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Relocation, Relocation, Relocation: Balancing Financial and Personal Needs in a Scenario Where Money is Scarce

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Relocation, Relocation, Relocation: Balancing Financial and Personal Needs in a Scenario Where Money is Scarce

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INTRODUCTION

Natural disasters, such as floods and hurricanes, can disturb land and disrupt communities in any part of the world.[1] This disruption can make the land unsustainable, forcing communities to relocate. Take for example

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1. Julian Agymen et al., *Close to the Edge, Down by the River? Joining up Managed Retreat and Place Attachment in a Climate Change World*, 41 ENV'T & PLANNING A: ECON. & SPACE 509, 513 (2009).

Newtok, Alaska. Newtok is a Yup'ik Eskimo village in western Alaska.[2] Rising temperatures and melting permafrost altered the Ninglick River's course, causing floods, which shifted the river closer to the village.[3] Between 1983 and 1989, Alaska spent nearly $2 million to prevent further erosion.[4] Despite these efforts to combat erosion, the Newtok villagers voted to relocate nine miles away to Nelson Island with hopes of creating a more stable environment.[5] There are other areas, such as Kiribati and Shishmaref, Alaska, that face similar dilemmas involving natural disasters and relocation.[6]

In the United States, both federal and state governments have initiated various programs to support communities as they face this persistent problem. For example, Louisiana developed the Louisiana Road Home Program, which implemented billions of dollars supplied by the Department of Housing and Urban Affairs to assist rebuilding homes after hurricanes Katrina and Rita.[7] Other states, such as New Jersey and Iowa, have similar plans as well.[8] Some of those plans consist of buyout schemes where the government pays landowners the pre-disaster property value.[9]

Although there are plans to assist communities, there are times when the government elects to take the land, particularly during buyout options. That taken land can include damaged land, such as distressed property.[10]

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2. Robin Bronen & F. Stuart Chapin III, *Adaptive Governance and Institutional Strategies for Climate-induced Community Relocations in Alaska*, 110 PROC. NAT'L. ACAD. SCI., no. 23, at 9320, 9322 (2013).

3. *Id.*

4. *Id.*

5. *Id.*

6. *See* Charlotte Edmond, *5 Places Relocating People Because of Climate Change*, WORLD ECON. FORUM (June 29, 2017), https://www.weforum.org/agenda/2017/06/5-places-relocating-people-because-of-climate-change/ [https://perma.cc/77UP-A3G6].

7. John Lovett, *Moving to Higher Ground: Protecting and Relocating Communities in Response to Climate Change*, 42 VT. L. REV. 25, 38 (2017).

8. *See id.* at 42–50 (for example, there is the New Jersey's Blue Acres Program, and there is the Cedar Rapids, Iowa's, Voluntary Property Acquisition program).

9. *Id.* at 50. *See also*, RICE KINDER INST. FOR URBAN RESEARCH, CASE STUDIES IN FLOODPLAIN BUYOUTS: LOOKING TO BEST PRACTICES TO DRIVE THE CONVERSATION IN THE HOUSTON REGION 2018, https://kinder.rice.edu/sites/g/files/bxs1676/f/documents/KI%202018%20Buyout%20Report%20.pdf [https://perma.cc/962M-ETYC] [hereinafter CASE STUDIES].

10. *Distressed Property*, BLACK'S LAW DICTIONARY (10th ed. 2014). Property that must be sold because of the mortgage foreclosure or because it is part of an insolvent estate.

Damaged land also includes property that sustains damage from climate change or other natural disasters, which will be the focus of this Comment. When natural disasters wreak havoc on properties and communities, those areas can sustain everlasting effects and damages for which recovery is not a viable option. In that event, relocation is the most suitable method for protecting communities.

The United Nations High Commissioner for Refugees (UNHCR) defines relocation, or planned relocation, as a solutions-oriented measure, involving the State or a governmental entity, transporting a community to safer and habitable grounds.[11] In the event of relocation, a governmental entity can utilize buyout plans, or options, to purchase the property at *pre*-disaster prices.[12] However, that can become costly, especially in the short-term. Since purchasing the properties is expensive, it makes sense to purchase them for their true value rather than a previous pre-disaster value.

Picture the following hypothetical. Imagine that Congress changes federal policy and slashes aid for communities impacted by flooding. In this scenario, Congress is now offering relocation money by taking the damaged property and paying what is the constitutionally regulated minimum price: the fair market value. Would the government be able to operate in the same manner as buyers in the real estate market? In other words, based on practical legal principles, should the government be held to a different standard than a natural person buying land in the property market? Would the flooded property, before restoration, be worth the same as it was prior to the flooding? This Comment will elaborate on how and why the government could pay the fair market value, rather than pre-disaster prices, in a scenario such as this.

Part I of this Comment will present the history and case development in two parts. It will briefly discuss the history and development of eminent domain, takings, and just compensation and will discuss takings and just compensation post-*Kelo v. City of New London*.[13] Part II aims to explain how individuals purchase damaged property at post-storm values, rather than pre-storm values. It will first present an overview of property valuations and how property attains fair market value. Next, it will discuss how natural disasters impact housing and property prices. It will also present studies and figures displaying the effects that property can sustain. Then, it will discuss property values in the context of environmental torts,

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11. Conference Report, The UN Refugee Agency on Planned Relocation, Disasters and Climate Change: Consolidating Good Practices and Preparing for the Future, (Mar. 12–14, 2014), www.unhcr.org/54082cc69.pdf [https://perma.cc/KBA6-XWJM].

12. Lovett, *supra* note 7, at 50. *See also* CASE STUDIES, *supra* note 9.

13. 545 U.S. 469 (2005).

particularly in Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) cases. Part III of this Comment will briefly show the modern-day application of relocation efforts, highlighting the expensive costs. Part IV will then briefly restate the problem. Part V will elaborate on how purchasing the land at a lower price is better in this case and in the hypothetical. That Part will further address how the government will direct funds towards moving people further inland and providing better housing options for relocated people and communities.

I. BACKGROUND OF JUST COMPENSATION IN TAKINGS AND FLOODING

Over time, the principle of just compensation has evolved. This Part discusses this history of that evolution.

A. Evolution of Just Compensation up to Kelo

Eminent domain is the inherent power granted to the government via the Fifth Amendment of the United States Constitution to take land for public use.[14] The Fifth Amendment emphasizes that private property shall not be taken for public use without just compensation.[15] In the context of takings, just compensation is generally known as the fair market value of the taken property.[16] Thus, property owners receive an amount that is equal to the property's value.

The law of eminent domain and takings slowly emerged around the late 1700s.[17] Economic development in the United States required modification to the law, particularly a willingness from the judiciary to sacrifice old property for the development of new property.[18] The notion that the state should compensate people for property taken for public use

14. *Eminent Domain*, BLACK'S LAW DICTIONARY (10th ed. 2014). The inherent power of a governmental entity to take privately owned property, esp. land, and convert it to public use, subject to reasonable compensation for the taking. — Also (rarely) termed *compulsory purchase*; (in Scots law) *compulsory surrender*; (in Australia) *compulsory acquisition*.

