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TAKING FLINT

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Abstract:

In April 2014, Michigan state officials switched Flint's drinking water from Lake Huron to the Flint River to save about \$100 per day. The Flint water proved significantly more corrosive, causing lead and other contaminants to leach from aging pipes into it. Although adding phosphate corrosion inhibitors would have mitigated this issue, the state failed to evaluate public health impacts before the switch. Immediately after the switch, residents, mostly poor and black, complained of memory loss, vision problems, and other ailments. Officials ignored residents' complaints and assured them of the water's safety, while simultaneously restoring General Motors to Lake Huron water because the Flint water was corroding engine parts.

Eighteen months later, Flint reconnected to Lake Huron, but the damage had been done. Residents were already exposed to contaminant levels twice the amount defined as hazardous by EPA regulations, and the corroded pipes only continued to make the water more unsafe. Reports of lead poisoning in children and Legionnaire's disease deaths tripled after the switch to Flint water.

In numerous environmental justice cases, beginning with the landmark *Warren County* suit, plaintiffs have sued private and local public entities on the theory that racial bias and political disenfranchisement drove decisions for dumping hazardous waste in

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their communities, allowing the decision-makers to be named as defendants and sued for monetary damages. While these same theories are also in the forefront of the Flint crisis, Flint is unique because the environmental harm was perpetrated by a state takeover of municipal political power. Not only were residents robbed of their right to local elections, but the takeover also placed state officials as the primary decision-makers. These officials are cloaked by sovereign immunity, unlike their local counterparts and private entities. The state's role in Flint's water crisis creates barriers to effective judicial relief for its residents. Therefore, it is unlikely that the plaintiffs in the class action lawsuits against state officials will recover damages. If, as one lawsuit seeks to do, a claim is brought under the Civil Rights Act or Equal Protection Clause, claimants must prove intentional discrimination, a standard nearly impossible to meet. Recognizing these barriers, some plaintiffs seek only injunctive relief through replacement of lead pipes, to circumvent sovereign immunity's bar to monetary compensation.

This Article proposes a novel, alternative theory to both compensate residents' permanent physical injuries and complete infrastructure changes to avoid further water contamination: The Flint Water Crisis is a physical taking of residents' property requiring just compensation. Takings claims abrogate state sovereign immunity, avoiding aforementioned obstacles. Here, the government's intentional, physical invasion, coupled with the substantial deprivation of economically beneficial use, supports the *physical* takings claim, and the actions of the government also lay the foundation for a *regulatory* takings claim. And under Michigan's Constitution, just compensation for physical takings includes "special effects" – detrimental outcomes experienced only by those affected by the taking. Beyond Flint, this article demonstrates the need for legal strategies in public health crises that provide retrospective relief and are not immobilized by immunity.

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INTRODUCTION

In Michael Moore's documentary *Roger & Me*, found footage from 1958 depicts the residents of Flint throwing a lavish fiftieth birthday party and parade for General Motors to show their appreciation for the prosperity created by the company.² During the 1960s and 1970s, there were 200,000 residents of Flint, Michigan; 80,000 of which were employed by the local General Motors (GM) plant.³ In the 1980s, at a time when GM was one of the richest companies in America, it announced the closing of eleven manufacturing plants in the United

² ROGER & ME (Warner Brothers 1989).

³ Trymaine Lee, *The Rust Belt: Once Mighty Cities in Decline*, MSNBC (Sep. 1, 2015), http://www.msnbc.com/interactives/geography-of-poverty/ne.html.

States and relocated those plants to Mexico.⁴ Thus, began the decline of the Rust Belt and of Flint, Michigan.

Further compounding matters, the commonality of appointing emergency managers, especially over majority black jurisdictions, is controversial.⁵ When an emergency manager is appointed, control of the city is under the governor's jurisdiction, rather than the local officials who were elected by their constituents.⁶ Many believe that the appointment of emergency managers in predominantly black communities disenfranchises voters by ousting elected officials and replacing them with people chosen by the governor.⁷ Moreover, residents of these communities believe that emergency managers are more concerned with correcting the city's financial deficits rather than focusing on public health; this problem is especially apparent when the governor belongs to a different party than the local constituents of a city in which an emergency manager is appointed.⁸

A fatal decision made by the emergency manager and other state officials who replaced the decision-making authority of local officials and the voting power of Flint residents was the choice to use the Flint River as a source of drinking water for the city of Flint without taking the necessary anti-corrosive measures. As a result, lead leached into the water that was used for eating, drinking, and bathing. After months of inaction, the truth was revealed, and all levels of government have attempted to turn off the faucet, but the damage has been done. Although litigation will not bring back the residents who prematurely died from Legionnaire's disease or ensure the behavior, cognitive, and physical effects of lead poisoning will be removed from the blood and bodies of the people of Flint, several lawsuits have been filed.⁹ However, the emergency law that was meant to rebuild the city

⁴ ROGER & ME *supra* note 2.

⁵ Julie Bosman & Monica Davey, Anger in Michigan Over Appointing Emergency Managers, N.Y. TIMES (Jan. 22, 2016), http://www.nytimes.com/2016/01/23/us/anger-in-michigan-overappointing-emergency-managers.html?_r=0.

⁶ Id.

⁷ Id.

⁸ Id.

⁹ Complaint, Mays v. Snyder, 14002 F. Supp. 15 (E.D. Mich. 2015) (No. 15-13002).

of Flint has built a wall of protection around the state officials responsible for the crisis, in the form of sovereign immunity.

This Article sets forth takings law as a means of penetrating that wall. Takings law is an unconventional approach to address the damage created by the use of the Flint River as a source for the city's drinking water, yet this may be the most direct way that the plaintiffs can obtain damages for the wrongs they have suffered.

Part I of this Article provides an overview of the city of Flint, to provide context for the Flint Water Crisis timeline described in Part II. The current lawsuits brought against government officials and private entities involved are detailed in Part III, with particular emphasis on how sovereign immunity is likely to hinder the plaintiffs' claims and, ultimately, their recovery. Takings claims are relevant to the substance of the claims and also illustrate the connection of property to the public health crisis in Flint. The historical overview of the city highlights the health and place connection with respect to previous environmental injustices that have taken place, as well as the political disenfranchisement that occurred when the state takeover was put into effect. Part IV explains takings claims as a lead into Part V's assertion that such claims are useful and relevant tools for those seeking justice in the Flint Water Crisis.

I. THE RISE AND FALL OF FLINT, MICHIGAN

Flint, Michigan is located within a geographic region of the United States known as The Rust Belt.¹⁰ The Rust Belt encompasses a section of northwestern and midwestern states that were once industrial "boom towns" but experienced significant deterioration when automotive companies began to outsource and relocate manufacturing facilities.¹¹ Flint, in particular, was the birthplace of GM.¹²

The impact of GM's relocation extended far beyond the closing of the Flint facility. The city had prospered on the automotive industry

¹⁰ Lee, *supra* note 3.

¹¹ Id.

¹² Flint, Mi., FORBES MAG., http://www.forbes.com/places/mi/flint/ (last visited Apr. 2, 2016).

and GM's exit created a trickle-down effect that resulted in the closing of many automotive suppliers and subcontractors, as well.¹³ As a result of the decrease in manufacturing jobs, there was no longer a need for the United Auto Workers labor union. Without the union, the few manufacturing jobs that remained in Flint, were no longer held to the wage standard that had once been required.¹⁴

A. Racial Disparities in Flint

Racial disparities in Flint, Michigan date back to the 1930s when the Federal Housing Authority endorsed "redlining" policies, which facilitated deep-seated segregation within the community that continued well into the twentieth century.¹⁵ A Michigan University study on home mortgage lending patterns, conducted throughout the 1980s, concluded that areas with a high density of minority residents were less likely to receive home mortgages.¹⁶ Flint's economic gap deepened when GM closed its main plant and the majority of Flint's white population fled the city in search of new jobs.¹⁷ The phenomenon of "white flight" has been attributed to many factors, including crime, poverty, decreases in municipal services, and reduced spending on education, all of which affected the city of Flint.¹⁸ From 1970 to 1990, Flint's white population declined from 138,065 to 69,788.¹⁹ By 1990, the rate of segregation in Flint was over 75%, the second highest in the state at that time.²⁰ A 1990 study of census data

17 Fuentes-George, supra note 15.

¹³ Lee, supra note 3.

¹⁴ Id.

¹⁵ Kemi Fuentes-George, Flint's Structural Racism: This is Why Providing Poisoned Water to the City's Citizens Seemed Like a Reasonable Idea, SALON (Feb. 7, 2016, 11:00 AM), http://www.sal on.com/2016/02/07/flints_structural_racism_this_is_why_providing_poisoned_water_to_t he_citys_citizens_seemed_like_a_reasonable_idea/.

¹⁶ JOSEPH DARDEN ET AL., ETHNOGRAPHIC EVALUATION OF THE BEHAVIORAL CAUSES OF UNDERCOUNT IN A BLACK GHETTO OF FLINT, MICHIGAN 1 (1990), https://www.census.gov /srd/papers/pdf/ev92-24.pdf.

¹⁸ Myron Orfield, Milliken, Meredith, and Metropolitan Segregation, 62 UCLA L. Rev. 364, 437 (2015).

¹⁹ DARDEN ET AL., supra note 16.

²⁰ Id.

showed a history of underreporting of African American citizens in Flint neighborhoods.²¹ Currently, the 102,000 residents of Flint are 57% African American and 37% white, and while the residential areas are segregated, the pervasiveness of the poverty is race-neutral with 41% of citizens living below the poverty level.²² The median home price in Flint is \$42,000 and average income is \$25,000.23 Flint borders the predominantly white city of Burton, where the average home price and income are \$75,000 and \$45,000, respectively.²⁴ Burton's municipal water source is Lake Huron.²⁵ The Lake Huron source is what Flint also planned to connect to as explained in greater detail in Section II of this Article. Segregated living patterns also give rise to other injustices. For example, dividing individuals among racial and socioeconomic lines often results in an imbalance of resources, often adversely affecting low-income, minority communities. As a result, the toxic effects of living in poverty are often quite literal. Impoverished neighborhoods have disproportionately high rates of environmental hazards, and Flint, Michigan is no exception.

B. Environmental Disparities in Flint

Poverty and disenfranchisement within a city leaves the residents susceptible to environmental challenges. Insufficient or careless industrial zoning laws leave low-income communities vulnerable, creating a decline in property values from which residents cannot recover.²⁶ President Clinton issued an executive order in 1994 that directed federal agencies to ensure that federal actions affecting public health do not have disproportionately adverse impacts on minority

²¹ See generally id.

²² Michael Martinez, Flint, Michigan: Did Race and Poverty Factor Into Water Crisis?, CNN (Jan. 28, 2016, 11:16 AM), http://www.cnn.com/2016/01/26/us/flint-michigan-water-crisis-race-poverty/.

²³ Jessica Trounstine, How Racial Segregation and Political Mismanagement Led to Flint's Shocking Water Crisis, WASH. POST (Feb. 8, 2016), https://www.washingtonpost.com/news/monkeycage/wp/2016/02/08/heres-the-political-history-that-led-to-flints-shocking-water-crisis/.

²⁴ Id.

²⁵ Id.

²⁶ U.S. COMM'N ON CIVIL RIGHTS, NIGHT IN MY BACKYARD: EXECUTIVE ORDER 12.898 AND TITLE VI AS TOOLS FOR ACHIEVING ENVIRONMENTAL JUSTICE 14 (2003), https://www.law.um aryland.edu/marshall/usccr/documents/cr2003X100.pdf.

populations, in compliance with Title VI of the Civil Rights Act.²⁷ However, Clinton's executive order did not obligate state governments to comply.²⁸

In 1995, the citizens of Flint brought an unsuccessful suit under the Equal Protection Act to block a power plant from being constructed in the Genesee Township, a residential area that is largely African American.²⁹ The plant was to be located within one mile of both a local school and an apartment complex and was to bring few jobs to the community.³⁰ Residents initiated the suit due to concerns that the plant's coal emissions would result in lead poisoning, an affliction that disproportionately affects African American populations.³¹

When the permit was granted to the Genesee Power Station to build the new plant, there were 227 additional environmental contamination sites located within the Flint area.³² The Genesee suit resulted in the EPA's promise to investigate the public health concerns, but the investigation is still pending.³³

Equal protection claims require the claimant to show discriminatory intent, which is extraordinarily difficult to prove.³⁴ An advantage of a Title VI claim is that the burden of proof is much lower because discrimination can be proven using the disparate impact doctrine.³⁵ In 1998, just three years after the permit was originally granted to the Genesee Power Station, the Michigan Department of Environmental Quality (MDEQ) approved a permit for a steel-

35 Id.

²⁷ Federal Actions to Address Environmental Justice in Minority Populations and Low Income Populations, 42 U.S.C. § 4321 (1994).

²⁸ Kary L. Moss, Environmental Justice at the Crossroads, 24 WM. & MARY ENVIL. L. & POL'Y REV. 35, 38 (2000).

²⁹ NAACP-Flint v. Governor of Mich. & Dep't of Envtl. Quality, 1998 Mich. App. LEXIS 837, at *3 (1998).

³⁰ Moss, *supra* note 28, at 45.

³¹ See Todd A. Jusko et. al., Intellectual Impairment in Children with Blood Lead Concentrations Below 10 Mg Per Deciliter, 348 NEW ENGL. J. MEDICINE 1517 (2003).

³² Moss, *supra* note 28, at 46.

³³ U.S. COMMISSION ON CIVIL RIGHTS, NOT IN MY BACKYARD: EXECUTIVE ORDER 12.898 AND TITLE VI AS TOOLS FOR ACHIEVING ENVIRONMENTAL JUSTICE 40 n.82 (2003), https://www.law.uma ryland.edu/marshall/usccr/documents/cr2003X100.pdf.

³⁴ Moss, *supra* note 28, at 41.

recycling mill to be built in the same area, but this time 200 jobs would be created.³⁶ A lawsuit was brought under Title VI, but the developers became frustrated with disputes between the MDEQ and EPA and pulled out before construction began.³⁷ The public health fears related to the power station would manifest themselves in the Flint Water crisis, and this was made possible by a systematic reduction of the residents' political power through a takeover of the local government by the state.

