_ou4_rod_200802.pdf (describing selected remedy of voluntary relocation of residential and commercial properties for an estimated 744 properties); U. S. Env'tl. Prot. Agency Region 7, *Times Beach Site 1* (2010), available at http://www.epa.gov/region07/cleanup/npl_files/mod980685226.pdf (describing the permanent relocation of all residents in Times Beach, Missouri, due to dioxin contamination of surface soil).

113. U. S. Env'tl. Prot. Agency, *Escambia Wood Treating Company (ETC) Superfund Site Permanent Relocation Focus Groups Summary Report 1* (2003), available at <http://www.epa.gov/superfund/community/relocation/etc.pdf> [hereinafter *Escambia Relocation Report*].

with contaminants including pentachlorophenol, creosote, dioxins, and benzo(a)pyrene.¹¹⁴ EPA's Record of Decision for the site determined that permanent relocation would be an appropriate remedy because it would eliminate "potential human exposure to contaminated soils that had been stockpiled at the site."¹¹⁵ Additionally, it "allowed the post-remedy land use in the ETC area to be restricted for industrial or commercial activities."¹¹⁶ EPA had an Interagency Agreement with the U.S. Army Corps of Engineers for the Corps to carry out the relocation.¹¹⁷ A citizens group, the Citizens Against Toxic Exposure, also assisted, providing advice to residents being relocated.¹¹⁸

Seven years after designating the ETC Superfund site as a pilot project, EPA conducted a series of focus groups with 28 of the 358 households that were relocated to assess the effectiveness of the permanent relocation.¹¹⁹ Although glad to escape the contamination site, many residents were not satisfied with their new residences.¹²⁰ Some felt that proximity to work was not sufficiently considered when the government offered them replacement homes.¹²¹ Others were frustrated over an increase in taxes and utility costs at their replacement residences.¹²² The Focus Groups Summary Report demonstrates that permanent relocation is far from a perfect solution, even though it is sometimes a necessary one.

B. *Applicability of CERCLA's Relocation Provisions to EDPs*

CERCLA was created to address America's legacy of hazardous waste sites. However, its relocation provisions do provide EDPs with protection in certain circumstances. If an EDP is displaced due to hazardous waste contamination at a site EPA decides to clean up under CERCLA, and there would "be an immediate risk to human health (where an engineering solution is not readily available) or . . . the structures (e.g., homes or businesses) [would be] an impediment to implementing a protective cleanup,"¹²³ then it is possible that EPA would decide that permanent relocation would be an appropriate remedy.

114. *Id.*

115. *Id.*

116. *Id.*

117. *Id.*

118. *Escambia Relocation Report*, *supra* note 113.

119. *Id.* at 1-2.

120. *Id.* at 6.

121. *Id.* at 3.

122. *Id.* at 8.

123. *Memorandum on Interim Policy*, *supra* note 99, at 6.

However, for EDPs displaced due to climate change, CERCLA's relocation provisions generally would not apply.¹²⁴

Robert J. Martin argues that CERCLA is available to permanently relocate the Village of Kivalina because of the combination of climate change-induced extreme weather and nearby open dumps, which are noted to contain a number of toxins "such as arsenic, lead, methyl mercury and petroleum hydrocarbons. . . ."¹²⁵ Specifically, Martin argues that

[b]ased upon the weight of the available technical and scientific evidence regarding the climate and contamination threats facing the Village of Kivalina, the clearest and most immediate course of action should be the federally funded permanent relocation of the community.¹²⁶

Martin points to the permanent relocation provisions within CERCLA and the tribal permanent relocation provisions in CERCLA Section 9626(b) (as well as the federal government's special relationship with federally recognized tribes) as providing all the necessary authority.¹²⁷ Though a thorough analysis of Martin's argument is beyond the scope of this Article, it is important to note that his proposed remedy is "distinct from, and not prejudicial to, alternative remedies predicated solely upon the phenomenon of carbon based global warming [and not hazardous waste contamination]."¹²⁸ Therefore, Martin's proposed remedy would not apply to many EDPs, namely those who are displaced due to extreme weather events and other effects of climate change, but who are not facing hazardous waste contamination.

C. Proposal for a New Relocation Law for Climate EDPs

Just as Love Canal increased public awareness about the nation's hazardous waste crisis, the Village of Kivalina and other communities forced to relocate are apt to serve as a catalyst for increasing public awareness about the plight of EDPs. And just as Congress created CERCLA to address hazardous waste and protect public health and the environment, there is the opportunity and need

124. Abate, *supra* note 61, at 18.

125. Robert J. Martin, *The Village of Kivalina is Falling Into the Sea: Should CERCLA Section 9626(b) Be Available to Move the Village From Harm's Way?*, 2 BARRY U. EARTH JURISPRUDENCE & ENVTL. JUST. J. 1, 9 (2012), available at <http://lawpublications.barry.edu/cgi/viewcontent.cgi?article=1008&context=ejej>.