15. U.S. CONST. amend. V.

16. *Just Compensation*, BLACK'S LAW DICTIONARY (10th ed. 2014). Under the Fifth Amendment, a payment by the government for property it has taken under eminent domain — usu. the property's fair market value, so that the owner is theoretically no worse off after the taking. — Also termed adequate compensation; due compensation; land damages.

17. MORTON J. HORWITZ, THE TRANSFORMATION OF AMERICAN LAW: 1780–1860, at 63 (Oxford Univ. Press 1992) (1977).

18. *Id.*

was not yet well-established at the time of the American Revolution.[19] Colonial legislatures in this era took private property without compensating the property owner.[20] The only colony paying compensation for building state-owned roads on unimproved land at the time was Massachusetts.[21] In fact, Colonial Massachusetts firmly followed just compensation for road construction, while New York limited just compensation to either land previously improved upon or to those who benefited from land taken for infrastructure expansion, such as private roads.[22]

It was not until the late eighteenth century when states included a just compensation requirement in their constitutions.[23] Vermont, the first state to include this provision, provided that the property owner received equivalent money for the value of his land.[24] Until the nineteenth century, New Jersey and Pennsylvania denied compensation on the ground that the original proprietary land grants had expressly reserved a portion of real property for the building of roads.[25] In Pennsylvania's case, that compensation was provided for improvements on land but not for unimproved land taken to build roads.[26]

Despite this view, statutory compensation in the nineteenth century created a trend to establish state constitutional provisions requiring just compensation for taken land.[27] By the 1820s, just compensation was beginning to gain general acceptance.[28] Five states required just compensation judicially rather than statutorily.[29] *Gardner v. Trustees of Newburgh* best expresses this rationale.[30] *Gardner* involved a group of trustees diverting water over plaintiff's land, which would damage plaintiff's property; at the time, New York did not have a provision for just

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19. *Id.*
20. William Michael Treanor, *The Origins and Original Significance of the Just Compensation Clause of the Fifth Amendment*, 94 YALE L.J. 694, 696 (1985).
21. *Id.*
22. HORWITZ, *supra* note 17.
23. The Vermont Constitution of 1777 and the Massachusetts Constitution of 1780 included it. Then, the Northwest Ordinance of 1787 required just compensation for governmental takings.
24. Treanor, *supra* note 20, at 702.
25. HORWITZ, *supra* note 17, at 64.
26. *Id.*
27. *Id.* at 65–66.
28. *Id.* at 66.
29. Treanor, *supra* note 20, at 714.
30. *Id.* at 715.

compensation.[31] Chancellor James Kent, a legal scholar and former Chief Justice of the New York Supreme Court, believed that state provisions and statutes for just compensation were crucial, so as to not deprive property owners of their right to own land.[32] Cases like *Gardner* helped promote the rationale for implementing just compensation in takings situations. After the 1850s, caselaw expanded the meaning of just compensation and takings.[33]

One such case was *Bauman v. Ross*.[34] Although the case does not concern flooding, it did shape the definition of just compensation. In 1888, a group of commissioners filed a separate petition to condemn tracts of land for the use of a permanent right of way.[35] On May 10, 1897, the United States Supreme Court reversed the lower courts on whether the government could acquire land without violating the Constitution, stating that the construction of the highway should continue without delay and that affected landowners will be compensated for their condemned land.[36] In this case, the Court determined the owner's entitlement: payment equal to the value of the thing that the property owner lost.[37]

Courts continued to expand or reiterate just compensation throughout the twentieth century. In 1917, in *United States v. Cress*, landowners sued the government to recover compensation for takings of private property by means of back-water flooding resulting from nearby dam construction and maintenance.[38] In that case, the federal government raised water levels, and lands adjacent to an unnavigable tributary suffered substantial losses in economic value.[39] The Court resolved what constituted public and private property within the beds of navigable streams.[40] The Court ruled that the property was private, and the government took the land when it erected a dam which subjected the property to constant overflows.[41]

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31. Gardner v. Trs. of Newburgh, 2 Johns. Ch. 162, (N.Y. Ch. 1816); *see also* Pumpelly v. Green Bay Co., 80 U.S. 166, 178 (1871).
32. Treanor, *supra* note 20, at 715; *see also Gardner*, 2 Johns. Ch. at 167.
33. Treanor, *supra* note 20, at 715–16.
34. Bauman v. Ross, 167 U.S. 548, 554 (1897).
35. *Id.*
36. *Id.* at 597.
37. *Id.* at 574 (stating, "The just compensation required by the Constitution to be made to the owner is to be measured by the loss caused to him by the appropriation. He is entitled to receive the value of what he has been deprived of, and no more.").
38. United States v. Cress, 243 U.S. 316 (1917).
39. *Id.* at 318.
40. *Id.* at 320.
41. *Id.* at 327.

In 1934, the Court in *Olson v. United States* stated that an owner of private property can be restored to "as good a position pecuniarily as if his property had not been taken. He must be made whole but is entitled to no more."[42] The Court in *United States v. Reynolds* held that just compensation "means the full monetary equivalent of the property taken. The owner is to be put in the same position monetarily as he would have occupied if his property had not been taken."[43] Although some of these cases do not involve natural or manmade flooding, similar principles apply by analogy. For areas affected by floods or other natural disasters, the government can still take the land for a public purpose or relocate people by paying them via buyout programs (e.g., paying just compensation for those lands). The power of taking for a public purpose, regardless of what disaster damaged the land, changed with the pivotal case of *Kelo v. City of New London*.[44]

B. The Commencement of the Kelo *Era and Beyond*

One monumental case that changed the landscape for takings and just compensation was *Kelo v. City of New London*. In 2000, the city of New London, Connecticut, created a development plan to revitalize the city.[45] A state agency classified the city as a distressed municipality.[46] The plan included publicly-owned spaces, such as a river walk, a park, and a new U.S. Coast Guard Museum.[47] The plan also included private spaces, such as a waterfront hotel and retail stores.[48] Some plaintiffs, including Susette Kelo, claimed that the takings did not qualify as public use under the Fifth Amendment.[49]

The Court disagreed with the plaintiffs' argument, believing the takings did qualify as public use. In a 5-4 decision, the majority stated that past jurisprudence transformed public use to mean public purpose.[50] Though the Court broadened the term "public use," the Court said state legislatures can impose stricter requirements in their own laws.[51] The

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42. Olson v. United States, 292 U.S. 246, 255 (1934).
43. United States v. Reynolds, 397 U.S. 14, 16 (1970).
44. 545 U.S. 469 (2005).
45. *Id.* at 472.
46. *Id.* at 473. Distressed municipalities are areas that are financially or economically weak, possibly teetering on the edge of bankruptcy.
47. *Id.* at 474.
48. *Id.*
49. *Id.* at 475.
50. *Id.* at 480.
51. *Id.* at 489.