C. State Takeover of Flint

Flint's General Fund consists of three primary sources of revenue: (1) property tax; (2) income tax; and (3) sales tax.³⁸ The first appointment of an emergency manager occurred in 2002 when the city's debt reached \$28 million. In 2010, the year before the next state takeover, the United States Census reported the unemployment rate in Flint to be 23.4% and a double-digit decline in the population for the fourth consecutive year.³⁹ Long-standing, high unemployment rates in Flint resulted in an essentially non-existent tax base.⁴⁰ With few jobs and the taxpayer base eviscerated, Flint's debt had reached \$25 million by the end of 2010.⁴¹ At the conclusion of the 2011 fiscal year, Flint had a budget deficit of \$20 million; the fourth consecutive year the city had a substantial deficit.⁴² By 2013, the unemployment rate had reached

³⁶ U.S. COMMISSION ON CIVIL RIGHTS, NOT IN MY BACKYARD: EXECUTIVE ORDER 12.898 AND TITLE VI AS TOOLS FOR ACHIEVING ENVIRONMENTAL JUSTICE 40 (2003), https://www.law.umaryla nd.edu/marshall/usccr/documents/cr2003X100.pdf.

³⁷ Moss, *supra* note 28, at 41.

³⁸ ERIC SCORSONE & NICOLETTE BATESON, MICHIGAN STATE UNIVERSITY EXTENSION OFFICE, CASE STUDY: CITY OF FLINT MICHIGAN, MICHIGAN STATE UNIVERSITY EXTENSION OFFICE 11 (2012), https://www.cityofflint.com/wp-content/uploads/Reports/MSUE_FlintStudy2011.pdf.

³⁹ Id. at 2-6.

⁴⁰ Claire Groden, *How Michigan's Bureaucrats Created the Flint Water Crisis*, FORTUNE (Jan. 20, 2016, 6:00 PM), http://fortune.com/flint-water-crisis/.

⁴¹ Kristin Longley, Flint Emergency: Timeline of State Takeover, MICH. LIVE (Dec. 1, 2012, 7:00 AM), http://www.mlive.com/news/flint/index.ssf/2012/12/flint_emergency_timeline_of _st_1.html.

⁴² SCORSONE & BATESON, supra note 38.

16%.⁴³ Unemployment is felt twice as hard in municipalities that share sales tax revenues with the state, as is the case in Michigan.⁴⁴

Universal poverty and unemployment of local residents within a community is often the cause of municipal insolvency rather than a mismanagement of funding.⁴⁵ A municipality faced with insolvency can often trace its financial problems back to an environment that discourages local business growth.⁴⁶ For example, the Michigan legislature imposes a property tax cap and limits the use of sales and fuel taxes.⁴⁷ This leads to a decline in sales tax revenues and increased unemployment, which results in poverty amongst the residents of a community.⁴⁸ Between 2007 and 2012, average consumer spending in Flint declined by \$225 per resident.⁴⁹

Michigan's state receivership law allowing the state takeover of struggling city governments is similar to a previously implemented Pennsylvania law.⁵⁰ In 2003, the city of Pittsburgh appointed an emergency manager after several years of the state legislature hampering the city's ability to raise tax revenues by denying Mayor Tom Murphy the ability to levy business and commuter taxes.⁵¹ The appointment of an emergency manager resulted in the restructuring of the city's tax revenue – a decision that has been hotly contested.⁵²

In November of 2011, Flint, like many cities in Michigan, suffered a financial crisis. A review team found that Flint had accumulated

⁴³ Christina Sterbenz, How Flint, Michigan became the Most Dangerous City in America, BUS. INSIDER (June 16, 2013, 12:11 PM), http://www.businessinsider.com/why-is-flint-michigandangerous-2013-6.

⁴⁴ Michelle Wilde Anderson, The New Minimal Cities, 123 YALE L.J. 1118, 1137 (2014).

⁴⁵ Id.

⁴⁶ Id. at 1127.

⁴⁷ Brentin Mock, Beyond Flint: Should States Take Over in an Emergency?, CITY LAB (Feb. 3, 2016), http://www.citylab.com/politics/2016/02/emergency-managers-state-takeover-flint-mich igan-water-crisis/459381/.

⁴⁸ Anderson, supra note 44, at 1,123.

⁴⁹ Trounstine, supra note 23.

⁵⁰ Mock, supra at note 47.

⁵¹ Id.

⁵² Id.

\$25.7 million in deficits.⁵³ Subsequently, Governor Rick Snyder appointed Michael Brown, Flint's first of four emergency managers, to oversee the city's finances.⁵⁴ The appointment of emergency managers throughout Michigan has become a semi-regular process due to Detroit's financial crisis.⁵⁵ Under Public Act 436, the governor has the authority to appoint emergency managers over cities and school districts that have been declared financial emergencies.⁵⁶ Under the Act, the emergency manager is meant to facilitate the city's return to financial stability by "addressing any and all issues" that may hinder this goal.⁵⁷ Since 2011, the City of Flint has had four emergency managers.⁵⁸

The first incarnation of Michigan's current Emergency Manager Law, passed in 2011, was called the Local Government and School District Fiscal Accountability Act.⁵⁹ The law was criticized as violating the Equal Protection Clause because, in practice, the law allowed the state to suspend the democratic rights of African American voters while allowing white neighborhoods of voters to continue with business as usual.⁶⁰

Before any of these claims were settled in court the law was repealed using a referendum in which two million Michigan residents voted for its repeal.⁶¹ The current version of the Michigan law, championed by Governor Rick Snyder, passed less than a year later in

⁵³ Jennifer Dixon, How Flint's Water Crisis Unfolded, DETROIT FREE PRESS, http://www. freep.com/pages/interactives/flint-water-crisis-timeline/ (last visited June 12, 2016).

⁵⁴ Id.

⁵⁵ Julie Bosman & Monica Davey, Anger in Michigan Over Appointing Emergency Managers, N.Y. TIMES (Jan. 22, 2016), http://www.nytimes.com/2016/01/23/us/anger-in-michigan-over-a ppointing-emergency-managers.html?_r=0.

⁵⁶ Id.

⁵⁷ Local Financial Stability and Choice Act of 2012, State of Michigan Act 436 of 2012, https://www.cityofflint.com/wp-content/uploads/CityPDF/mcl-act-436-of-2012.pdf.

⁵⁸ Id.

⁵⁹ Kathleen Garbacz, Michigan Republicans' Tactics to Evade Democracy Using Referendum Proof Laws and Other Means, 16 J.L. Soc'y 197, 204 (2014).

⁶⁰ Id.

⁶¹ Id. at 204.

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2012.⁶² The current law, which is almost identical to the repealed law, passed during a lame duck session of the legislature.⁶³ The legislature avoided any possibility of a referendum by allocating \$780,000 to pay for the emergency manager's salary and carry out the bill.⁶⁴ The Michigan Constitution exempts bills with appropriations from being subject to a referendum so the legislature can protect its budget.⁶⁵ The other significant difference added to the current law is that it allows the city to choose between four options after the finding of a financial emergency.⁶⁶ The four options are: (1) consenting to an agreement plan between the city and state that describes actions to be taken to rectify the financial emergency; (2) mediation between the city and its creditors; (3) bankruptcy; and (4) appointment of an emergency manager.⁶⁷ The failure to reach either a consent agreement or agreement through mediation will result in the appointment of an emergency manager or a declaration of bankruptcy, respectively.⁶⁸ The act is formally named the Local Financial Stability and Choice Act but is commonly referred to as the Emergency Manager Law.⁶⁹ As in Pennsylvania, there are concerns that the Michigan legislature played a role in the decline of the city of Flint, particularly by limiting the ability of local governments to raise and create tax revenues that would minimize debt and build infrastructure.⁷⁰

Six months after the amended Emergency Manager Law passed, the State Treasurer's assertion that the city of Flint was potentially experiencing a financial emergency resulted in Governor Snyder's appointment of a financial review board.⁷¹ A finding of a financial

- ⁶⁸ Id. at 3, 5.
- ⁶⁹ Id. at 4.
- 70 Mock, supra note 47.
- 71 Longley, supra note 41.

⁶² Local Financial Stability and Choice Act, 2012 Mi. P.A. 436.

⁶³ Garbacz, *supra* note 59, at 204.

⁶⁴ Id.

⁶⁵ Id. at 199.

⁶⁶ ERIC SCORSONE, MICHIGAN STATE UNIVERSITY EXTENSION OFFICE, FREQUENTLY ASKED QUESTIONS ABOUT THE NEW MICHIGAN LOCAL FINANCIAL EMERGENCY LAW 2 (2012), http:// msue.anr.msu.edu/uploads/236/25914/FAQ-WhyNewLawWasPassed.pdf.

⁶⁷ Id. at 3.

emergency may be the result of several factors including but not limited to: (1) violation of state or local government plans for debt or budget management; (2) missed payroll or other bond payments; (3) low credit rating; or (4) the state treasurer's assessment that the local government's stability is uncertain.⁷² The review board presented a report to the governor indicating the existence of such an emergency, and the governor appointed an emergency manager to the city of Flint in November of 2011.⁷³ Over the next five years, Flint would have four different emergency managers appointed to the city.⁷⁴

Governor Rick Snyder appointed Michael Brown as emergency manager of Flint in 2011.⁷⁵ Brown eliminated the salaries of the mayor and city council, and he terminated several City Hall officials, including the entire offices of the Ombudsman and the Civil Service Commission.⁷⁶ Less than a year later, Michael Brown was removed from his position after a circuit court judge found Brown's appointment violated the Open Meetings Act.⁷⁷ The judge reinstated the city council, but the Michigan Court of Appeals reinstated Brown six days later.⁷⁸ In August, Brown was forced to step down, and Governor Snyder appointed Ed Kurtz as Brown's replacement.⁷⁹ Kurtz served as emergency manager of Flint during its first financial emergency in 2002.⁸⁰ Kurtz then appointed Brown as city administrator.⁸¹ Flint's City Council filed a lawsuit against Kurtz in an effort to get him removed in September of 2012, but the law grants immunity to the emergency manager.⁸² The decision to switch from

78 Id.

- ⁷⁹ Brush et al., *supra* note 75.
- 80 Id.
- ⁸¹ Longley, *supra* note 41.
- 82 Id.; Local Financial Stability and Choice Act, 2012 Mi. P.A. 436 § 20(1).

⁷² SCORSONE, *supra* note 66, at 2.

⁷³ Longley, supra note 41.

⁷⁴ Mock, *supra* note 47.

⁷⁵ Mark Brush et al., *Timeline: Here's How the Flint Water Crisis Unfolded*, MICH. RADIO (Dec. 1, 2015), http://michiganradio.org/post/timeline-heres-how-flint-water-crisis-unfolded#stre am/0.

⁷⁶ Longley, *supra* note 41.

⁷⁷ Id.

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Detroit Water to the new water authority happened under Kurtz's control.⁸³ Kurtz signed the agreement to join the new water authority with knowledge that there would be a two-year gap in water service during completion of the new pipeline.⁸⁴ Kurtz hired an engineering firm to prepare Flint's water treatment plant to treat the Flint River water until 2016, when the pipeline would be completed.⁸⁵ Kurtz then resigned at the end of June in 2013.86 Michael Brown was then reappointed as emergency manager, only to resign again three months later.⁸⁷ Darnell Earley was appointed as Brown's replacement, and he oversaw implementation of Kurtz's prior agreements regarding the water switch.⁸⁸ By this time, Detroit Water had become aware of the water service gap that Flint would experience during the provider switch and offered to continue water service.⁸⁹ Earley rejected Detroit's offer, stating that the city would obtain water from the Flint River.⁹⁰ In April 2014, the city officially made the switch to Flint River water.⁹¹ Throughout the remainder of 2014, the MDEQ and Michigan University both conducted studies that determined Flint's water to be unsafe.⁹² In fact, GM quit using the water at its factory in 2014 because the water corroded GM's industrial machinery.⁹³ In January 2015, Flint's city council asked emergency manager, Earley, to switch the water service back to Detroit Water.⁹⁴ Earley refused, saying that the switch would be too expensive.⁹⁵ Just a few days later, Governor Snyder reassigned Earley and replaced him with Jerry Ambrose, who

- ⁸³ Brush et al., *supra* note 75.
- 84 Id.
- 85 Id.
- 86 Id.
- 87 Id.
- 88 Id.
- 89 Id.
- 90 Id.
- 91 Id.
- 92 Id.
- 93 Id.
- 94 Id.
- 95 Id.

remains Flint's emergency manager at the time of writing this Article. 96

The Emergency Manager Law suspends the city's charter, the authority of the city's elected officials, and the city's usual business processes, while still maintaining the legal status of the city.97 Emergency managers are accountable to the governor, and the local elected officials may only act with consent of the emergency manager.98 The law specifies that the power of the emergency manager is "superior to and supercede[s]" that of a city's elected officials.⁹⁹ The city council is permitted to remain in place, but it has no decisionmaking authority.¹⁰⁰ The role of the emergency manager is to investigate and restructure city budgets, which often leads to prioritizing financial issues over social issues and using public utilities to generate income.¹⁰¹ In 2011, emergency manager Michael Brown ratified a 35% increase in Flint residents' water and sewer rates.¹⁰² The increase resulted in a class action suit in which the judge held that the increase must be rolled back and any liens placed on property due to unpaid water bills must be removed.103 City officials voiced opposition, claiming this would bankrupt the city, but the order to repeal remained in place.¹⁰⁴

The central concern surrounding Michigan's Emergency Manager Law is that it grants broad power to state-appointed officials, trumping the power of the city's elected officials and effectively holding democracy hostage.¹⁰⁵ Although the Flint's city council

104 Id.

⁹⁶ Id.

⁹⁷ Michelle Wilde Anderson, Democratic Dissolution: Radical Experimentation in State Takeovers of Local Governments, 39 FORDHAM URB. L.J. 577, 581 (2011).