126. *Id.* at 16-17.

127. *Id.* at 17.

128. *Id.* at 4.

for Congress to act again, this time to protect the health and safety of EDPs.

CERCLA's relocation provisions provide a starting point for a new legal framework addressing the needs of EDPs. This new law should create a fund available for EDPs to relocate from homes made uninhabitable by the effects of climate change, such as sea level rise or expanding flood planes. The greatest contributors to greenhouse gases (GHGs) in the atmosphere should pay for this fund. EPA already requires that major emitters (facilities that emit 25,000 metric tons of GHGs or more annually) report their GHG emissions, so the data for 85-90% of total U.S. GHGs are already available.¹²⁹ Just as the Superfund was created primarily with a tax on the petroleum and chemical industries, this EDP fund could be paid for with a tax on major emitters of GHGs.

The fund should cover the costs of permanent relocation of residents and businesses and community facilities where the President determines that such relocation may be necessary to prevent substantial danger to present or future public health or welfare. (The Village of Kivalina would certainly meet this threshold.) As with CERCLA, such relocations should be carried out consistent with the URA to help ensure that displaced persons are treated in a "uniform, fair and equitable" manner and that "relocation assistance is provided to displaced persons to lessen the emotional and financial impact of the displacement."¹³⁰

D. *Strengths and Weaknesses of this Approach*

There are a number of advantages to this approach. First, as discussed above, most environmental displacement will be domestic, so a domestic legal framework is an effective approach to addressing the United States' displacement problem. Moreover, there currently does not seem to be the will to develop an international solution, making domestic approaches all the more important.

Second, this solution could be implemented relatively quickly. Because EPA already knows who the major emitters of GHGs are, it would be relatively simple to identify who would be subject to the tax, tax them, and begin to grow the EDP fund. Once Congress passed the

129. *EPA GHG Emissions Data Sets*, EPA.gov, <http://epa.gov/ghgreporting/ghgdata/ghgdatasets.html> (last updated June 9, 2014); *Greenhouse Gas Reporting Program and the U.S. Inventory of Greenhouse Gas Emissions and Sinks*, EPA.gov, <http://epa.gov/ghgreporting/ghgdata/reported/inventory.html> (last updated June 12, 2014).

130. U.S. Dep't of Hous. and Urban Dev., *supra* note 110.

legislation, as with any federal statute, a federal agency would be expected to develop regulations and guidance documents to further clarify how the statute would be implemented. Lessons learned from Superfund relocations are available to inform these agency documents.

Third, this approach will help alleviate some of the environmental justice concerns that pervade the climate change crisis. As early as 1971, the White House Council on Environmental Quality noted that “[m]iddle and upper income families . . . can insulate themselves from some . . . environmental burdens”¹³¹ For the poor, on the other hand, “there is little relief and limited opportunity to escape.”¹³² Wealthier residents have the resources to leave an environmentally distressed community while the poor do not. Climate change will further exacerbate this as its effects will make more land areas uninhabitable, without any possibility of remediation. For example, historical environmental problems such as polluted air and hazardous waste sites generally can be cleaned up or remediated. The effects of climate change are already so severe that it is not possible to “remediate” the Village of Kivalina to enable its residents to stay there; its residents must move. This makes it critical to the environmental justice movement that there be relocation opportunities for those who cannot afford to move themselves. This legal framework would provide just that.

Despite these strengths, this approach also has weaknesses. First, environmental issues are becoming increasingly politically polarizing. Congress has not passed a major environmental statute or amendment in almost twenty-five years.¹³³ Moreover, climate issues have become especially controversial among lawmakers; 56% of Republicans in Congress and 90% of the Republican leadership in the House and the Senate refuse to accept it.¹³⁴ Finally, any increase in taxes is

131. Council on Env'tl. Quality, *Environmental Quality: The Second Annual Report of the Council on Environmental Quality* 190 (1971), available at <http://www.slideshare.net/whitehouse/august-1971-the-first-annual-report-of-the-council-on-environmental-quality>.

132. *Id.*

133. Harvard Law School, *Richard Lazarus Chair Lecture: Environmental Lawlessness*, YOUTUBE (May 3, 2013), <https://www.youtube.com/watch?v=50KY8e1tQAs>.