dissenters acknowledged the notion that states could impose stricter requirements but criticized that economic development alone should not be the sole justification for a taking.[52] The dissent believed that the choice between public or private use belonged to the state legislature and the Court should give them significant consideration when determining the constitutionality of a state's decision.[53] This determination of constitutionality is presented in *Arkansas Game & Fish Commission v. United States*.[54]

In *Arkansas Game & Fish Commission v. United States,* the Army Corps of Engineers operated a dam upstream where the Corps released water into the commission's tree-growing area.[55] After six years, the Army Corps abandoned the dam testing, and the commission sued the United States, alleging the temporary testing constituted a taking.[56] The government believed the commission should not receive just compensation since the flooding constituted only a temporary taking.[57] The Supreme Court rejected the government's argument stating that temporary flooding induced by the government is not exempt from the umbrella of takings.[58]

The Court stated that time, foreseeability, and severity are factors to analyze in situations such as this.[59] The Court remanded the case back to the Federal Circuit to address the issue of just compensation.[60] On remand, the Federal Circuit opined that just compensation should take into consideration the significance of the damages and accurately estimate what the approximate value should be relative to fair market value.[61] When determining this value, one must consider various valuation methods and the property's condition.

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52. *Id.* at 469, 505–23. *See also* Jennie Jackson Miller, *Saving Private Development: Rescuing Louisiana from Its Reaction to* Kelo, 68 LA. L. REV. 631, 644 (2008).

53. *Kelo*, 545 U.S. at 497. *See also* Scott P. Ledet, *The* Kelo *Effect: Eminent Domain and Property Rights in Louisiana*, 67 LA. L. REV. 171, 176 (2006).

54. 568 U.S. 23 (2012).

55. *Id.* at 28.

56. *Id.* at 28–29.

57. *Id.* at 32–33.

58. *Id.* at 38.

59. *Id.* at 38–39.

60. *See* Ark. Game & Fish Comm'n v. United States, 736 F.3d 1364, 1379 (Fed. Cir. 2013).

61. *Id.* (stating, "The quantum of damages" must "be shown to a reasonable approximation," i.e., "estimated with a fair degree of accuracy.").

II. ON THE MARKET: NATURAL DISASTERS AFFECTING PRICES AROUND THE BLOCK

Numerous things affect property values. How those values change are determined by certain evaluation methods and certain variables.

A. Summation of Property Valuation Techniques

A myriad of determinants controls the price of property and home values. These determinants include, among others, inflation, population,[62] changes in adjacent properties,[63] and the economy.[64] One prime determinant is the adage "location, location, location." Yet, there is more to property valuation than just location. In the context of taxation, valuation of real property starts with statutory language.[65] Statutory language can differ, ranging from "fair market value" to "full and fair cash value."[66] Even though the language differs amongst some states,[67] each standard is still based on value, with the most common understanding being market valuation.[68] To calculate market value, appraisers utilize one

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62. *See* Office of Policy Development and Research, *Vacant and Abandoned Properties: Turning Assets into Liabilities*, U.S. DEP'T OF HOUS. & URBAN DEV., https://www.huduser.gov/portal/periodicals/em/winter14/highlight1.html [https://perma.cc/KBE6-3NBW] (last visited Oct. 7, 2019). (Vacant and abandoned properties present daunting challenges to communities nationwide. Evidence shows that vacant and abandoned properties drag down local economies, *impeded population growth*, depress property values, increase crime, and impose heavy cost burdens on local governments.) (emphasis added).

63. See Patrick Sisson, *The High Cost of Abandoned Property, and How Cities Can Push Back*, CURBED (June 1, 2018, 6:46 PM), https://www.curbed.com/2018/6/1/17419126/blight-land-bank-vacant-property [https://perma.cc/LH7K-XNUH] (A study in Columbus, Ohio, found a vacant building on the block can reduce the value of nearby properties by 20% or more, while a 2010 Philadelphia study estimated that vacant properties result in $3.6 billion in reduced household wealth citywide due to the blighting impact on neighboring properties.).

64. *See* Jospeh Nguyen, *4 Key Factors That Drive the Real Estate Market*, INVESTOPEDIA, https://www.investopedia.com/articles/mortages-real-estate/11/factors-affecting-real-estate-market.asp [https://perma.cc/H8ZT-MYGH] (last updated June 25, 2019).

65. Dennis M. Wilson, *The Lawyer's Role in Real Property Taxation*, 5 PROB. & PROP. 40, 41 (1991).

66. *Id.*

67. *Compare* LA. REV. STAT. § 47:2323 (2017) ("fair market value"), *with* R.I. GEN. LAWS § 44-5-12 (2015) ("full and fair cash value").

68. Wilson, *supra* note 65.

of three common methods: replacement cost approach, income approach, and comparable sales approach.[69]

The first method, replacement cost approach (or cost approach), calculates the value only on improved properties.[70] This method considers the value of the land as vacant and the depreciated value of the improvements.[71] The former is determined by analyzing similar property transactions and adjusting the prices to consider differences in location and parcel size.[72] The latter is determined by assessing costs to similar constructions and altering the given value to mirror the physical depreciation of the improvements.[73]

The cost approach is most useful for valuing unique lands or "special use facilities" where comparable data (e.g., rental and sales data) is difficult to discover.[74] An example that utilizes this method is when an appraiser evaluates large factories or plants.[75] Luckily, this method does not depend on active markets and data for comparable properties,[76] unlike the two other methods, which utilize some form of data for similar properties.

The second approach, the income approach, utilizes data from rents and net income that a piece of property can generate in the real estate market.[77] This approach is appropriate to use when analyzing commercial properties, such as apartment buildings, rental properties, and businesses.[78] This approach requires informed reasoning when analyzing expenses and the quality of the rental stream compared to other values on the rental landscape.[79]

The final method, the comparable sales method, is most useful when similar properties and the property in question are nearly homologous.[80]

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69. *Id.*
70. *Id.* at 42.
71. *Id.*
72. *Id.*
73. *Id.*
74. *Id.*
75. *Id.*
76. *The Cost Approach to Real Estate Valuation*, PROP. METRICS, https://www.propertymetrics.com/blog/2018/08/28/cost-approach/ [https://perma.cc/7XRM-7RVY] (last updated July 23, 2019).
77. Wilson, *supra* note 65, at 42.
78. *Id.*
79. *Id.*
80. *The Cost Approach to Real Estate Valuation*, *supra* note 76.

Property appraisals consider sales prices for similar properties.[81] The valuation accounts for any special or specific transactional terms.[82]

The valuation data considers adjustments for prices, as well as factors, such as quality, size, and property location.[83] Whether one utilizes the comparable sales technique or the other two, appraisals are synthesized to determine the market value.[84] This means that when utilizing any of the methods, the old saying is in fact true: location, location, location. However, all locations are not equal. Natural disasters can greatly affect and devastate some locations. Aside from property damage, there must be economic or price devaluation.