⁹⁸ Trounstine, supra note 23.

⁹⁹ Mich. Comp. Laws § 141.1552(1)(ee).

¹⁰⁰ Groden, *supra* note 40.

¹⁰¹ Trounstine, *supra* note 23.

¹⁰² Ron Fonger, Judge Orders Flint to Cut Water Rates by 35 Percent in Sweeping Injuction, MICH. LIVE (Aug. 7, 2015, 5:26 PM), http://www.mlive.com/news/flint/index.ssf/2015/08/flint_ ordered_to_cut_water_rat.html.

¹⁰³ Id.

¹⁰⁵ Anderson, *supra* note 97.

remained in place, it had no authority, and any meetings and votes that were held were strictly symbolic.¹⁰⁶ Emergency managers do not have a specified amount of time to serve.¹⁰⁷ The local officials may vote to remove the emergency manager after eighteen months, which results in the starting over of the entire evaluation process.¹⁰⁸ Within the current version of the Emergency Manager Law, the emergency manager himself, as well as his employees, are given express immunity from liability.¹⁰⁹

In 2011, Flint was one of four Michigan cities with predominately African American, or other minority, populations under appointment of an emergency manager.¹¹⁰ By 2013, over 50% of Michigan's African American citizens were living in a city controlled by an emergency manager.¹¹¹ Flint and other cities with similar demographics are particularly vulnerable to state emergency manager laws because the political leanings of the cities do not align with those of the state as a whole.¹¹² The City of Flint is primarily made up of democratic voters, who did not vote for republican governor Rick Snyder.¹¹³ In 2013, Flint's city council sent a letter to Governor Snyder, asking that he remove the emergency manager because of a lack of effectiveness evidenced by continued economic and population decline.¹¹⁴

The Emergency Manager Law specifies one of its purposes as being to further the "health, safety, and welfare of the citizens" of

¹⁰⁶ Groden, *supra* note 40.

¹⁰⁷ Garbacz, *supra* note 59, at 205.

¹⁰⁸ Id.

¹⁰⁹ Local Financial Stability and Choice Act, 2012 Mi. P.A. 436 § 20(1).

¹¹⁰ Anderson, *supra* note 97 (noting the cities were Benton Harbor 91.4% African American, Pontiac 55.3% African American, Flint 59.5% African American, and Ecorse 48.6% African American but 36.5% Hispanic).

¹¹¹ Orfield, *supra* note 18, at 455 (noting the cities were Benton Harbor, Pontiac, Flint, Ecorse, Detroit, Saginaw, River Rogue, Inkster, Allen Park, and Royal Oak).

¹¹² Anderson, supra note 97, at 602.

¹¹³ Trounstine, *supra* note 23.

¹¹⁴ Letter from Flint City Council to Governor Synder (Jan. 16, 2013), http://media.mlive.com /newsnow_impact/other/Letter%20to%Gov%20%20Snyder%20from%20Flint%20City%20 Council.PDF.

Michigan.¹¹⁵ However, voters are more likely to be concerned with public health and safety issues, while an emergency manager is strictly concerned with restructuring budgets.¹¹⁶ This is illustrated by managers of insolvent cities cutting law enforcement, fire departments, waste disposal, and other basic public services.¹¹⁷ For example, Flint's police force was cut by more than half from 2007 to 2012 and by two thirds over the last three years.¹¹⁸ This led to Flint's ranking as one of America's most dangerous cities for several years running and, in 2011, holding the highest number of violent crimes and homicides of any comparably sized U.S. city.¹¹⁹

The financial crisis in Flint affected the price, quality, and control of many public services. In 2015, Flint residents paid more than almost any other area in the country for toxic water they could not use.¹²⁰ As of the writing of this Article, Flint has managed to retain control of its school district, but several other Michigan school districts have not fared as well under the Emergency Manager Law.¹²¹ Grand Rapids, Michigan lost control of its school district in 2012.¹²² The emergency manager terminated every teacher and staff in the district and issued a request for bids from private charter school organizations to take over the school district.¹²³ Detroit schools have been under control of an emergency manager since 2010.¹²⁴ In January 2016, the Teachers Union filed a lawsuit against the Detroit school district due to the

- 118 Id. at 1162.
- 119 Id.

123 Id.

¹¹⁵ Mich. Comp Laws § 141.1543(3)(a)-(c).

¹¹⁶ Anderson, *supra* note 97, at 605.

¹¹⁷ Anderson, *supra* note 44, at 1160-63.

¹²⁰ Christopher Ingraham, Flint's Poisoned Water was Among Most the Expensive in the Country, WASH. POST (Feb. 16, 2016), https://www.washingtonpost.com/news/wonk/wp/2016/ 02/16/flints-poisoned-water-was-the-most-expensive-in-the-country/.

¹²¹ Dominic Adams, Flint Schools Slash Debt by \$11M but State to Review Finances Under New Law, MICH. LIVE (Dec. 5, 2015, 5:00 AM), http://www.mlive.com/news/flint/index.ssf/2015/12 /flint_school_district_slashes.html#incart_river_index_topics.

¹²² Anderson, supra note 97, at 604.

¹²⁴ Ray Sanchez, Detroit Public Schools Hit with Lawsuit, CNN (Jan. 28, 2016, 5:19 PM), http://www.cnn.com/2016/01/28/us/detroit-public-schools-lawsuit/.

deteriorating condition of the school buildings, citing everything from absent heating systems, to rodents, to black mold.¹²⁵ Coincidentally, the Detroit school district's current emergency manager, Darnell Earley, was the same emergency manager in control of Flint during the implementation of the city's water supply switch.¹²⁶

D. Legal Questions Raised by a Takeover

Despite the state legislature's role in the decline of Flint, the implementation of the Emergency Manager Law sends the distorted message that Flint's financial problems are solely a result of local government that can only be solved by state takeover.¹²⁷ In addition to taking control from the people of Flint, the Emergency Manager Law has the added implication of removing a clear recourse to certain legal claims raised by plaintiffs. Citizens have no claim to their mismanaged tax dollars in situations of financial emergency and no entitlement to the public utilities and services for which they pay taxes.¹²⁸ Furthermore, the citizens lose the right to make democratic changes in their elected officials because the emergency manager law has the effect of suspending democracy in local government.¹²⁹ In 2002, following the first appointment of an emergency manager by the governor, the Flint City Council filed an appeal seeking an injunction against the appointment.¹³⁰ The court stated a municipality's "existence is entirely dependent on the legislation that created it, and the Legislature that may also destroy it." 131 The court goes on to define the purpose of law as protecting citizens from mismanagement by providing an incentive to the municipality to meet state standards.¹³²

¹²⁵ Id.

¹²⁶ Id.

¹²⁷ Anderson, supra note 97, at 582.

¹²⁸ Anderson, *supra* note 44, at 1122–23.

¹²⁹ Anderson, supra note 97, at 582.

¹³⁰ See generally Flint City Council v. State of Michigan, 655 N.W.2d 604 (2002).

¹³¹ Id. at 610 (citing Bd. of Cty. Rd. Comm'rs for the Cty. Of Oakland v. Mich. Prop. & Cas. Guar. Ass'n, 609, 575 N.W.2d 751).

¹³² Id.

However, by removing democracy from the municipality, the local government officials are no longer accountable to their constituents.¹³³

Following the 2013 state takeover of Detroit, the Detroit National Association for the Advancement of Colored People (NAACP) filed a federal lawsuit claiming the Emergency Manager Law violated the Voting Rights Act.¹³⁴ The NAACP argued that Michigan's widespread state takeovers resulted in disparate impact discrimination because the voting rights of over half the state's African American population were effectively suspended. Detroit filed for bankruptcy a few months later, and thus the NAACP proceeding was stayed.¹³⁵

II. FLINT WATER CRISIS TIMELINE

The Flint River water crisis was the result of a culmination of actions by local, state, and federal actors in an effort to cut costs in a financially unstable city. In order to understand the current situation in Flint, Michigan, one must go back to 2010, the year in which the Karegnondi Water Authority (KWA) was incorporated. The KWA is an entity that, once completed, will utilize water from Lake Huron to provide water services to various communities throughout the State of Michigan, including Flint.¹³⁶ It was the decision to switch from Flint's longtime water source to the new KWA source that triggered a devastating chain of events leading to dangerously elevated lead levels in Flint's drinking water.¹³⁷

On March 25, 2013, State Treasurer, Andy Dillon, and Governor Snyder's Chief of Staff, Dennis Muchmore, went before the Flint City Council to discuss water supply alternatives for the city.¹³⁸ Subsequently, the Flint City Council voted seven to one to approve a resolution to become a partner in the KWA, the new regional water

¹³³ Groden, *supra* note 40.

¹³⁴ Orfield, *supra* note 18, at 455–56.

¹³⁵ Id. at 456.

¹³⁶ Dixon, *supra* note 53.

¹³⁷ Id.

¹³⁸ Dominic Adams, Flint City Council Approves Resolution to Buy Water from Karegnondi, State Approval Still Needed, MICH. LIVE, http://www.mlive.com/news/flint/index.ssf/2013/03/f lint_city_council_approves_re.html (last updated Mar. 26, 2013, 1:28 AM).

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authority, and to cut ties with its current water provider, the Detroit Water and Sewerage Department (DWSD).¹³⁹ This switch to the KWA from the DWSD was seen as a cost-saving move to improve Flint's financial stability.¹⁴⁰ At the time of the vote, city officials believed that switching from Detroit to the KWA would save the city \$4 million per year.¹⁴¹

The Flint City Council, along with then-emergency manager Ed Kurtz, made the decision to switch water sources; however, there is significant contention around which party, the emergency manager or the city council, had the *responsibility* to make the decision.¹⁴² Traditionally, it would be up to the emergency manager to make significant financial decisions affecting the city, such as switching water sources.¹⁴³ However, it was the city council that voted on this major decision.¹⁴⁴ At least two Flint councilmen have stated that Kurtz punted the water source issue to the city council, with one councilman saying Kurtz's relinquishment of responsibility was because of fear that Governor Snyder would fire Kurtz if he made the final decision.¹⁴⁵

At the time of the vote to switch to the KWA, the pipeline from Flint to the KWA source was not yet completed.¹⁴⁶ However, when the city council voted to join the KWA, it did not vote as to what source the city would use in the interim.¹⁴⁷ Therefore, the decision to join the KWA and the decision to use water from the Flint River during the interim were distinct choices, made separately.¹⁴⁸

In early April 2013, the DWSD issued a press release in which it accused Flint's city council of "effectively launching the greatest water

143 Id.

144 Id.

145 Id.

146 Id.

147 Id.

148 Id.

¹³⁹ Id.

¹⁴⁰ Id.

¹⁴¹ Id.

¹⁴² Paul Egan, Flint Council Video Shows Path Away from Detroit Water, DETROIT FREE PRESS, http://www.freep.com/story/news/local/michigan/flint-water-crisis/2016/02/03/videoflint-council-voted-kwa-but-not-flint-river/79759726/ (last updated Feb. 4, 2016, 12:40 PM).

war in Michigan history" in deciding to change water sources.¹⁴⁹ The DWSD noted in the press release that Flint's switch to the KWA would actually cost more than if Flint stayed with the DWSD.¹⁵⁰ The DWSD insisted that the choice by Flint officials to pursue the KWA deal "can only be attributed to a 'political' objective that [had] nothing to do with the delivery – or price – of water."¹⁵¹

The Director of the DWSD, Sue McCormick, even contacted Flint officials asking them to reconsider their decision to terminate Flint's contract with the DWSD. McCormick outlined the cost-disadvantage associated with the KWA proposal and even offered a modified rate structure for the city.¹⁵² Despite the DWSD's offer, Flint emergency manager Ed Kurtz ratified the city council's resolution and signed the contract with KWA on April 16, 2013.¹⁵³ Kurtz stated in a press release that the KWA pipeline was the best option for Flint residents and would save them the most money in the long run.¹⁵⁴ Records from the governor's office also show that Andy Dillon, then-State Treasurer, authorized Kurtz to move forward with the KWA plan.¹⁵⁵ The next day, the DWSD sent a letter to Flint officials terminating its existing water service contract between Flint and Detroit.¹⁵⁶ The termination was intended to take effect in twelve months, meaning the Detroit water would stop in April 2014; however, connection to the

151 Id.

- 153 Egan, supra note 142; Dixon, supra note 53.
- 154 Press Release, Jeffrey Wright, Joint Statement by Jeff Wright and Ed Kurtz Regarding Detroit's Final Offer on Water Service (Apr. 16, 2013), http://www.gcdcwws.com/images/ contentImages/file/Press%20Release.Official.Final%20Decision%20on%20KWA.pdf.
- 155 Egan, supra note 142; Dixon, supra note 53.
- 156 Beth LeBlanc, Flint Water Woes Put Rush on Lake Huron Waterline, TIMES HERALD, http://www.thetimesherald.com/story/news/local/2015/10/06/flint-water-woes-put-rus h-lake-huron-waterline/73473466/ (last updated Oct. 6, 2015, 5:23 PM).

¹⁴⁹ Press Release, Bill Johnson, Water War Undermines Flint DWSD Relations (Apr. 1, 2013), http://www.dwsd.org/downloads_n/announcements/press_releases/pr2013-04-01_water _war_undermines_flint-dwsd_relations.pdf.

¹⁵⁰ Id.

¹⁵² Allie Gross, New Emails Reveal the Switch to the Flint River Was Not About Saving Money, DETROIT METRO TIMES (Jan. 25, 2016, 2:10 PM), http://www.metrotimes.com/Blogs/archiv es/2016/01/25/new-emails-reveal-the-switch-to-the-flint-river-was-not-about-saving-mone y; Dixon, supra note 53.