134. Tiffany Germain, Ryan Koronowski & Jeff Spross, *The Anti-Science Climate Denier Caucus: 113th Congress Edition*, THINKPROGRESS.ORG (June 26, 2013, 9:55 AM), <http://thinkprogress.org/climate/2013/06/26/2202141/anti-science-climate-denier-caucus-113th-congress-edition/> (last updated Apr. 10, 2014) (discussing how this is despite agreement by over ninety-seven percent of climate scientists that GHGs emitted by human activity are causing climate change).

apt to be unpopular among many in Congress.¹³⁵ This political polarization on climate issues and lack of Congressional will to act on environmental and tax issues make it likely that it would be an uphill battle to get Congress to create an EDP fund. However, ultimately, the effects of climate change are apt to be so severe that it will become clear that Congress must act.

Another weakness of this approach has already been demonstrated by Superfund relocations: relocated people are frequently dissatisfied with their new homes or communities. This is even more significant for indigenous communities, many of whom have “a unique connection to the land that is often not present in the dominant society.”¹³⁶ Ideally, climate change would be mitigated, such that adaptation measures such as relocation would not be necessary in the first place. However, it is almost certainly too late for that. The International Panel on Climate Change has stated that the global temperature will increase by more than 1.5 degrees Celsius given the ongoing increase in the cumulative level of GHG emissions.¹³⁷ Even if emissions were stopped immediately, “[m]ost aspects of climate change will persist for many centuries.”¹³⁸ These include water stress such as “damaging, unprecedented flooding,” and more extreme weather-related disasters making “the lives of those living on coastlines, particularly the world’s poor, misery.”¹³⁹ Because of the effects of climate change already occurring, adaptation in the form of relocation is essential to the immediate protection of EDPs. However, there are lessons learned from CERCLA relocations regarding steps the government can take to ensure greater satisfaction with EDPs’ new homes. For example, EPA’s focus groups with those involved in the Escambia permanent relocation revealed that the majority of people who were “quite satisfied” with their new homes had identified their new homes themselves, rather than relying on the government to find potential new homes for them.¹⁴⁰ These people believed that they were

135. See, e.g., *About*, AMERICANS FOR TAX REFORM, <http://www.atr.org/about> (last visited July 5, 2014) (stating that among current U.S. congressmen, 219 Representatives and 41 Senators have pledged never to raise income taxes on individuals or businesses).

136. Abate & Kronk, *supra* note 22, at 187 (discussing how this includes both unique legal and spiritual or cultural ties to the land where they reside or to their traditional homelands).

137. *Feeling the Heat*, *supra* note 7 (citing a 1.5 degrees Celsius increase is in comparison to the global temperature in 1850 to 1900).

138. *Id.*

139. *Id.*

140. *Escambia Relocation Report*, *supra* note 113, at 6.

better at finding homes that met their individual needs.¹⁴¹ This demonstrates that allowing EDPs to identify new homes themselves is one way to address this weakness.

CONCLUSION

Despite the grave plight of climate EDPs, there is currently no global or domestic legal framework to address the needs of the great majority of them in the United States. Refugee law generally does not provide any protection, and climate EDPs in the United States have not been able to find a means of relief in the courts. A new legal framework is needed.

A model is already in place in the United States, off of which a new domestic legal framework could be based: CERCLA's relocation provisions. An EDP fund would, like the Superfund, cover relocation of EDPs from homes climate change has made uninhabitable. It would pay for permanent relocation of residents, businesses, and community facilities where the President determines that such relocation may be necessary to prevent substantial danger to present or future public health or welfare. The greatest contributors to GHG emissions could be taxed to pay for the EDP fund. Because the EPA already has a database of major GHG emitters, the data about whom to tax are already available.

This approach has some weaknesses, including a lack of will in Congress to act on climate and environmental issues and the disruption to EDPs who have to move to a new home and create a life in a new community. However, its strengths outweigh its weaknesses. A domestic solution is more likely than an international one. This is a solution that could be implemented relatively quickly because the U.S. government already has experience dealing with Superfund relocations and EPA already has a database of whom to tax. With the U.S. government already stating that the Village of Kivalina could be flooded any day, time is of the essence.¹⁴² Additionally, this solution will help to address environmental justice concerns, as it provides poor residents of communities rendered uninhabitable by climate change with the opportunity to be relocated to new homes. Although prospects for a new environmental tax may seem remote, eventually the number of people forced to relocate because of the effects of climate change will make it increasingly difficult for Congress to ignore the problem, and they will have to act.

141. *Id.*

142. U.S. GOV'T. ACCOUNTABILITY OFFICE, *supra* note 39.