B. Rise and Fall of Prices like the Waves of a Flood

Studies have shown how natural disasters like floods influence property values. In 1986, the Yuba River destroyed a levee, which flooded two towns in northern California.[85] Researchers undertook preliminary field work two weeks after the initial flooding as well as fifteen months later.[86] Property values plummeted from the destruction.[87] After the event, the prices did recover, but those prices attained significantly lower points than the prices before the calamity.[88]

The study showed that factors such as the flood's depth, velocity, and duration influenced those residential land values.[89] All companies stopped showing houses two weeks after the incident and two to three months later, properties were sold at significantly lower prices.[90] The sales price of these transactions decreased from an average of $50,000 to approximately $40,000.[91] Three years prior to the catastrophe, the average list price for homes and properties was approximately $53,000, but by the end of August 1986, the average price was approximately $44,000, resulting in an estimated 18% decline.[92] After the event, the prices did recover, but

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81. Wilson, *supra* note 65.
82. *Id.*
83. *Id.*
84. *Id.*
85. Graham A. Tobin & Burrell E. Montz, *Catastrophic Flooding and the Response of the Real Estate Market*, 25 SOC. SCI. J., 167 (1988).
86. *Id.* at 171.
87. *Id.* at 167.
88. *Id.*
89. *Id.* at 170, 172.
90. *Id.* at 173.
91. *Id.*
92. *Id.*

those prices attained significantly lower points than the prices before the calamity.[93] Based on this study, a natural disaster can greatly influence prices. Although some studies vary on that position,[94] many conclude that floods and natural disasters negatively affect prices.[95]

In 2011, one study proposed a way to analyze floods and property values using variables, such as risk and behavioral economics, especially with climate change on the rise.[96] To analyze the price responses, the 2011 study focused on what analysts have called myopia[97] and amnesia,[98] meaning the study examined the differences in perceived risk and actual risk, especially when there were gaps in flooding.[99]

This study displayed interesting results. In one data set, home prices in frequently flooded areas would dip and slowly rise depending on the temporal difference between floods.[100] Individuals would recall the risk associated with floods, which would adversely affect property prices.

The results were more drastic for areas with increasingly frequent floods.[101] For areas that continually experienced frequent and increasingly severe floods, prices adjusted sharply due to both the risk associated with the market in the moment as well as a newly perceived higher risk of future occurrence.[102] This meant that although prices would drop drastically and then gradually rise, the next occurrence of a flood, particularly a frequent and increasingly severe one, would cause the market to drop slightly lower

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93. *Id.*

94. *See* Dennis Bialaszewski & Bobby A. Newsome, *Adjusting Comparable Sales for Floodplain Location: The Cases of Homewood, Alabama*, 50 APPRAISAL J., 114, 118 (1990) (concluding that appraisers may not be warranted in making adjustments to property sales for floodplain location).

95. Gwilym Pryce et al., *The Impact of Floods on House Prices: An Imperfect Information Approach with Myopia and Amnesia*, 26 HOUS. STUDIES, 259–61 (2011). *See also* Okymung Bin & Stephen Polasky, *Effects of Flood Hazards on Property Values: Evidence Before and After Hurricane Floyd*, 80 LAND ECON., Nov. 2004, at 490, 499 (concluding that the price of a residential housing property located within a floodplain is lower than an otherwise similar house located out of a floodplain).

96. Pryce et al., *supra* note 95, at 266.

97. *Id.* at 262. Myopia means discounting information from anticipated events, with the discount rising progressively as the event becomes less imminent.

98. *Id.* Amnesia means discounting information from past events, with the discount rising progressively as time elapses.

99. *Id.*

100. *See id.* at 270, fig.3.

101. *Id.* at 270–71.

102. *See id.* at 271, fig.4.

each time with only marginal increases in price.[103] It would equate to a numbing effect, meaning that the price would be at a nadir and hover around that point, for a period of time.[104]

Considering the figures throughout the study, there were two major impacts on price levels. First, in efficient markets, home prices would slightly decrease for a short time period regardless of a temporal difference between floods.[105] Second, in a market experiencing both myopia and amnesia, prices would drastically decline for an extended period of time after a flood.[106]

The following things ring true: the maxim, "location, location, location," matters, and property prices for floods, or any natural disasters,[107] will drop even if the declines differ amongst various localities. Although these studies focus more on homeowners with insurance, one can still look at the value from the perspective of the land itself and not from the perspective of insurance. In other words, whether the landowner does or does not have insurance should not affect the land's value. The land's value is based on the factors previously discussed, such as location, population, and inflation.[108] Thus, purchasing property accounts for those factors, in addition to stability and natural disasters.

In the event someone purchases a home or property in these scenarios, the price would have to be at the time of purchase rather than the price at an earlier time. In the context of real estate, it is sensible that properties would sell at a price *in that moment of time* rather than at an earlier stage (e.g., pre-disaster prices). Even caselaw[109] and regulations[110] underline similar reasoning. Further, there are contexts outside of flooding that contain analogous points. One such example comes from environmental torts contaminating properties, especially in the context of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA).

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103. *Id.* at 271.

104. *Id.* at 271, fig.4.

105. *Id.* at 274.

106. *Id.*

107. *See also* James C. Murdoch, Harinder Singh, & Mark Thayer, *The Impact of Natural Hazards on Housing Values: The Loma Prieta Earthquake*, 21 J. AM. REAL EST. & URB. ECON. ASS'N, 167–84 (1993).

108. Sisson, *supra* note 63.

109. Ark. Game & Fish Comm'n v. United States, 568 U.S. 23 (2012).

110. *See* 44 C.F.R. § 80.17(c)(1) (2009). The amount of purchase offer is the current market value of the property or the market value of the property immediately before the relevant event affecting the property ("pre-event").

C. Analogizing Property Damages with CERCLA and Property Contamination

Environmental torts are torts exposing land to damaging environmental conditions that injure or degrade the environment.[111] These torts commonly involve toxic or hazardous waste. To prevent environmental damage from those toxic materials, Congress enacted the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA).[112] Congress enacted CERCLA, informally called Superfund, to minimize contamination and environmental damage.[113] Liability in this context can be strict and expansive.[114]

There is a due diligence process for evaluating the value of contaminated properties.[115] The main reasons for the due diligence process include establishing liability protection for involved parties and disclosing environmental information about the property (i.e., evaluating the value of the property and the monetary costs associated with clean-up).[116] This standard allows for parties to understand the positives and negatives associated with the land, especially for parties in a "contractual relationship" (e.g., leases, title transfers).[117] By having this due diligence procedure, there is an elevated expectation associated with handling contaminated properties. Perhaps there should be a similar standard imposed in the relocation context.[118] Despite the necessary diligence in the CERCLA context, private parties may have a hard time recovering damages associated with contaminated properties.