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Karegnondi pipeline was not supposed to occur until summer of 2016.¹⁵⁷ Therefore, Flint would be without a water source from the time of the DWSD cutoff and completion of the KWA pipeline.¹⁵⁸ At this point in time, Flint was on the path towards drawing water out of the Flint River to satisfy the city's water needs during the interim.¹⁵⁹

A. Flint River

Beginning in June 2013, the City of Flint began to undertake the process of utilizing the Flint River as the city's main source of drinking water until the completion of the KWA pipeline.¹⁶⁰ In an effort to assess the feasibility of Flint's water treatment plant, emergency manager Ed Kurtz signed a resolution hiring Houston-based engineering firm Lockwood, Andrews, & Newnam to get the city's water treatment plant into operational posture so that it could start using the Flint River as its primary water source.¹⁶¹

On June 29, 2013, a formal meeting was held between City of Flint officials, the Genesee County Drain Commissioner's Office, engineers from Lockwood, Andrews, & Newnam, and the MDEQ.¹⁶² At this meeting, the parties generally discussed the feasibility of using the Flint River as the city's primary water source during the time between the termination of Detroit contract and connection of the KWA pipeline.¹⁶³ The meeting produced several determinations, including that the Flint River "would be more difficult to treat but is viable as a source" and that the engineers would construct the necessary

¹⁵⁷ Id.

¹⁵⁸ Id.

¹⁵⁹ Jim Lynch, Ex-Detroit Official Reignites Flint Water Switch Tiff, DETROIT NEWS (Jan. 26, 2016, 11:19 PM), http://www.detroitnews.com/story/news/michigan/flint-water-crisis/2016/ 01/26/ex-detroit-official-reignites-flint-water-switch-tiff/79379770/.

¹⁶⁰ Dixon, *supra* note 53; Edward Kurtz, Resolution Authorizing Approval to Enter into a Professional Engineering Services Contract for the Implementation of Placing the Flint Water Plant into Operation (June 26, 2013), http://media.mlive.com/newsnow_impact/other/ Water%20Plan%20Resolution.PDF.

¹⁶¹ Dixon, supra note 53; Kurtz, supra note 160.

¹⁶² City of Flint Department of Public Works, Water System Questions & Answers 2, Jan. 13, 2015, https://www.cityofflint.com/wp-content/uploads/CoF-Water-System-FAQ-1-16-201 5.pdf.

¹⁶³ Id.

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upgrades for the plant and could address quality control.¹⁶⁴ On April 1, 2014, the MDEQ approved and issued a construction permit to begin the process of making the Flint Water Treatment Plant operational.¹⁶⁵

Nearly one month later, on April 25, 2014, the City of Flint officially began using the Flint River as its primary water source.¹⁶⁶ A ceremony was held with representatives of the MDEQ in attendance.¹⁶⁷ A member of the MDEQ's Office of Drinking Water said that "the quality of the water being put out meets all of our drinking water standards and Flint water is safe to drink."168 Despite the MDEQ's assurances, the Flint River was not safe to drink.¹⁶⁹ Unlike the city's previous water from Lake Huron with the DWSD, the water from the Flint River is significantly more corrosive, which can cause leaching of iron and lead pipes.¹⁷⁰ A corrosion control program, in which chemicals would be introduced during the treatment process to prevent corrosion, was not used in the treatment of Flint River water.¹⁷¹ The lack of a corrosive control program for the Flint River water is what ultimately led to the leaching of lead pipes into the drinking water.¹⁷² Moreover, corrosion of iron pipes can cause bacteria-fighting chlorine to disappear; this is problematic because chlorine is added to water in an effort to prevent the growth of harmful bacteria that can cause disease.¹⁷³

170 Edwards, supra note 169.

172 Id.

¹⁶⁴ Id.

¹⁶⁵ Dixon, supra note 53.

¹⁶⁶ Press Release, Jason Lorenz, City of Flint Begins Using Flint River as Temporary Primary Water Source 2, Apr. 25, 2014, http://flintwaterstudy.org/wp-content/uploads/2016/01/s nyder-emails.pdf.

¹⁶⁷ Id.

¹⁶⁸ Id.

¹⁶⁹ Paul Egan, Bacteria Fears Left Flint Water Pipes Unprotected, DETROIT FREE PRESS, http://www.freep.com/story/news/local/michigan/flint-water-crisis/2016/02/09/flintcorrosion-control-omitted-over-bacteria-concerns/80072284/ (last updated Feb. 9, 2016, 5:46 PM); Marc A. Edwards, Why is it Possible that Flint River Water Cannot be Treated to Meet Federal Standards? FLINT WATER STUDY (Aug. 24, 2015), http://flintwaterstudy.org/tag/drinkingwater/.

¹⁷¹ Egan, supra note 169.

¹⁷³ Edwards, supra note 169.

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This decision not to add corrosion control chemicals to Flint River water was made by the MDEQ.¹⁷⁴ According to the then-Director Dan Wyant, the MDEQ officials charged with implementing water treatment protocols for Flint used the wrong federal standards for large water systems to treat Flint's water.¹⁷⁵ Wyant said the MDEQ staff "were confused on federal regulations that required the city to make Flint River water less corrosive."¹⁷⁶ It so happened that the MDEQ staff misinterpreted the federal Lead and Copper Rule as applied to larger water systems, which requires the water treatment plant to use corrosion control chemicals.¹⁷⁷

Due to the presence of various bacteria in the water, the City of Flint issued a boil-water advisory from August to September of 2014.¹⁷⁸ In an effort to combat the presence of bacteria, the city increased the flushing of water mains and increased the amount of chlorine added to the water.¹⁷⁹

Approximately one month later, in October 2014, GM announced that it would be pulling its plant off of Flint water after employees began noticing rust on newly manufactured parts. This prompted GM to purchase its water from Lake Huron via Flint Township instead.¹⁸⁰ The reason cited by GM for the switch back to Lake Huron water was high levels of chloride in the water which caused engine parts to rust.¹⁸¹ The City of Flint approved GM's switch from the Flint River to

¹⁷⁴ Ron Fonger, DEQ Chief Says State Used Wrong Federal Water Rules in Flint for 17 Months, MICH. LIVE, http://www.mlive.com/news/flint/index.ssf/2015/10/state_deq_flint_should_have _be.html (last updated Oct. 19, 2015, 2:52 PM).

¹⁷⁵ Id.

¹⁷⁶ Id.

¹⁷⁷ Lindsey Smith, State Admits Flint did not Follow Federal Rules Designed to Keep Lead Out of Water, MICH. RADIO (Oct. 18, 2015), http://michiganradio.org/post/state-admits-flint-didnot-follow-federal-rules-designed-keep-lead-out-water#stream/0.

¹⁷⁸ Dixon, supra note 53; Ron Fonger, Flint Issues Boil Water Advisory for Section of the City After Positive Tests for Total Coliform Bacteria, MICH. LIVE, http://www.mlive.com/news/flint/ind ex.ssf/2014/09/flint_issues_boil_water_adviso.html (last updated Jan. 17, 2015, 10:20 AM).

¹⁷⁹ Id.

¹⁸⁰ Dixon, supra note 53.

¹⁸¹ Ron Fonger, General Motors Plant Won't Use Flint Water Until KWA Pipeline Complete, MICH. LIVE, http://www.mlive.com/news/flint/index.ssf/2015/10/gm.html (last updated Oct. 12, 2015, 7:11 PM).

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water from Flint Township, yet never considered reviewing its own water treatment process.¹⁸²

Beginning in January of 2015, the city warned residents that the total trihalomethanes (TTHMs), a disinfectant byproduct, contained in its water exceeded federal limits outlined in the Safe Water Drinking Act.¹⁸³ Long-term exposure to TTHMs is known to cause liver, kidney, and central nervous system problems and an increased risk of cancer.¹⁸⁴ Due to Flint's boil-water advisories and recent discovery that the water violated federal levels for TTHMs, the University of Michigan-Flint decided to test its own water in various locations throughout its campus.¹⁸⁵ The school found high levels of lead in two isolated drinking fountains, but otherwise said the water was safe to drink.¹⁸⁶

After this testing, Sue McCormick and the Detroit Water and Sewerage Department offered Flint's then-emergency manager, Darnell Earley, the chance to enter into a long-term arrangement and reconnect back to its Lake Huron pipeline without charging a reconnection fee.¹⁸⁷ The city ultimately rejected the offer after concluding that the DWSD offer would increase costs to the city by \$12 million per year at the proposed rates.¹⁸⁸ Several days after the DWSD's offer to rejoin the Lake Huron pipeline, Flint residents

186 Dixon, supra note 53; Schuch, supra note 185.

¹⁸² John Wisely & Robin Erb, Chemical Testing Could Have Predicted Flint's Water Crisis, DETROIT FREE PRESS, http://www.freep.com/story/news/local/michigan/2015/10/10/missed-opp ortunities-flint-water-crisis/73688428/ (last updated Oct. 11, 2015, 7:14 AM).

¹⁸³ Dixon, supra note 53; Hannah Rappleye et al., Bad Decisions, Broken Promises: A Timeline of the Flint Water Crisis, NBC NEWS (Jan. 19, 2016, 2:13 PM), http://www.nbcnews.com/news/usnews/bad-decisions-broken-promises-timeline-flint-water-crisis-n499641.

¹⁸⁴ Dixon, *supra* note 53; Rappleye et al., *supra* note 183.

¹⁸⁵ Dixon, supra note 53; Sarah Schuch, University of Michigan-Flint Reveals Water Quality Test Results to Campus, MICH. LIVE (Feb. 9, 2015, 5:02 PM), http://www.mlive.com/news/flint/i ndex.ssf/2015/02/water_testing_at_um-flint_show.html.

¹⁸⁷ Dixon, supra note 53; Ron Fonger, Detroit Offers Flint 'Long-Term' Deal for Lake Huron Water with No Reconnection Fee, MICH. LIVE, http://www.mlive.com/news/flint/index.ssf/2015/0 1/detroit_offers_flint_deal_for.html (last updated Jan. 17, 2015, 9:50 AM); Christine Ferretti, Detroit Offers to Reconnect Water Service to Flint, DETROIT NEWS (Jan. 20, 2015, 10:10 PM), http: //www.detroitnews.com/story/news/local/michigan/2015/01/20/detroit-offersreconnect-water-service-flint/22083573/.

¹⁸⁸ Dixon, supra note 53; Fonger, supra note 187; Ferretti, supra note 187.

attended a city hall meeting and brought with them samples of discolored water collected from their homes.¹⁸⁹

B. Admitting the Problem

On February 3, 2015, Governor Snyder announced a \$2 million grant to Flint for water system infrastructure improvements as part of the Financially Distressed Cities, Villages, and Townships Grant Program.¹⁹⁰ The city used the grant to detect leaks in its pipelines and to replace its Water Pollution Control Facility Incinerator.¹⁹¹ The next day, Flint resident LeeAnne Walters showed the Flint City Council rashes that had developed on her son's body. The city tested Walters' home water and found high levels of lead.¹⁹² Concerned about the high levels of lead discovered in her home water, Walters sent her results to a representative of EPA Region 5, who then forwarded the results to Miguel Del Toral, a regulations manager in the EPA's ground water and drinking water branch.¹⁹³ Del Toral then reached out to the MDEQ's Stephen Busch and asked if Flint had a corrosion control program in place.¹⁹⁴ Busch replied that Flint had "an optimized corrosion control program" and "has not had any unusual [testing] results."195 Approximately one month after Walters' water was initially tested, her home water was again tested for lead.¹⁹⁶ The results showed that the ppb levels of lead in her home were even worse than the first test – the levels were almost forty times higher than the World Health Organization limit. Walters again sent the results to the EPA

¹⁸⁹ Dixon, *supra* note 53.

¹⁹⁰ Dixon, supra note 53; Gov. Rick Snyder Awards Flint \$2 Million in 'Distressed Municipalities' Grants for Water System Infrastructure Improvements, OFF. GOV. RICK SNYDER (Feb. 3, 2015), htt p://www.michigan.gov/snyder/0,4668,7-277--346722--,00.html.

¹⁹¹ Dixon, *supra* note 53; OFF. GOV. RICK SNYDER, *supra* note 190.

¹⁹² Dixon, supra note 53; Marc A. Edwards, Commentary: MDEQ Mistakes and Deception Created the Flint Water Crisis, FLINT WATER STUDY (Sept. 30, 2015), http://flintwaterstudy.org/2015/ 09/commentary-mdeq-mistakes-deception-flint-water-crisis/.

¹⁹³ Dixon, supra note 53; Edwards, supra note 192.

¹⁹⁴ Dixon, supra note 53; Edwards, supra note 192.

¹⁹⁵ Dixon, supra note 53; Edwards, supra note 192.

¹⁹⁶ Dixon, supra note 53; Edwards, supra note 192.

Region 5 who in turn contacted the MDEQ to express concern about these high lead levels.¹⁹⁷

This initial communication between the MDEQ and the EPA is what many say contributed to the theory of misrepresentation by the MDEQ to the EPA.¹⁹⁸ The MDEQ maintains that by saying Flint had a corrosion control program *in place*, it did not mean that the treatment was actually *being performed*.¹⁹⁹ Conversely, the EPA interpreted the MDEQ's statement that a corrosion control program was "in place" as meaning that Flint was performing the program.²⁰⁰ Nearly one year after using the Flint River as its primary water source, the city hired a consultant to review its water treatment process.²⁰¹ The consultant recommended that Flint spend \$50,000 on corrosion control chemicals to prevent iron leaching in pipes which had turned the water brown.²⁰²

On March 26, 2015, EPA officials held a conference call discussing the increase in Legionnaire's disease in Genesee County and Flint.²⁰³ During this call, the EPA suspected the increase was linked to Flint's change in water sources.²⁰⁴ Del Toral suggested that the constant flushing of Flint's water by residents may have caused chlorine residual, which normally would fight Legionella bacteria, to be washed away.²⁰⁵ After a second inquiry by the EPA Region 5 office regarding Flint's corrosion control program, the MDEQ responded that Flint was not currently "practicing corrosion control

¹⁹⁷ Dixon, *supra* note 53; Edwards, *supra* note 192.

¹⁹⁸ Press Release, Doug Ringler, Office of the Auditor General, Questions and Answers, 2-3 (Dec. 23, 2015), http://www.audgen.michigan.gov/finalpdfs/15_16/1761032015.pdf.