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111. *Environmental tort*, BLACK'S LAW DICTIONARY (10th ed. 2014). A tort involving exposure to disagreeable or harmful environmental conditions or harm to and degradation of an environment (e.g., the pouring of acid on golf greens). • An environmental tort is usu. harmful to land rather than people, though people may find it unpleasant (e.g., odors from a landfill). By contrast, toxic torts involve exposure to harmful substances that cause personal physical injury or disease.

112. *Superfund: CERCLA Overview*, ENVTL. PROTECTION AGENCY, https://www.epa.gov/superfund/superfund-cercla-overview [https://perma.cc/9KJT-KCB4] (last visited Oct. 6, 2019).

113. *What is Superfund?*, ENVTL. PROTECTION AGENCY, https://www.epa.gov/super fund/what-superfund [https://perma.cc/JLU4-BS8Z] (last visited Oct. 6, 2019).

114. See 42 U.S.C. § 9607 (2018). See also 42 U.S.C. § 9601(20) (2018).

115. 1 ENVIRONMENTAL LAW PRACTICE GUIDE § 5A.01 (Michael B. Gerrard ed., Matthew Bender).

116. *Id.*

117. *See* 42 U.S.C. § 9601(35) (2018).

118. *Infra* discussion Part V.

CERCLA does not allow for private parties to recover damages such as diminution in property value (commonly called stigma damages), personal injury, or lost profits.[119] However, some states, such as Alaska and Minnesota, allow plaintiffs to recover for diminution in property value.[120] Still, plaintiffs can challenge the disputed value of the property.[121]

Starting the protest differs amongst jurisdictions, but generally, the taxpayer will file a complaint with their local board of review.[122] Local rules may dictate that the taxpayer include a basic written letter explaining the reasons for objecting to the assessed value.[123] The timeline for filing also varies, but most timeframes coincide with the issuance of the recently determined value for the proper tax year.[124] After filing, an informal conference between the taxpayer and the assessor will commence.[125] The assessor will issue a decision following the meeting.[126]

If the taxpayer is dissatisfied with the assessor's determination, the taxpayer can request a hearing before their respective board of review.[127] This formal hearing allows plaintiffs to present evidence, but what qualifies as presentable evidence varies.[128] If that hearing achieves unfavorable results for the taxpayer, the taxpayer can further appeal at the state level.[129] The rules governing the administrative appeals process for disputing valuation differs across jurisdictions.[130]

Although determining environmental damages can be amorphous, a basic equation for valuing contaminated properties is the property's stigma, or perceived value, plus the expenses to remediate the property

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119. *See* Alexandra B. Klass, *CERCLA, State Law, and Federalism in the 21st Century*, 41 SW. L. REV. 679, 685 (2012).

120. *Id.* at 686.

121. *See, e.g.*, Karina M. Thomas & David B. Clayton, *Challenging Valuations of Contaminated Property*, 26 COLO. LAW. 71, 72 (1997).

122. 2 BENDER'S STATE TAXATION: PRINCIPLES AND PRACTICE § 23.05 (Charles W. Swenson ed., Matthew Bender) (2019).

123. *Id.*

124. *Id.*

125. *Id.*

126. *Id.*

127. *Id.*

128. *Id.*

129. *Id.*

130. *Id. Compare* LA. REV. STAT. § 47:1989 (2018) ("Appeals of the board of review must be filed with the tax commission within 10 business days of the board's decision.") *with* D.C. CODE § 47-825.01 ("Petitions to request an administrative review must be filed by April 10 of the tax year.").

subtracted from the value cleanup (typically the assessor's valuation).[131] There are cases involving disputes of the property's value from contamination, indicating how property value changes due to toxicity and contamination from Superfund sites. In *Westling v. County of Mille Lacs*,[132] business owners held land that became contaminated due to unstable organic compounds produced from their manufacturing company.[133] The Westlings contacted a testing firm to determine the extent of the damage and contamination.[134] They also contacted an appraiser, who estimated costs to cure the property would total approximately $3 million with stigma discount equaling around $1.35 million.[135] The expert determined the property's worth was a negative $2,760,000 as of January 2, 1993.[136]

However, the county's expert assessed the costs and determined the property was worth $900,000 on the same date.[137] The local tax court, which handled the case prior to this level, agreed with the plaintiffs, stating the cost to cure the property would exceed $3 million and that the assessor should reduce the market value to $0.[138] The Supreme Court of Minnesota upheld the tax court's reasoning based on the evidence and calculations of the damages.[139] As seen from this case, and other similar cases,[140] properties experiencing some form of damage can decrease in value.

III. THE REAL WORLD: NEWTOK AND KIRUNA

Communities affected by flooding, hurricanes, or other catastrophes can either continually rebuild their community or relocate. Individuals and communities must move if the government elects to take their land. In those scenarios, people will have to relocate because the land is either uninhabitable or unsustainable due to damage. As previously mentioned, one occurrence is the relocation of indigenous tribes in Newtok, Alaska.[141]

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131. Thomas & Clayton, *supra* note 121, at 71. For example, one equation is this: "Value Impaired = Value Clean – (Costs to Cure + Stigma)."

132. Westling v. Cty. of Mille Lacs, 543 N.W. 2d 91 (Minn. 1996).

133. *Id.* at 92.

134. *Id.*

135. *Id.* at 93.

136. *Id.*

137. *Id.*

138. *Id.*

139. *Id.*

140. *See, e.g.*, Commerce Holding Corp. v. Bd. of Assessors, 649 N.Y.S. 2d 932, 936 (N.Y. App. Div. 1996).

141. *See* discussion *supra* Introduction.

Eskimo tribes in Newtok, Alaska, faced challenges caused by climate change and erosion.[142] Newtok sits atop permafrost in the Yukon-Kuskokwim Delta where the Ninglick River and the Bering Sea border the village.[143] Numerous climate factors, such as rising temperatures and thawing permafrost, altered the course of the Ninglick River, causing erosion to hasten and take with it the land surrounding the community.[144] The effects of this erosion have greatly hampered Newtok's infrastructure, such as eroding Newtok's dumpsite and primary barge landing.[145] Although the citizens of Newtok elected to relocate to a safer location, the moving process took time and money.[146] Another example is the relocation of Kiruna, Sweden. Kiruna, a mining town in northern Sweden, is relocating a few miles east due to sinkholes appearing in the town.[147] However, climate change or rising sea levels did not create this upheaval. Rather, the Luossavaara-Kiirunavaara Aktiebolag (LKAB), a state-owned mining company, caused the appearance of sinkholes due to years of mining the surrounding area.[148] LKAB will pay approximately 3.5 billion kronor (roughly $390 million USD) while setting aside an additional 7.5 billion kronor ($840 million USD) for the project.[149] The total cost of the project will surpass 12 billion kronor ($1.3 billion USD).[150] Although some property values are uncertain, those values are assessed independently.[151] Once the value is determined, LKAB will pay property

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142. Robin Bronen, *Climate-Induced Community Relocations: Creating an Adaptive Governance Framework Based in Human Rights Doctrine*, 35 N.Y.U. REV. L. & SOC. CHANGE 357, 376 (2011).

143. *Id.* at 375–76.

144. *Id.* at 376.

145. *Id.* at 378–79.

146. Katie Peek, *How to Survive in a Warmer World*, SCI. AM. (Sept. 1, 2016), https://www.scientificamerican.com/article/how-to-survive-in-a-warmer-world-interactive/ [https://perma.cc/987K-QZRU?type=image].

147. Jonah Engel Bromwich, *How Do You Move a City? Ask Kiruna, Sweden*, N.Y. TIMES (May 20, 2016), https://www.nytimes.com/2016/05/21/world/europe/kiruna-sweden-move-arctic-circle.html [https://perma.cc/D3D7-CSF9].

148. *Id.*

149. Nicolas Rolander, *Swedish City of Kiruna Plans Massive Relocation: Ground Fissures Forcing Entire Town to Move Over Next Two Decades*, WALL STREET J. (Sept. 3, 2013), https://www.wsj.com/articles/swedish-city-of-kiruna-plans-massive-relocation-1378248241 [https://perma.cc/DLE7-B7LE].

150. Bromwich, *supra* note 147.

151. Rolander, *supra* note 149.

owners an additional twenty-five percent[152] premium.[153] Thus, LKAB will buy out landowners at market value plus twenty-five percent.[154] Although these examples are costly, they are the simpler relocation scenarios (i.e., having time and money to plan relocation appropriately).

IV. THE PROBLEM: SO LITTLE TIME, SO LITTLE MONEY

The goal of this Comment is to provide a new perspective to the discussion of relocation: how should the government pay for damaged property in a scenario calling for relocation, especially in the short-term when resources are low? So far, the government's relocation efforts have achieved success. Yet, that success includes examples that highlight the exorbitant costs when relocating considerably small numbers of people. Consider Isle de Jean Charles located in Louisiana.

Isle de Jean Charles is a town in the Bayou State battling climate change. In 2016, the State government spent approximately $50 million to relocate the town's residents.[155] Although some people initially refused, they realized that a move was necessary and selected a location near Thibodaux, Louisiana.[156] Yet recently, some members of the Biloxi-Chitimacha Choctaw tribe rejected the relocation plan due to unresolved concerns.[157] However, Louisiana failed to notify the tribe that the closing on the property already occurred.[158] But some families, including those of

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152. *See* 4 ch. 1 § EXPROPRIATIONSLAG (Svensk författningssamling [SFS] 1972:719) (Swed.), *available at* https://lagen.nu/1972:719#K4P1S1 [https://perma.cc/MTD9-YFQX].

153. Rolander, *supra* note 149.

154. Josh Dean, *How to Move a Town*, BLOOMBERG BUSINESSWEEK (Sept. 4, 2017), https://www.bloomberg.com/news/features/2017-09-05/the-audacious-complicated-plan-to-move-a-swedish-mining-town [https://perma.cc/XB3B-55LL].

155. Tristan Baurick, *Here's Where Residents of Sinking Isle de Jean Charles Will Relocate*, NOLA.COM (Dec. 19, 2017, 7:42 PM) https://www.nola.com/environment/index.ssf/2017/12/site_chosen_for_relocating_isl.html [https://perma.cc/HZ87-LA8K].

156. *See also* Faimon A. Roberts III, *State Chooses Site Near Thibodaux to Relocate Isle de Jean Charles Climate Refugees*, ADVOCATE (Dec. 21, 2017, 7:00 PM), https://www.theadvocate.com/baton_rouge/news/environment/article_4c46b2ba-e685-11e7-9c86-0f1dd0c64526.html [https://perma.cc/RN2D-JTWR].

157. *See* Julie Dermansky, *Isle de Jean Charles Tribe Turns Down Funds to Relocate First U.S. "Climate Refugees" as Louisiana Buys Land Anyway*, DESMOG (Jan. 11, 2019), https://www.desmogblog.com/2019/01/11/isle-de-jean-charles-tribe-turns-down-funds-relocate-climate-refugees-louisiana [https://perma.cc/GTB2-U4RW].

158. *Id.*

non-Native American descent, still refuse to relocate.[159] Considering that Thibodaux is only four meters (or thirteen feet) above sea-level,[160] there remains the possibility that relocation efforts could occur years from now if Thibodaux faces torrential rain, flooding, or any harmful climate change factors. Other places are experiencing this troublesome issue too.

In April 2018, Harris County in Texas applied for over $160 million in FEMA funds to buyout 1,000 homes that were deemed high risk.[161] Recall from above that FEMA does not utilize a just compensation method, but rather, it purchases land at pre-disaster values.[162] Most of those homes are located in low-lying areas.[163] The Trump administration initially granted approximately $26 million of those funds to begin the buyout process.[164] The high-risk homes are considered "substantially damaged," meaning that the cost of rebuilding would exceed half of the property's market value.[165] The goal of these expensive buyouts is to prevent homes from being restored in harm's way.[166]

Relocation costs range approximately from $200,000 to $1 million per person.[167] Preliminary estimates for relocating some Alaskan coastal communities ranged from $20 million to $200 million to move roughly

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159. James Varney, *Residents of Disappearing Louisiana Isle Refuse $50 Million Relocation Plan: 'This is My Paradise,'* WASH. POST (Apr. 16, 2019), https://www.washingtontimes.com/news/2019/apr/16/isle-de-jean-charles-louisiana-families-refuse-rel/ [https://perma.cc/5B2M-R6WU]. *See also* Jenny Jarvie, *On a Sinking Louisiana Island, Many Aren't Ready to Leave*, L.A. TIMES (Apr. 23, 2019, 5:00 AM), https://www.latimes.com/nation/la-na-jean-charles-sinking-louisiana-island-20190423-htmlstory.html [https://perma.cc/S44M-2NQ8].

160. *Elevation of Thibodaux, LA*, USA, WORLDWIDE ELEVATION MAP FINDER, http://elevation.maplogs.com/poi/thibodaux_la_usa.43425.html [https://perma.cc/66BD-KFCK] (last visited Oct. 7, 2019).

161. Daniel Cusick, *FEMA Approves Buyout Funds for Houston Homes Flooded by Harvey,* SCI. AM. (June 7, 2018), https://www.scientificamerican.com/article/fema-approves-buyout-funds-for-houston-homes-flooded-by-harvey/ [https://perma.cc/9SXP-S3UV].

162. *See* discussion *supra* Introduction.

163. Cusick, *supra* note 161.

164. *Id.*

165. *Id.*

166. *Id.*

167. Oliver Milman, *'We're Moving to Higher Ground': America's Era of Climate Mass Migration is Here*, GUARDIAN (Sept. 24, 2018), https://www.theguardian.com/environment/2018/sep/24/americas-era-of-climate-mass-migration-is-here [https://perma.cc/8RP4-GBF3].