¹⁹⁹ Id.

²⁰⁰ Id.

²⁰¹ Dixon, *supra* note 53; VEOLIA NORTH AMERICA, WATER QUALITY REPORT (Mar. 12, 2015), https://www.cityoffflint.com/wp-content/uploads/Veolia-REPORT-Flint-Water-Quality-2 01503121.pdf.

²⁰² Dixon, *supra* note 53; VEOLIA NORTH AMERICA, *supra* note 201.

²⁰³ Dixon, *supra* note 53; Chad Livengood & Karen Bouffard, *Emails: State Mum on Flint Legionnaires' Warning*, DETROIT NEWS, http://www.detroitnews.com/story/news/michiga n/flint-water-crisis/2016/02/12/flint-legionnaire-disease-emails/80265486/ (last visited June 13, 2017).

²⁰⁴ Dixon, supra note 53; Livengood & Bouffard, supra note 203.

²⁰⁵ Dixon, *supra* note 53; Livengood & Bouffard, *supra* note 203.

treatment."²⁰⁶ In an internal MDEQ email, Busch wrote that under the Federal Lead and Copper Rule, the state was meeting its monitoring requirements for Flint.²⁰⁷ After reviewing the correspondence between the MDEQ and the EPA, the Michigan Office of the Auditor General concluded that there was "no specific reason to believe that the MDEQ willfully misrepresented [this] information to the EPA."²⁰⁸

On June 10, 2015, the EPA Region 5 recommended to the MDEQ that it offer to help the City of Flint with technical assistance of managing its water quality issues, including the presence of lead in the drinking water.²⁰⁹ Weeks later, EPA regulations manager Del Toral wrote in a memo to Thomas Poy, chief of the EPA's ground water and drinking water branch, that the absence of a corrosion control program in Flint's water treatment procedure raises a "major concern from a public health standpoint."²¹⁰ Del Toral went on to say that this lack of treatment for lead would cause serious issues for Flint residents with homes on lead or partial lead service lines, which are "common throughout the City of Flint."²¹¹ Del Toral noted that Walters' home water was tested by scientists at Virginia Tech who found lead levels as high as 13,200 ppb. According to the EPA, water with 5,000 ppb's of lead are considered hazardous waste.²¹²

Beginning in July 2015, Governor Snyder was informed that Flint residents had raised concerns about the safety of their drinking water.²¹³ Snyder said that this prompted him to ask the MDEQ and the

²⁰⁶ Ringler, *supra* note 198, at 3; Dixon, *supra* note 53.

²⁰⁷ Ringler, *supra* note 198, at 3; Dixon, *supra* note 53.

²⁰⁸ Ringler, supra note 198, at 3.

²⁰⁹ Dixon, *supra* note 53; *see* Memorandum from Miguel A. Del Toral, Regulations Manager, Ground Water and Drinking Water Branch to Thomas Poy Chief Ground Water and Drinking Water Branch (June 24, 2015), http://flintwaterstudy.org/wp-content/uploads/2015/11/M iguels-Memo.pdf.

²¹⁰ Dixon, supra note 53; Del Toral, supra note 209; Questions About the Disposal of Lead-Contaminated Items, ENVIL. PROTECTION AGENCY, http://www3.epa.gov/epawaste/hazard /tsd/lead/faq.htm#9 (last visited June 13, 2017) [hereinafter EPA FAQ].

²¹¹ Dixon, supra note 53; Del Toral, supra note 209; EPA FAQ, supra note 210.

²¹² Dixon, supra note 53; Del Toral, supra note 209; EPA FAQ, supra note 210.

²¹³ Dixon, supra note 53; Paul Egan, Aide: Snyder Angry When He Heard Flint Water News, DETROIT FREE PRESS, http://www.freep.com/story/news/local/michigan/2016/01/15/snyder-angr y-flint-information-muchmore/78810570/ (last updated Jan. 15, 2016, 12:52 PM).

Department of Health and Human Services about the Flint situation.²¹⁴ MDEQ officials responded that Flint was in compliance with federal lead and copper rules and that there was not a "widespread problem."²¹⁵ The Department of Health and Human Services explained that the elevated lead levels of Flint residents were not out of the ordinary and "[followed] a seasonal trend."²¹⁶ During this time, EPA Region 5 Director Susan Hedman told Flint Mayor Dayne Walling that talks related to Del Toral's leaked memo should not happen until the EPA's report on the status of Flint water has been "revised and fully vetted."²¹⁷ Hedman's response would later be used to suggest that the EPA was not aggressive enough in addressing the lead levels found in Flint based on the reports conducted on Flint resident LeeAnne Walters' home.²¹⁸

Towards the end of July 2015, the Snyder administration, through Chief of Staff Muchmore, voiced its concerns about the situation in Flint.²¹⁹ In an email to Nick Lyon, Director of the Department of Health and Human Services, Muchmore stated that Flint residents were getting concerned about the health effects of rising lead levels and "are basically getting blown off by us (as a state we're just not sympathizing with their plight)."²²⁰

Nearly five months after receiving information about elevated lead levels in Flint, the MDEQ sent a letter to Flint instructing the city to start a corrosion control program on August 17, 2015.²²¹ The MDEQ

²¹⁴ Dixon, supra note 53; Egan, supra note 213.

²¹⁵ Dixon, supra note 53; Egan, supra note 213.

²¹⁶ Dixon, supra note 53; Egan, supra note 213.

²¹⁷ Dixon, *supra* note 53.

²¹⁸ Todd Spangler, E-mails Shed Light on EPA's Role in Flint Water Crisis, DETROIT FREE PRESS (Mar. 5, 2016, 10:58 PM), http://www.freep.com/story/news/local/michigan/flint-water-crisis/2016/03/05/e-mails-shed-light-epas-role-flint-water-crisis/80576406/.

²¹⁹ Dixon, supra note 53; Siddhartha Roy, Original July 22 Email form Dennis Muchmore to Michigan Health Department's Director, FLINT WATER STUDY (Jan. 13, 2016), http://flintwaterstudy.org /2016/01/original-july-22-email-from-dennis-muchmore-to-michigan-health-departmentsdirector/.

²²⁰ Dixon, supra note 53; Roy, supra note 219.

²²¹ Dixon, supra note 53; Jeremy C.F. Lin et al., Events that Led to Flint's Water Crisis, N.Y. TIMES, http://www.nytimes.com/interactive/2016/01/21/us/flint-lead-water-timeline.html?_r=0 (last visited June 13, 2017).

issued this instruction based on results showing lead levels at 11 ppb based on a six-month testing period conducted from January to June of 2015.²²² A week later, Virginia Tech researcher Marc Edwards notified the MDEQ that he would be conducting a study of Flint's water quality due to his concerns about corrosion and lead found in the city's water.²²³ In September 2015, Edwards and his research team issued their preliminary report which indicated that 40% of the Flint homes they tested had elevated lead levels.²²⁴ However, the MDEQ disputed the Virginia Tech findings; MDEQ Communications Director Brad Wurfel wrote to The Flint Journal that the MDEQ was "perplexed" by Edwards' findings, and that it was "unsure how the Virginia Tech team got its results."²²⁵

As the MDEQ's involvement in the Flint crisis came under fire by the Virginia Tech research, state lawmakers began asking MDEQ officials about the issues raised in the Del Toral memo that had leaked two months before.²²⁶ The MDEQ responded by saying that it "does not review or receive draft memos" from the EPA, like the Del Toral memo.²²⁷ Just a week earlier, EPA program manager Jennifer Crooks informed MDEQ officials that even though some MDEQ officials were listed to be copied in on the Del Toral memo, the MDEQ could honestly say that it never received the memo because the EPA specifically requested that the memo not be sent to them.²²⁸

On September 24, 2015, researcher Dr. Mona Hanna-Attisha and the Hurley Medical Center released a study that showed increased blood-lead levels in Flint children since the city switched to the Flint

²²² Dixon, supra note 53; Lin et al., supra note 221.

²²³ Dixon, supra note 53; Flint Water Timeline, MICH.GOV, https://www.michigan.gov/docu ments/snyder/FlintWaterTimeline_FINAL_511424_7.pdf (last visited June 15, 2017).

²²⁴ Marc A. Edwards, Our Sampling of 252 Homes Demonstrates a High Lead in Water Risk: Flint Should Be Failing to Meet the EPA Lead and Copper Rule, FLINT WATER STUDY (Sept. 8, 2015), ht tp://flintwaterstudy.org/2015/09/our-sampling-of-252-homes-demonstrates-a-high-lead-i n-water-risk-flint-should-be-failing-to-meet-the-epa-lead-and-copper-rule/.

²²⁵ Id.

²²⁶ Dixon, *supra* note 53; Spangler, *supra* note 218.

²²⁷ Dixon, supra note 53; Spangler, supra note 218.

²²⁸ Dixon, supra note 53; Spangler, supra note 218.

River.²²⁹ The very next day, City of Flint issued a lead advisory to residents after the release of Hurley Medical Center findings.²³⁰ Flint officials told residents to only use cold water for drinking, cooking, and making baby formula.²³¹ However, the city still maintained that its water treatment procedure was in compliance with federal standards.²³² Upon confirmation of the findings in the Hurley Medical Center study by the Department of Health and Human Services, officials in Genesee County declared a public health emergency in Flint and urged residents not to drink the water.²³³

On October 2, 2015, approximately eighteen months after the switch to the Flint River, Governor Snyder announced a one million dollar action plan for the City of Flint.²³⁴ The plan included purchasing water filters for the city, testing of water in Flint schools, and expediting corrosion control treatment.²³⁵ Snyder also hinted that reconnecting Flint back to the DWSD's pipeline remained a viable alternative to using the Flint River.²³⁶ Snyder maintained that the water leaving the Flint Water Treatment Plant is safe to drink, but that lead could be introduced through homes that used lead piping.²³⁷ Days later, Snyder signed a bill appropriating \$9.35 million to help Flint reconnect to the DWSD pipeline.²³⁸ The Mott Foundation also agreed to contribute \$4 million to assist the city along with Flint

- 232 Lorenz, supra note 230; Owczarzak, supra note 230; Dixon, supra note 53.
- ²³³ Dixon, *supra* note 53; Spangler, *supra* note 218.

- ²³⁵ Fonger, supra note 234; Dixon, supra note 53.
- ²³⁶ Fonger, *supra* note 234; Dixon, *supra* note 53.
- 237 Fonger, supra note 234; Dixon, supra note 53.
- ²³⁸ Dixon, *supra* note 53; Spangler, *supra* note 218.

²²⁹ Dixon, supra note 53; Flint Water Crisis Fast Facts, CNN, http://www.cnn.com/2016/03/04/ us/flint-water-crisis-facts/ (last updated Apr. 10, 2017, 12:38 PM).

²³⁰ Press Release, Jason Lorenz, City of Flint Issues Lead Advisory (Sept. 25, 2015), http://flintwaterstudy.org/wp-content/uploads/2015/09/Lead-Advisory-Release.pdf; Brianna Owczarzak, *Flint Officials Issue Lead Advisory*, WNEM, http://www.wnem.com/sto ry/30116282/flint-officials-issue-lead-advisory (last updated Sept. 25, 2015, 1:28 PM); Dixon, *supra* note 53.

²³¹ Lorenz, supra note 230; Owczarzak, supra note 230; Dixon, supra note 53.

²³⁴ Ron Fonger, Governor's Plan for Lead in Flint Water Includes Free Tests, \$1 Million in Filters, MICH. LIVE, http://www.mlive.com/news/flint/index.ssf/2015/10/governors_plan_for_fl int_water.html (last updated Oct. 2, 2015, 2:45 PM); Dixon, supra note 53.

contributing \$2 million itself.²³⁹ The next day, the City of Flint reconnected to the DWSD pipeline.²⁴⁰

On October 18, 2015, MDEQ Director Dan Wyant announced that the agency made a mistake in applying the wrong federal standards of the Lead and Copper Rule that governs the testing methods for drinking water in the City of Flint.²⁴¹ Specifically, the MDEQ applied standards of the rule that were designed for populations of less than 50,000, even though Flint has a population of roughly 100,000.²⁴² Wyant stated that none of the MDEQ staff in his division had ever worked on a water source switch in a community with more than 50,000 people and that the staff believed they were applying the correct federal standards for Flint.²⁴³ The Lead and Copper Rule requires two six-month testing programs to determine the proper corrosion control program for communities with populations of 100,000 residents.²⁴⁴ Three days after the MDEQ's announcement, Governor Snyder created an independent task force to investigate the situation in Flint.²⁴⁵

Due to the MDEQ's confusion in the application of the federal Lead and Copper Rule, the EPA's Director of Ground Water and Drinking Water Division, Peter Grevatt, released a memo addressing how the Lead and Copper Rule's corrosion control treatment standards should be properly applied.²⁴⁶ The memo stated that for all large water systems, like Flint's, the MDEQ should "ensure that

²³⁹ Dixon, supra note 53; Spangler, supra note 218.

²⁴⁰ Dixon, *supra* note 53; Spangler, *supra* note 218.

²⁴¹ Jim Lynch, Michigan DEQ Vows Changes in Flint Water Crisis, DETROIT NEWS, http://www.detroitnews.com/story/news/environment/2015/10/18/deq-mistakes/7419 8882/ (last updated Oct. 19, 2015, 8:31 PM); Dixon, *supra* note 53.

²⁴² Lynch, supra note 241; Dixon, supra note 53.

²⁴³ Lynch, supra note 241.

²⁴⁴ Id.

²⁴⁵ Dixon, supra note 53.

²⁴⁶ Memorandum from United States Environmental Protection Agency, Memorandum on Lead & Copper Rule Requirements for Optimal Corrosion Control Treatment for Large Drinking Water Systems (Nov. 3, 2015), https://www.epa.gov/sites/production/files/2015-11/docu ments/occt_req_memo_signed_pg_2015-11-03-155158_508.pdf [hereinafter Memorandum]; Dixon, *supra* note 53.

appropriate corrosion control treatment is maintained at all times."²⁴⁷ He went on to say, however, that the switch experienced by Flint is one that "rarely arises" and that the language of the rule does not "specifically address such circumstances."²⁴⁸ The EPA also released the final version of Del Toral's Flint report, nearly five months after it was leaked.²⁴⁹ In regards to the Del Toral memo, the EPA noted that "most of [Del Toral's] recommendations" are being implemented by Flint, including switching back to Detroit water and giving filters to residents.²⁵⁰

On December 9, 2015, the City of Flint began using additional orthophosphate in its water treatment process as a corrosion control nearly twenty-one months after using the Flint River as its primary source of water.²⁵¹ Days later, newly-elected Mayor Karen Weaver declared a state of emergency for the City of Flint.²⁵² Towards the end of December 2015, Governor Snyder's Flint Water Advisory Task Force issued its opinion about the Flint Crisis.²⁵³ The task force stated that "the primary responsibility for what happened in Flint rests with the Michigan MDEQ." The task force went on to to say that despite problems raised by departments at the local, state, and federal level, it is the MDEQ's responsibility to "ensure safe drinking water in Michigan."²⁵⁴ The task force stated that the MDEQ's "minimalist technical compliance approach" was insufficient to ensure the safety of Flint's drinking water.²⁵⁵ The task force noted that throughout the

251 Spangler, supra note 218.

²⁴⁷ Memorandum, *supra* note 246; Dixon, *supra* note 246.

²⁴⁸ Id.

²⁴⁹ Memorandum from United States Environmental Protection Agency, Transmittal of Final Report – High Lead at Three Residences in Flint (Nov. 4, 2015), https://www.epa.gov/sites /production/files/2015-11/documents/transmittal_of_final_redacted_report_to_mdeq.pdf; Dixon, *supra* note 53.

²⁵⁰ Memorandum, *supra* note 249; Dixon, *supra* note 53.

²⁵² Dixon, *supra* note 53; Spangler, *supra* note 218.

²⁵³ Letter from Flint Water Advisory Task Force to Governor Snyder (Dec. 9, 2015), http://flintwaterstudy.org/wp-content/uploads/2015/12/FWATF-Snyder-Letter-12-29-15. pdf; Dixon, *supra* note 53.

²⁵⁴ Id.

²⁵⁵ Id.

whole crisis, the MDEQ treated Flint's concerns "dismissively" and "disrespectfully" and that the MDEQ was more focused on discrediting and questioning the work of researchers rather than compliance and oversight.²⁵⁶ Following this announcement, the MDEQ's director and spokesman resigned.²⁵⁷

On January 5, 2016, Governor Snyder followed Mayor Weaver and declared a state of emergency in Flint.²⁵⁸ Snyder later mobilized the Michigan National Guard to help distribute lead filters and bottled water to Flint residents.²⁵⁹ Two days after the Governor's state of emergency announcement, Dr. Eden Wells, Michigan's chief medical executive, warned Flint residents to use lead filters or bottled water until further notice.²⁶⁰ Snyder then asked President Obama to approve a declaration of a federal emergency and major disaster in Flint; two days later, President Obama signed an emergency declaration in Flint but denied Snyder's request for declaration of a major disaster.²⁶¹ In his State of the State address, Snyder asked the Michigan Legislature for nearly \$30 million to address Flint's immediate needs, like the costs of bottled water and lead filters.²⁶²

On January 20, 2016, Governor Snyder voluntarily released 274 pages of his emails to the public in the wake of the Flint crisis, despite the fact that the Office of the Governor is not subject to the Michigan Freedom of Information Act.²⁶³ However, the emails contained several

259 Id.

261 Id.

²⁵⁶ Id.

²⁵⁷ Dixon, supra note 53.

²⁵⁸ Dixon, supra note 53; Spangler, supra note 218.

²⁶⁰ Id.

²⁶² Dixon, supra note 53; Highlights from Gov. Snyder's State of the State Speech, DETROIT FREE PRESS, http://www.freep.com/story/news/politics/2016/01/19/highlights-gov-snyders-state-sta te-speech/79031454/ (last updated Jan. 19, 2016, 8:46 PM).

²⁶³ Dixon, supra note 53; John Wisely et al., Snyder E-mails: Aides Figured Flint Was Others' Problem, DETROIT FREE PRESS, http://www.freep.com/story/news/local/michigan/flint-water-crisis /2016/01/20/rick-snyder-releases-emails-related-flint-water-crisis/79057168/ (last updated Jan. 21, 2016, 11:20 AM).

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redactions, and Snyder refused to force other employees in the governor's office to release their emails.²⁶⁴

Following the resignation of the EPA Region 5 administrator, Susan Hedman, the EPA issued an emergency order in which it would take over water testing and sampling in Flint and order an independent review of what occurred in the city.²⁶⁵ The order criticized the state's handling of the water crisis and the substantial delays in implementing procedures to improve water quality.²⁶⁶ The order also demanded that the state create a website where the public can access water sampling results and reports and make an inventory of all lead service lines in Flint.²⁶⁷

In response to the EPA emergency order, the new MDEQ Director Keith Creagh agreed to comply with EPA's handling of water testing but at the same time questioned the EPA's legal authority to make such an order.²⁶⁸ Creagh maintained that the MDEQ had "complied with every recent demand or request" by the EPA, and that the order ignored facts, like the state's commitment of almost \$10 million to help the crisis.²⁶⁹ The EPA issued a statement saying it "worked within the framework of the law to repeatedly and urgently communicate the steps the state needed to take to properly treat Flint's water. Those

²⁶⁴ Dixon, supra note 53; Wisely et at., supra note 263.

²⁶⁵ Office of Enf't & Compliance Assurance, U.S. EPA, In the Matter of City of Flint, Michigan; Michigan Department of Environmental Quality; and the State of Michigan, http://www.e pa.gov/sites/production/files/2016-01/documents/1_21_sdwa_1431_emergency_admin_o rder_012116.pdf; Mark Berman, EPA Issues Emergency Order Over Flint Water Crisis, Administrator Who Oversees Michigan Resigns, WASH. POST (Jan. 21, 2016), https:// www.washingtonpost.com/news/post-nation/wp/2016/01/21/michigan-authorities-deba ted-responsibility-for-flint-water-crisis-emails-show/.

²⁶⁶ Berman, supra note 265; Office of Enf't & Compliance Assurance, supra note 265.

²⁶⁷ Office of Enf't & Compliance, supra note 265.

²⁶⁸ Todd Spangler, State Questions EPA's Flint Order but Will Comply, DETROIT FREE PRESS, http://www.freep.com/story/news/local/michigan/flint-water-crisis/2016/01/22/inspec tor-looking-epas-handling-flint-water/79170150/ (last updated Jan. 22, 2016, 9:10 PM); Letter to Gina McCarthy, Adm'r, U.S. EPA, to Keith Creagh, Dep't of Envtl. Quality, re Emergency Administrative Order, In the Matter of City of Flint, Michigan et al. (Jan. 22, 2016), http://w ww.scribd.com/doc/296348164/Response-to-EPA-s-Emergency-Admin-Order [hereinafter Letter].

²⁶⁹ Spangler, supra note 268; Letter, supra note 268.

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necessary actions were not taken as quickly as they should have been." $^{\prime\prime\,270}$

On February 3, 2016, the United States House Oversight and Government Reform Committee held a hearing to examine the situation in Flint.²⁷¹ The committee questioned EPA deputy acting assistant administrator Joel Beauvais, new MDEQ Director Keith Creagh, and researcher Marc Edwards.²⁷² The committee found that failures at every level of government caused and exacerbated the Flint crisis.²⁷³ They found that the EPA Region 5 was aware of Flint's high lead levels through an internal memo (the Del Toral memo) in April of 2015 but failed to act until January of 2016.²⁷⁴ Further, the committee found that the EPA had an obligation to act under the Safe Drinking Water Act (SWDA) if the state, here the MDEQ, was not in compliance with federal standards.²⁷⁵ The SDWA²⁷⁶ was established to protect the quality of drinking water in the United States. This law focuses on all waters actually or potentially designed for drinking use, whether from above ground or underground sources.

Most recently, Flint Mayor Karen Weaver announced on February 9, 2016, that Flint will need \$55 million to remove lead pipelines throughout the city.²⁷⁷ Weaver said the lead replacement efforts will

²⁷⁰ Lisa R. Seville, EPA Faults State 'Failures and Resistance' in Flint Water Crisis, NBC NEWS (Jan. 19, 2016, 6:04 PM), http://www.nbcnews.com/storyline/flint-water-crisis/epa-faults-statefailures-resistance-flint-water-crisis-n499901; Spangler, *supra* note 218.

²⁷¹ Examining Federal Administration of the Safe Drinking Water Act in Flint, Michigan Before the H. Comm. On Oversight and Government Reform, 114th Cong. (2016), https://oversight.house.go v/hearing/examining-federal-administration-of-the-safe-drinking-water-act-in-flint-michig an/ [hereinafter Hearing]; Spangler, supra note 218.

²⁷² Hearing, supra note 271; Spangler, supra note 218.

²⁷³ Hearing, *supra* note 271; Spangler, *supra* note 218.

²⁷⁴ Hearing, supra note 271.

²⁷⁵ Id.

²⁷⁶ See generally Complaint for Declaratory & Injunctive Relief, Concerned Pastors for Social Action v. Khouri, 2016 U.S. Dist. LEXIS 70470 (E.D. Mich. Jan 27, 2016) (No. 16-10277) [hereinafter Complaint].

²⁷⁷ Ashley Fantz & Kristina Sgueglia, Flint Mayor Says \$55 Million Needed to Replace Lead Pipes, CNN, http://www.cnn.com/2016/02/09/politics/flint-mayor-cost-replace-pipes/ (last updated Feb. 9, 2016, 7:08 PM).
be led by the Lansing Board of Water and Light, which has removed thousands of lead pipes in Detroit.²⁷⁸

III. LITIGATING THE FLINT WATER CRISIS

The claim of negligence against private companies involved in the contamination of the water in Flint, Michigan is set to proceed in state court.²⁷⁹ The cases against government officials involve the question of sovereign immunity, which complicates the claims.

Sovereign immunity is a principle derived from the English common law system, with the idea being that one could not sue the Crown without the consent of the monarch.²⁸⁰ Michigan's sovereign immunity law applies more broadly to high-level officials when they act "within the scope of their judicial, legislative or executive authority."²⁸¹ Their lower-ranking counterparts enjoy immunity as well, but only if: (1) they are acting within or reasonably believe they are acting within the scope of employment; (2) the agency with which they are employed is engaged in the exercise or discharge of a governmental function; and (3) the individuals' conduct is not grossly negligent.²⁸²

Sovereign immunity makes it difficult for citizens to hold the state accountable for its part in the mismanagement of the city of Flint. Michigan's sovereign immunity from tort liability is expressed through statute.²⁸³ The state generally extends the statutory immunity to its municipalities as well.²⁸⁴ The statute also allows for six exceptions to sovereign immunity that, per the Supreme Court of the United States, are to be construed narrowly: (1) maintenance of public

²⁷⁸ Id.

²⁷⁹ Mason et al. v. Lockwood, Andrews & Newnam PC et al., 842 F.3d 383 (6th Cir. 2016).

²⁸⁰ Eric Berger, The Collision of the Takings and State Sovereign Immunity Doctrines, 63 WASH. & LEE L. REV. 493, 544 (2006), http://scholarlycommons.law.wlu.edu/wlulr/vol63/iss2/2.

²⁸¹ MICH. COMP. LAWS ANN. § 691.1407(5) (2013).

²⁸² MICH. COMP. LAWS ANN. § 691.1407(2)(a)-(c) (1991).

²⁸³ MICH. COMP. LAWS ANN. § 691.1401 (1991).

²⁸⁴ Kim Kroha, Potholes in the Motor City: How Vacant Properties and Neighborhood Stabilization Can Subject Detroit and Similarly Situated Municipalities to Liability, 47 New ENG. L. Rev. 715, 720 (2013).

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highways; (2) public building defects; (3) performance of proprietary functions by government entities; (4) medical treatment; (5) negligent operation of a government vehicle; and (6) sewage disposal system events.²⁸⁵ Of these, the public building exception, the proprietary function exception, and the sewage disposal exception are the only exceptions that may be potentially applicable to Flint. The public building exception is generally applicable to any government-owned building that is open to the public, even if access may be limited.²⁸⁶ This exception would subject the government to liability for injuries caused by a public building defect, which was known or should have been known to the government at the time and may apply to schools or public housing.²⁸⁷ Proprietary functions are defined through Michigan case law as being activities, typically not funded by tax dollars, in which the government engages for the purpose of pecuniary gain.²⁸⁸ The sewage disposal system exception was added in 2001 and has been construed by the court to include storm water drains.²⁸⁹ At the time of this Article, there were no pending claims under any of these exceptions. Another potential, though not statutory, exception to sovereign immunity is inverse condemnation under the Michigan Takings Clause. This may occur when the government takes an "overt action" towards public improvements that results in diminished value of private property.²⁹⁰ However, the Michigan Court of Appeals has stated this doctrine applies when the damage is directed at a specific property owner rather than an entire community.²⁹¹

Consent by the state, Congressional abrogation and constitutional violations by the State can all refute the sovereign immunity defense. Unsurprisingly, Michigan has not offered consent. *Fitzpatrick v. Bitzger* recognized that the powers given to Congress under the Fourteenth

²⁸⁵ Press Release, Christopher Johnson et al., Michigan Governmental Immunity Update 1-2 (Jan. 20, 2012), http://www.mmrma.org/meetings/pdf/Governmental%20Immunity%20U pdate%20Handout.pdf.

²⁸⁶ Kroha, supra note 284, at 723.

²⁸⁷ Id.

²⁸⁸ Id. at 721.

²⁸⁹ See generally Linton v. Arenac Cty Rd. Comm'n, 273 Mich. App. 107 (2006).

²⁹⁰ Kroha, *supra* note 284, at 724.

²⁹¹ Holloway Citizens Comm. v. County. of Genesee, 196 N.W.2d 484, 485 (1972).