500 inhabitants per coastal village.[168] Coastal villages in Alaska, such as Newtok, fall into this category. One estimate to move villagers of Newtok, Alaska, ten miles to Nelson Island reflected costs upward to $120 million.[169] Another coastal village, Kivalina, estimated costs equaling nearly $400 million to move just 400 residents.[170] No country is impervious to the high costs. The Kiruna, Sweden, move equated to an American value of nearly $390 million.[171] Whether it is through buyout options or relocation plans, the federal government is paying exorbitant costs to safely transport a small amount of people.

Now recall the hypothetical stated earlier.[172] Take these real-life floods and natural disasters, and picture that Congress has changed federal policy to end aid for flood victims. Instead, Congress is offering relocation money, rather than money from aid packages, by taking the damaged property. The government could continue using its buyout options by purchasing property at pre-disaster prices. However, there is a more affordable approach to utilize for relocation.

V. SOLUTION: PURCHASE AT LOWER PRICES AND UTILIZE MONEY EFFICIENTLY FOR HOUSING AND RELOCATION EFFORTS

Based on established principles and consumer behaviors, the solution in this relocation hypothetical is purchasing the damaged property at a lower price and using the saved money to relocate people closer inland. As mentioned in the previous examples, relocation efforts are expensive even when moving a small number of people a few miles (5–15 miles) from their previous location. Moving people to sustainable areas requires funds that would likely decrease as relocation and climate change

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168. Robert W. Kates, William R. Travis & Thomas J. Wilbanks, *Transformational Adaptation When Incremental Adaptations to Climate Change are Insufficient*, PROCS. NAT'L. ACAD. SCI. U.S. 109, 7156–61 (2012), https://www.pnas.org/content/pnas/109/19/7156.full.pdf [https://perma.cc/7YA6-DE86].

169. James Varney, *For 'Climate Relocation,' the Dollar Math is Hardly Settled*, REALCLEAR INVESTIGATIONS (Nov. 9, 2017), https://www.realclearinvestigations.com/articles/2017/11/06/climate_relocation.html [https://perma.cc/5XAA-UJRP].

170. *See* Randall S. Abate, *Public Nuisance Suits for the Climate Justice Movement: The Right Thing and The Right Time*, 95 WASH. L. REV. 197, 207 (2010) (citing Complaint for Damages at 45, Kivalina v. ExxonMobil Corp., 663 F. Supp. 2d 863 (N.D. Cal. 2009) (No. CV08-1138 SBA)).

171. *See* discussion *supra* Part III.

172. *See* discussion *supra* Introduction.

problems persist.[173] Under the current schematics, individuals receive money priced at pre-storm values. By purchasing land at its post-disaster value, the government saves money to utilize for other relocation-based purposes. Further, this would prevent wasting money on unnecessary purchases due to failed communication.[174] With that extra money, the federal government can efficiently utilize funds to tackle climate change relocation.

The federal government can collaborate with state or local governments and spend the savings to move people further inland. As previously seen, the government has relocated people from unsustainable areas to nearby coastal areas or other similar areas.[175] Many coastal and similar areas are slowly succumbing to the tides, with those neighboring areas suffering the same fate.[176] In Louisiana, for example, wetlands and coastal regions lose over 70 square kilometers of land annually.[177] If the government uses funds to relocate people a short distance away, it is possible that climate change will affect those areas that were once a safe haven. To end that repetitive cycle, the government can use the money to move people inland to an undisturbed area of land (e.g., country land). For an area to count as "inland," a diligence standard, such as in the CERCLA context,[178] would exist in the relocation context.

If a top priority is to efficiently and safely relocate communities, the land must be stable. Land that is far from bodies of water such as the Mississippi River and Gulf of Mexico, or at least closer inland, would also classify as stable. This is so that the government can build sustainable housing not susceptible to future flooding. Having a similar due diligence standard in writing will promote the notion that relocation efforts should be effective and efficient.

By doing so, the government can then utilize funds to concentrate on building better housing alternatives, rather than spending it on temporary

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173. Liz Koslov, *The Case for Retreat*, 28 PUB. CULTURE S2, 359, 366 (2016).

174. Dermansky, *supra* note 157.

175. *See* discussion *supra* Part IV.

176. *See* Thomas C. Frohlich & Michael B. Sauter, *American Cities That Will Soon be Under Water*, MSN (June 19, 2018, 3:05:18 PM), https://www.msn.com/en-us/money/realestate/american-cities-that-will-soon-be-under-water/ar-AAyRPEM?ocid=ARWLCHR [https://perma.cc/PY8D-TWKD].

177. *Louisiana Coastal Wetlands: A Resource at Risk*, U.S. GEOLOGICAL SURVEY, https://pubs.usgs.gov/fs/la-wetlands/ [https://perma.cc/Y4GM-RMEN] (last visited Oct. 7, 2019).

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

solutions.[179] In the context of natural disasters (e.g., relocation, hurricanes, floods), housing people is a problem.[180] There is a lack of affordable housing alternatives, with the availability of housing decreasing across the country.[181] This also eliminates attempts to rebuild on land or areas subject to constant storms that damage sustainable land and infrastructure.[182]

Under this plan, the government can only use money for relocation efforts (e.g., moving costs, housing efforts). When relocation commences, the government pays the minimum value via the takings doctrine. From there, the federal government would provide a larger supplement (better housing and cash compensation) contingent on people relocating inland, meaning a safer distance from flooded and eroded areas. In the context of takings, there are no mechanisms dictating that the government cannot take land at fair market value. Even outside the context of takings, some regulations allow the government to pay a minimum value.

Title 44 of the Federal Code of Regulations permits the government during emergency situations to purchase at either fair market value or pre-disaster value.[183] In that sense, the government could behave like a real estate market participant and simply purchase the land at fair market value rather than pre-disaster value. Recall that caselaw allows for this so long as the government pays just compensation to the property owners. After payment, the government has to utilize the land for a public purpose. Here, the public purpose can include using land to establish proper housing for relocation. This would also include an economic benefit satisfying requirements from *Kelo v. City of New London*.[184]

Recall from *Kelo* that the government purchased tracts of land in the Fort Trumball area to revitalize the city of New London.[185] Since the city

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179. *See* Joyce N. Levine, Ann-Margaret Esnard & Alka Sapat, *Population Displacement and Housing Dilemmas Due to Catastrophic Disasters*, 22 J. PLAN. LITERATURE 3, 7 (2007).