Amendment allow the body to abrogate the state immunity.²⁹² In these instances, Congress must provide a clear statement of intent to do so, and Michigan has not proffered such a statement.²⁹³ Nonetheless, the Michigan-based law firms who have filed these current class action lawsuits are hoping to prove that governmental immunity does not apply because a constitutional violation, they believe, occurred: State of Michigan officials committed a Due Process violation by creating a dangerous condition that threatened the constitutional rights of its citizens to lead safe, healthy lives. In other words,

Sovereign immunity does not apply if the government or an employee infringes on the U.S. constitution, as in, for example, cases where police have allegedly violated someone's civil rights. It also may not apply if the plaintiff can show there was gross negligence. Michigan law, however, shields the state's topmost officials – including the governor, agency heads and Flint's emergency manager – even in cases of gross negligence.²⁹⁴

The Natural Resources Defense Council, the American Civil Liberties Union, and the Council for Concerned Preachers have joined as plaintiffs and filed suit against various city and state individuals.²⁹⁵ These NGO groups hope to avoid sovereign immunity limitations by seeking medical care or monitoring and replacement of water pipes rather than monetary damages.²⁹⁶ A pending class action suit against Governor Rick Snyder and MDEQ officials allege the defendants were deliberately indifferent to Flint residents' health and safety.²⁹⁷ The plaintiffs' counsel claims that because the issue is one of equal protection and rooted in the Fourteenth Amendment, sovereign

²⁹² Fitzpatrick v. Bitzer, 427 U.S. 445 (1976).

²⁹³ Raygor v. Regents of the Univ. of Minn., 534 U.S. 533, 541–42 (2002); Atascadero State Hosp. v. Scanlon, 473 U.S. 234, 242 (1985).

²⁹⁴ Brendan Pierson, Plaintiffs' Lawyers Wary of Taking on Flint Water Scandal, REUTERS (Jan. 25, 2016, 6:35 PM), http://www.reuters.com/article/us-michigan-water-lawsuits-insight-idUS KCN0V32O9.

²⁹⁵ See generally Complaint, supra note 276.

²⁹⁶ Kimberly Adams, Flint Water Lawsuits Highlight Government Immunity, MKT. PLACE (Jan. 27, 2016, 4:22 PM), http://www.marketplace.org/2016/01/27/wealth-poverty/flint-lawsui ts-highlight-government-immunity.

²⁹⁷ Flint Water Class Action Already Filed, FLINT WATER CLASS ACTION, http://www.flintwater classaction.com/lawsuits-already-filed/ (last visited Apr. 2, 2016).

immunity will not apply.²⁹⁸ A number of other class action lawsuits seek equitable relief in lieu of damage, such as the abatement of water bills, and ceasing shutoff services even in the event of unpaid water bills.²⁹⁹

Requests by the residents of Flint for national law firm representation for class action lawsuits have largely declined due to the sovereign immunity obstacle that stands between the class and their relief. University of Michigan law professor Gil Seinfeld explains:

You're going to run headlong into the garden-variety, fairly straight application of this immunity doctrine. So unless the state has consented to let itself be sued, it's almost certainly not going to go anywhere In the early '80s, the Supreme Court said that if you're suing an official and want to get money damages from them, they're going to be immune from liability unless you can show that they clearly violated an established law that a reasonable person would have known about. But here you run into a question of money. The next question is whether these officials are indemnified [or, have insurance from the government in case they're personally sued while doing their job]. If we're talking about massive liability the citizens of Flint might have suffered – and really really significant damages – the likelihood that an official who made that decision is going to be able to pay off these plaintiffs is really small.³⁰⁰

IV. TAKINGS LAW

The controversy over whether sovereign immunity should apply to takings cases is not new; one of the earliest cases discussing the issue dates back to 1897.³⁰¹ The seminal case in this arena is *First English Evangelical Lutheran Church v. County of Los Angeles*, which set the precedent by

²⁹⁸ Id.

²⁹⁹ Rita A. Cicero, Flint's Lead Pipes Must Be Replaced, On City's Tab, Suit Says, 38 NO. 8 WESTLAW J. ASBESTOS 9 (2016).

³⁰⁰ Amber Phillips, Why It Will Be Very Difficult for Flint Residents to Sue Michigan for Money, WASH. POST (Apr. 20, 2016), https://www.washingtonpost.com/news/the-fix/wp/2016/0 1/26/why-it-will-be-very-difficult-for-flint-residents-to-sue-the-state-of-michigan-for-mone y/?utm_term=.7352150866e3.

³⁰¹ Berger, *supra* note 280 (discussing Chicago, Burlington & Quincy R.R. Co. v. City of Chicago, 166 U.S. 226, 241(1897)).

establish[ing] that the government must provide compensation for the period during which the government deprived the property owner of the use of his land for not only physical but also regulatory takings. In this way, *First English* extended the line of precedent that already held that property owners suffering temporary physical takings were entitled to just compensation.³⁰²

The argument here for the takings claimant is that reversing the infringing regulation is not enough, because it will not make the claimant whole since they would remain uncompensated for the period of time that the regulation was in effect.³⁰³ While *First English* would seem to bar a sovereign immunity defense for takings claims against the Federal Government, issues become muddled when trying to raise a takings claim against a state government where the claimant is requesting money damages.³⁰⁴ Before going into the analysis of whether sovereign immunity would apply in a takings case, Part IV of this Article will first describe the significance of takings law, generally.

The Fifth Amendment to the United States Constitution reads, in part, "private property shall not be taken for public use, without just compensation."³⁰⁵ Although subject to more specific controversy, the phrase "just compensation" has historically referred to the state's obligation to pay a property owner fair market value for any property taken in the exercise of the government's eminent domain authority.³⁰⁶ Eminent domain is the state's power to physically seize the property of citizens as well as take full legal right and title in that property, all in the name of doing some greater public good.³⁰⁷ While the ratification of this amendment in 1791 marks the formal beginnings of eminent domain in the United States, the government had long been

³⁰² Berger, *supra* note 280 (discussing First English Evangelical Lutheran Church v. County of Los Angeles, 482 U.S. 304, 319 (1987)).

³⁰³ Id.

³⁰⁴ Id.

³⁰⁵ Janet T. Jackson, What is Property? Property is Theft: The Lack of Social Justice in U.S. Eminent Domain Law, 84 ST. JOHN'S L. REV. 63, 94 (2010).

³⁰⁶ Jed Rubenfield, Usings, 102 YALE L.J. 1077, 1081-82 (1993).

³⁰⁷ Id. at 1081.

taking property from American Indians without their consent and without compensating them.³⁰⁸

The United States never formally recognized American Indians as having an ownership interest in their lands,³⁰⁹ but instead chose to carve out an exception: "'Rather than recognizing that tribes, as the original owners of the lands, had the power to grant fee simple title to an individual or another sovereign, the Court simply reclassified the tribe's original property interest' as merely an occupancy right, which the federal government could extinguish."³¹⁰ The government's application of pre-eminent domain takings law in many ways foreshadowed the issues that those owning property in certain poor or otherwise disadvantaged communities face in asserting their rights under the Takings Clause.³¹¹

Early on in its history, takings were defined relatively narrowly such that just compensation was only guaranteed for an actual physical dispossession of the property accompanied by the government's taking legal title to the property.³¹² By 1871, the United States Supreme Court had issued its first opinion modifying this long standing doctrine by way of *Pumpelly v. Green Bay Co.*³¹³ Under *Pumpelly*, a property owner could be compensated when the state had made a physical invasion of the owner's property that "destroy[ed] its value entirely," in this case a massive flood due to a state dam project.³¹⁴ *Pumpelly* remained untouched until 1982, when the Supreme Court extended its ruling in *Loretto v. Teleprompter Manhattan CATV Corp.* by allowing a takings claim to lie where a statute required landlords to allow cable companies to install their equipment in the landlord owned buildings, regardless of the fact that the space taken

- ³¹¹ Jackson, *supra* note 305.
- ³¹² Rubenfield, *supra* note 306.

313 Id.

³⁰⁸ Jackson, supra note 305.

³⁰⁹ Id. at 96

³¹⁰ Id. (quoting Stacey L. Leeds, By Eminent Domain or Some Other Name: A Tribal Perspective on Taking Land, 41 TULSA L. REV. 51, 61 (2005)).

³¹⁴ Id. (quoting Pumpelly v. Green Bay Co., 80 U.S. (13 Wall.) 166, 177-78 (1871)).

up by the equipment itself was negligible and did not affect the use of the property.³¹⁵

Shifting from a traditional view requiring some type of physical invasion, the Court in *Pennsylvania Coal Co. v. Mahon* ruled a statute forbidding coal mining where it could cause damage to public utilities was a regulatory taking because of the huge diminution in value of the coal mining property in question after the passage of the statute.³¹⁶ More recently, the diminution in value aspect has been interpreted to require that the economic harm suffered "approach[es] a total loss."³¹⁷

In 1945, the Supreme Court gave a clearer definition of "property" as used by the Fifth Amendment Takings Clause.³¹⁸ Rather than defining property strictly as the physical land itself, the Court explained that the term denotes the rights that a property owner has in the land, such as "the right to possess, use, and dispose of it."³¹⁹ Thus, a taking can represent an appropriation of one's interest in a piece of land rather than simply just an appropriation of the physical land itself, whatever that interest may be.³²⁰

A. Recent Trends in Takings Law

More recently, the Supreme Court has allowed claims to lie for takings of personal property, significantly expanding the potential realm of takings law because it traditionally applied only to real property.³²¹ But after reviewing briefly the history of takings law, the Court remarked, "Nothing in this history suggests that personal property was any less protected against physical appropriation than real property."³²² The case in question was *Horne v. Department of Agriculture*, which disputed the government's uncompensated takings

- ³¹⁹ United States v. Gen. Motors, 323 U.S. 373, 377-78 (1945).
- 320 See id. at 378.
- 321 Horne v. Dep't of Agric., 135 S. Ct. 2419, 2425 (2015).
- 322 Id. at 2427.

³¹⁵ Rubenfield, *supra* note 306.

³¹⁶ Id. at 1086-87

³¹⁷ Id. at 1087.

³¹⁸ Sandra L. Geiger, An Alternative Tool for Pursuing Environmental Justice: The Takings Clause, 31 COLUM. J.L. & SOC. PROBS. 201, 240 (1998).

of raisin growers' crops each year in an effort to keep the raisin market steady under the Agricultural Marketing Agreement Act of 1937.³²³ The Court held that the raisins taken under the act were appropriated for government use, and as such the government has to compensate raisin growers for this taking either from the proceeds it gains from selling them or, presumably, must otherwise compensate the growers if it chooses not to sell the raisins.³²⁴

In 2012, the Ninth Circuit found a personal property takings statute was a violation of the Fourth Amendment right against unreasonable seizures, but it is likely also a violation of the Fifth Amendment Takings Clause.³²⁵ The Los Angeles statute allowed the taking of unattended property belonging to the homeless and did not compensate the victims for the seizure.³²⁶ Furthermore, blogger Ilya Somin noted the great social justice that is done when property rights are enforced:

This situation is just one of many examples of how, contrary to conventional wisdom, judicial enforcement of constitutional property rights benefits the poor as much or more so than the wealthy. Rarely if ever would local governments engage in comparable uncompensated destruction of property belonging to the wealthy or the middle class.³²⁷

The Ninth Circuit's recent decision highlights a trend of the government targeting disadvantaged groups in effectuating takings law.³²⁸

B. Eradicating the Sovereign Immunity Problem Through

³²³ Id. at 2424.

³²⁴ Id. at 2432.

³²⁵ Ilya Somin, The Takings Clause and Government Destruction of Homeless Persons' Property, VOLOKOH CONSPIRACY (Sept. 6, 2012, 12:34 AM), http://volokh.com/2012/09/06/thetakings-clause-and-government-destruction-of-homeless-persons-property/ (discussing the holding and impact of Lavan v. City of Los Angeles, 693 F.3d 1022 (9th Cir. 2012)).

³²⁶ Id.

³²⁷ Id.

³²⁸ Abraham Bell & Gideon Parchomovsky, *The Uselessness of Public Use*, 106 COLUM. L. REV. 1412, 1424 (2006) (discussing Justice O'Connor's dissent in Kelo v. City of New London, 545 U.S. 469, 505 (2005) (O'Connor, J., dissenting)).

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Takings

When it comes to states raising a sovereign immunity defense in a takings claim, the dispute arises out of conflicting readings of the Eleventh and Fifth Amendments.³²⁹ Those arguing in favor of state sovereign immunity argue that the Eleventh Amendment extends to takings situations in which a state citizen sues that state to recover compensation, despite specific constitutional authorizations to the contrary.³³⁰ The textual argument against sovereign immunity applying to states in takings cases is precisely that specific language in the Eleventh Amendment: "The Judicial power of the United States shall not be construed to extend to any suit in law or equity, commenced or prosecuted against one of the United States by Citizens of another State, or by Citizens or Subjects of any Foreign State." 331 It is plain to see that the text of the Eleventh Amendment does not prohibit suits by citizens of a state against that state, and thus the arguments for that interpretation are attenuated. Rather, an "interpretive approach" says the Eleventh Amendment suggests states are only afforded sovereign immunity when sued by citizens of another state or of a foreign state.³³² In terms of the Framers' intent, "the Eleventh Amendment's language instead strongly suggests the country decided to constitutionalize only a limited form of sovereign immunity." 333

As time has gone on, the Court has applied sovereign immunity more narrowly, as evidenced in the *Alden v. Maine* case.³³⁴ Alden modestly suggests that the Fifth Amendment takings right may undermine the Eleventh Amendment, precluding any state sovereign immunity defense.³³⁵ Eric Berger theorizes "that constitutional immunity for takings claims might have been amended out of the

³³² Berger, *supra* note 280, at 523.

334 See generally Alden v. Maine, 527 U.S. 706 (1999).

³²⁹ See Berger, supra note 280, at 519.

³³⁰ Id. at 520.

³³¹ U.S. CONST. amend. XI.

³³³ Id. at 581.

³³⁵ See Berger, supra note 280, at 535.