180. *Id.*

181. *Id.*

182. *See* Michael R. Greenberg, Michael Lahr & Nancy Mantell, U*nderstanding the Economic Costs and Benefits of Catastrophes and Their Aftermath: A Review and Suggestions for the U.S. Federal Government*, 27 RISK ANALYSIS 83, 85, 89 (2007). *See also* Jason Iverson, *Funding Alaska Village Relocation Caused by Climate Change and Preserving Cultural Values During Relocation*, 12 SEATTLE J. SOC. JUST. 561, 572 (2013). *See also* Koslov, *supra* note 173, at 370.

183. 44 C.F.R. § 80.17(c)(1) (2009). The amount of purchase offer is the current market value of the property or the market value of the property immediately before the relevant event affecting the property.

184. *See generally* 545 U.S. 469 (2005).

185. *Id.* at 473–75.

was in economic decline, one could argue that the property was damaged, in the economic sense, and thus on the verge of becoming inhabitable or unsustainable. Hence, there was a public purpose to keep the city afloat. In the case of relocation, especially in Newtok and Isle de Jean Charles, land is, or was, also on the verge of being unlivable or unsustainable for humans. Since people can no longer live there, people must move to safer, livable areas. With that move, however, there is a social or concern.

The main social concern when relocating people and communities, particularly indigenous tribes, is that the move will disturb their culture.[186] Some scholars suggest that successful efforts should be cognizant of social values.[187] This is true, particularly if people feel a personal or cultural connection to their homeland.[188] Although there are balance and cultural concerns, helping indigenous communities move to a new, inland area can help maintain cultural cohesion and keep values intact.

By providing a new, similar area that allows for relocated tribes to feel connected and center the area around values and culture, the government's efforts would allow for indigenous tribes to retain their societal and cultural identities. Indigenous communities would have a new start on inland areas while keeping their societal expectations intact. Although there would be an acclimation period to this new area, there would be no fear of indigenous tribes interacting with people they might otherwise feel threatened by. Further, by moving the tribes inland, this eliminates the possibility of having to potentially relocate them again and unroot any connections they have formed to their new home. This would best be done through constant communication and negotiations as well as prioritizing what the tribe values.

Another similar tactic to use, mainly for relocating non-indigenous tribes, is providing options for people to move to declining cities such as Detroit[189] or Pittsburg[190] or to small towns. Moving non-indigenous people

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186. Iverson, *supra* note 182, at 576.

187. *See* Johanna Wolf, Ilana Allice & Trevor Bell, *Values, Climate Change, and Implications for Adaptation: Evidence from Two Communities in Labrador, Canada*, 23 GLOBAL ENVTL. CHANGE 548, 549 (2013) ("What is considered legitimate and successful adaptation depends on what people perceive to be worth preserving and achieving, including their culture and identity.").

188. Eli Keene, *Resources for Relocation: In Search of Coherent Federal Policy on Resettling Climate-Vulnerable Communities*, 48 TEX. ENVTL. L.J. 119, 145 (2018).

189. *See* Eric A. Scorsone, *Depopulating Cities and Chronic Fiscal Stress: The Detroit Story*, 14 J.L. & SOC'Y 207, 210 (2013).

190. *See* Sarah Jacobs, *10 American Cities That Have Fallen into Decline*, BUS. INSIDER (Jan. 14, 2018, 8:46 AM), https://www.businessinsider.com/us-census-data-population-decrease-shows-american-cities-in-decline-2018-1 [https

to declining cities and small towns can provide a population or economic boost to the city or town. In Detroit's city limits, there exists around forty square miles of vacant homes.[191] There are numerous houses, which are not move-in ready, are too low for lenders, or might be too costly for poor individuals.[192] The government can utilize the extra money from their minimum value purchase and direct it towards better housing alternatives. By redirecting extra funds and making contingencies for people to move to cities like Detroit, the government could improve existing homes in Detroit and rebuild them to provide better housing alternatives for relocated people. Although this would cost some money, the abandoned and cheaper homes can cost around $32,000.[193] Through their purchase, the government can mitigate declining population numbers and provide an economic boost to those areas.

Critics might argue this is unfair because the affected individuals would receive less money in comparison to current schemes. Although monetary allocations are different, the benefits would not disappear. They would just come in different forms such as housing and safety. This is analogous to what some countries already do. For example, Sweden provides up to an additional twenty-five percent when taking property.[194] Here, the additional percentage is a supplement or benefit topped onto the taking of the property. The difference in this Comment's solution is the type of supplement utilized. By focusing efforts on non-monetary supplements, there would be more fair and practical living options[195] for relocated communities with a possible economic benefit for places similar to Detroit.

://perma.cc/ 32F3-U7Z3].

191. *See* Andre Douglas Pond Cummings, *Racial Coding and the Financial Market Crisis*, 2011 UTAH L. REV. 141, 173 (2011).

192. Matthew Goldstein, *Detroit: From Motor City to Housing Incubator*, N.Y. TIMES (Nov. 4, 2017), https://www.nytimes.com/2017/11/04/business/detroit-housing.html [https://perma.cc/X2YA-CKP4].

193. Jacob Passy, *Detroit has the Country's Most Unequal Housing Market-and That Could be a Good Thing*, MARKETWATCH (July 22, 2018, 10:39 AM), https://www.marketwatch.com/story/detroit-has-the-countrys-most-unequal-housing-marketand-that-could-be-a-good-thing-2018-07-19 [https://perma.cc/4WLU-J 7W2].

194. 4 ch. 1 § EXPROPRIATIONSLAG (Svensk författningssamling [SFS] 1972:719) (Swed.), *available at* https://lagen.nu/1972:719#K2P7 [https://perma.cc/MTD9-YFQX].

195. For example, the citizens of Newtok received abandoned military barracks as their housing alternative. *See* Kyla Mandel, *In Alaska, a Town Threatened by Climate Change Gets Federal Funding to Relocate*, THINK PROGRESS (Mar. 23, 2018, 2:45 PM), https://thinkprogress.org/newtok-alaska-gets-relocation-funding-35b4434242a6/ [https://perma.cc/T48Y-E8LK].

CONCLUSION

Relocation is an expensive but necessary measure when land is unsustainable. Land is finite but so is money. If the stated hypothetical[196] comes to fruition, then relocation efforts would be difficult to execute. Under current law and established principles, the government could act as any other buyer in the real estate market. The government could apply takings principles and pay for the damaged land at fair market value. This is analogous to the behavior of consumers in the real estate market. By purchasing the damaged land at fair market value, the government would save money since it is currently purchasing these properties at pre-disaster value.

Although people would not receive as much under this scenario, the government would not hang them out to dry. Those individuals would receive just compensation, as well as supplement aid in the form of relocation and better housing options. Although some would argue it pervades the idea of fairness, it would be worse to encounter a scenario where people would receive no payment in the event the government ended aid. Thus, by applying its current principles and emulating market participant behaviors and principles, people would still receive money, and the government would still pay, albeit at a lesser cost. Considering that relocation is affecting numerous parts of the country—and the world—that is not a bad price to pay in order to conquer the looming dangers for the long haul.

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196. *See* discussion *supra* Introduction.

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