Constitution when the Court incorporated the Fifth Amendment against the states via the Fourteenth Amendment." ³³⁶

Furthermore, the argument still stands that takings claims can still be brought in state court, notwithstanding any bar by sovereign immunity held to exist on these claims against states in federal court.337 This is precisely what the Sixth Circuit said in DLX, Inc. v. Kentucky, where the court held that while sovereign immunity barred a takings claim against the state in federal court, that same claim could proceed in state court.³³⁸ The court's reasoning was that if the Constitution requires a remedy for an uncompensated taking, then it must also require states to provide a remedy for that taking.³³⁹ Thus, allowing a sovereign immunity defense would be illogical because the remedy called for by the Constitution would effectively be barred, since the claim would not lie in either a state or a federal court.³⁴⁰ Today, "the Court has now recognized, in limited circumstances, that sovereign immunity is not an impenetrable barrier to suits against the government for money."341 This long winded debate in the court system has finally dwindled down, with the result being that sovereign immunity in the context of takings claims is not as strong of a defense for states as it used to be. The constitution guarantees "just compensation" for all takings of property by the government, and to disallow relief in such circumstances would be in direct contradiction with the intent of the founding fathers.³⁴²

In a recent case in Montana, a property owner was denied a takings claim against the state by the Montana Supreme Court, based on sovereign immunity under the Eleventh Amendment.³⁴³ When the

- ³⁴⁰ Berger, *supra* note 280, at 552–53, 586–87.
- 341 Id. at 589-590
- 342 See id. at 578.

³³⁶ Id. at 541.

³³⁷ Id. at 511.

³³⁸ DLX, Inc. v. Kentucky, 381 F.3d 511, 527 (6th Cir. 2004).

³³⁹ Berger, supra note 280, at 552.

³⁴³ Cori Badgley, Governor of Montana Successfully Asserts Sovereign Immunity to Takings Claim, ABBOTT & KINDERMANN LAND USE BLOG, http://blog.aklandlaw.com/2008/05/articles/tak ings-inverse-condemnation/governor-of-montana-successfully-asserts-sovereign-immunity -to-takings-claim/ (last visited Sept. 16, 2016).

case was then taken to federal court, the Ninth Circuit ruled that the Eleventh Amendment only applied to federal jurisdiction over takings cases brought under the Fifth Amendment, but that these claims could be brought in state court.³⁴⁴ The Ninth Circuit then had to dismiss the case based on this reasoning because the claimant was asking for monetary damages as opposed to prospective relief. Unfortunately for the claimant, he received no compensation because the Montana Supreme Court had already ruled that the Eleventh Amendment did apply to state court takings claims brought under the Fifth Amendment.³⁴⁵ Had the claimant taken his case to federal court first, he likely would have been able to receive compensation in his state court case.

C. Michigan Law on Takings

The current version of Michigan's constitution was enacted in 1963.³⁴⁶ Article X § 2 of the constitution is the foundational authority for eminent domain law in the state.³⁴⁷ It reads, in relevant part:

Private property shall not be taken for public use without just compensation therefore being first made or secured in a manner prescribed by law. If private property consisting of an individual's principal residence is taken for public use, the amount of compensation made and determined for that taking shall be not less than 125% of that property's fair market value, in addition to any other reimbursement allowed by law. Compensation shall be determined in proceedings in a court of record.³⁴⁸

On its face, the first sentence of the paragraph seems to mimic the Fifth Amendment of the United States Constitution, especially with the inclusion of a "just compensation" guarantee and a "public use" requirement.³⁴⁹ However, as will be discussed further below, the

³⁴⁴ Id.

³⁴⁵ Id.

³⁴⁶ See generally MICH. CONST.

³⁴⁷ See John E. Mogk, Eminent Domain and the "Public Use": Michigan Supreme Court Legislates an Unprecedented Overruling of Poletown in County of Wayne v. Hathcock, 51 WAYNE L. REV. 1331, 1335 (2005).

³⁴⁸ MICH. CONST. art. X § 2, para 1.

³⁴⁹ U.S CONST. amend. V; Mogk, *supra* note 347, at 1349.

precedent case law in Michigan defines the public use requirement much differently than it has been interpreted under the Fifth Amendment.³⁵⁰

Two major cases have taken a pass at interpreting this section of the state constitution, each with a different outcome.³⁵¹ The first, *Poletown Neighborhood Council v. City of Detroit*, arose out of a plan by the Detroit Economic Development Corporation to condemn a piece of property so that General Motors could build an assembly plant there.³⁵² At the time of this litigation, Detroit was facing severe unemployment rates,³⁵³ and thus the hope was that the new plant would keep the hundreds of jobs of those who worked at the older, aging plant in Detroit.³⁵⁴ *Poletown*'s main dispute was "whether the proposed condemnation [was] for the primary benefit of the public or the private user."³⁵⁵ Ultimately, the Supreme Court of Michigan held that this particular project was for a public use, but made sure to clarify that their holding did not mean that all future projects proposed by an economic development corporation would also be upheld as furthering a public use.³⁵⁶

Twenty-three years later in *Hathcock v. County of Wayne*, the court would overrule the *Poletown* decision. In contrast to the economic backdrop of the *Poletown* case, Hathcock was decided during a time in which Detroit's economy was steadily developing.³⁵⁷ In *Hathcock*, Wayne County began purchasing properties from buyers surrounding a newly renovated airport in an effort to head off any noise complaint concerns from neighbors of the airport down the road.³⁵⁸ Part of the agreement with the FFA, who gave Wayne County the money to make

- 354 Id.; Poletown, 304 N.W.2d at 632.
- ³⁵⁵ *Poletown*, 304 N.W.2d at 632.
- 356 Id. at 634-35.
- 357 Mogk, supra note 347, at 1341.
- ³⁵⁸ County of Wayne v. Hathcock, 684 N.W.2d 765, 771 (2004).

³⁵⁰ Mogk, *supra* note 347, at 1358-59.

³⁵¹ Id. at 1335 (2005).

³⁵² Poletown Neighborhood Council v. City of Detroit, 304 N.W.2d 455, 457 (1981).

³⁵³ Mogk, *supra* note 347, at 1336.

these sales, stated that the acquired properties had to be put to an "economically productive use." 359

Wayne County's plan for an "economically productive use" was a 1,300-acre state of the art business and technology center, which was expected to create thousands of jobs and generate millions in tax revenue.³⁶⁰ However, the county was unable to acquire all the land that it needed for the project through voluntary sales, so it instead initiated condemnation proceedings against the defendants to gain title to the remaining parcels.³⁶¹

The *Hathcock* court's overruling of *Poletown* hinged on how it defined public use.³⁶² While the court in *Poletown* defined public use in a flexible sense, the court in *Hathcock* took an originalist approach.³⁶³ Not only did the *Hathcock* court interpret public use to mean what it meant when the constitution was ratified in 1963, but the court interpreted what it meant specifically to someone "versed in the law" in 1963.³⁶⁴ In the end, the *Hathcock* court held that the takings by Wayne County were not for public use as the term is understood within the aforementioned limitations.³⁶⁵

The Supreme Court of the United States further refined the definition for public use in *Kelo v. City of New London* by ruling that a city could exercise its eminent domain power to proceed with an economic redevelopment plan focused on the removal of "blight."³⁶⁶ The Court described blight as "extreme poverty."³⁶⁷ Thus, the Court in effect ruled that eminent domain could only be used to upgrade property, and could not be used to lessen its benefit to the public.³⁶⁸

³⁵⁹ Id.

³⁶⁰ Id.

³⁶¹ Id.

³⁶² See Mogk, supra note 347, at 1342.

³⁶³ Hathcock, 684 N.W.2d at 779.

³⁶⁴ County of Wayne v. Hathcock, 684 N.W.2d 765, 779-80 (2004).

³⁶⁵ Id. at 781.

³⁶⁶ Kelo v. City of New London, 545 U.S. 469, 469–71 (2005).

³⁶⁷ Id. at 500.

³⁶⁸ See id. at 503.

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Around the same time *Poletown* was decided, the Uniform Condemnation Procedures Act (UCPA) was adopted in Michigan in 1980 which governs all land condemnation proceedings in the state.³⁶⁹ Prior to the adoption of the UCPA, the condemning entity historically had to prove to a jury the public purpose and need for the taken property, who would then decide if the taking was indeed necessary and would decide the amount of just compensation for the property owner.³⁷⁰

The UCPA dramatically changes this traditional proceeding. Under the UCPA, the question of public use and necessity are only considered if the property owner attempts to challenge the taking on the grounds that the condemning entity has not met those requirements.³⁷¹ If the property owner does nothing in response to the condemnation proceedings, then under the UCPA "necessity is 'conclusively presumed' and that the property owner's right to further challenge the condemnation is 'waived.'" 372 Further, under the UCPA, the condemning entity immediately takes title to the property on the date of filing without waiting for a challenge from the property owner, and pays the property owner to compensate them for the taking.³⁷³ Because of the immediacy of transfer, this action is known as a "quicktake" action.³⁷⁴ The property owner can also challenge only the amount of compensation, wherein a trial will be conducted with a jury on just the compensation issue.³⁷⁵ Thus, the UCPA makes it much easier for government agencies to condemn land for the taking, and makes it harder for property owners to challenge the taking by taking away their traditionally automatic right to a jury trial, as well as taking the burden off the government of proving public purpose and necessity.

³⁶⁹ Jason C. Long, Eminent Domain: Opening and Closing Trial Under Michigan's Uniform Condemnation Procedures Act, 2004 MICH. ST. L. REV. 83, 84 (2004).

³⁷⁰ Id.

³⁷¹ Id.

³⁷² Id. at 84-85 (quoting Mich. Comp. Laws §§ 213.51-.77 (1998)).

³⁷³ Id. at 85, 88, 93.

³⁷⁴ Id. at 93-94.

³⁷⁵ Id. at 88.

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D. Kinds of Takings

There are several types of takings, and the analysis involved under each varies depending on the type of taking at issue. The traditional taking is what is known as a "physical taking." A physical taking occurs when the government physically occupies a person's private property either directly or by permitting others to occupy it.³⁷⁶ The seminal case in physical takings jurisprudence is Loretto v. Teleprompter Manhattan CATV Corp.³⁷⁷ In Loretto, a landlord in New York City sued a cable television company based on its installation of some cabling on the rooftop of the building she owned, pursuant to a law enacted by the state of New York which required landlords to permit such cable installations.³⁷⁸ Loretto argued that the installation was a physical taking of her property,³⁷⁹ albeit the fact that the cables did not take up much physical space.³⁸⁰ The Court held that a taking had taken place in contravention of Loretto's constitutional rights.³⁸¹ Stating that it did not matter whether a public use was served by the regulation, the Court held that a physical appropriation of another's property was a taking regardless.³⁸² Additionally, the Court noted the fact that the area of the land purportedly taken was small was not of consequence in its determination that a taking had taken place.³⁸³ Rather, the size of the area and the extent of the property's occupation were factors to consider in determining the amount of compensation due.³⁸⁴ Lastly, the Court heavily emphasized the effect such a taking has on the property owner's rights,³⁸⁵ rights that are both essential to enjoying the full breadth of the property ownership and constitutionally

³⁸² Id. at 426.

³⁷⁶ Geiger, *supra* note 318, at 232.

³⁷⁷ See generally Loretto v. Teleprompter Manhattan CATV Corp., 458 U.S. 419 (1982).

³⁷⁸ Id.

³⁷⁹ Id. at 423.

³⁸⁰ Id. at 430, 436.

³⁸¹ Id. at 441.

³⁸³ Loretto v. Teleprompter Manhattan CATV Corp., 458 U.S. 419, 430, 436 (1982).

³⁸⁴ Id. at 436-37.

³⁸⁵ *Id.* at 435–36.

guaranteed.³⁸⁶ The Court stated "[p]roperty rights in a physical thing have been described as the rights 'to possess, use and dispose of it.' To the extent that the government permanently occupies physical property, it effectively destroys each of these rights."³⁸⁷

Regulatory takings, in contrast, occur when a governmental regulation severely limits or entirely bars beneficial use of a person's private property.³⁸⁸ In one case on point, Lucas v. South Carolina Coastal Council, the Supreme Court further refined the requirement for a regulatory taking as being when "the regulation denies all economically beneficial or productive use of land." 389 The Court here suggested this may be because total economic devaluation is functionally equivalent to a physical seizure.³⁹⁰ Alternatively, it may be because regulations of this sort are more likely to force a person's property to be "pressed into some form of public service under the guise of mitigating serious public harm." 391 In Lucas, the petitioner owned two beachfront residential properties in the Isle of Palms, South Carolina.³⁹² The South Carolina legislature then passed an act which prohibited Lucas from building any permanent structures on his land, for the purpose of rehabilitating and preserving the state's coastline.³⁹³ Lucas argued the act effected a regulatory taking of his property because it rendered the land economically useless, despite his concession of the fact that the act was valuable legislation for preserving South Carolina's coastline.³⁹⁴ The Court held that South Carolina could only avoid compensating Lucas for a taking if it could make a showing that "principles of nuisance and property law" barred the residential uses Lucas intended to make with his properties.³⁹⁵ This

- 392 Id. at 1006.
- 393 Id. at 1007-09.
- 394 Id. at 1009.

³⁸⁶ *Id.* at 436.

³⁸⁷ Id. at 435 (citation omitted).

³⁸⁸ Geiger, supra note 318, at 232.

³⁸⁹ Lucas v. South Carolina Coastal Council, 505 U.S. 1003, 1015 (1992).

³⁹⁰ Id. at 1017.

³⁹¹ Id. at 1018.

³⁹⁵ Lucas v. South Carolina Coastal Council, 505 U.S. 1003, 1031-32 (1992).

is so because it is not said nor has it been interpreted anywhere in the Takings Clause that title to land is held subject to any subsequent restrictions that a state might make which may bar all economically beneficial use.³⁹⁶ Thus, unless underlying common law principles of property or nuisance law would keep Lucas from building homes on his residential properties, the state could not avoid paying him just compensation for enacting a regulation which would prevent him from doing so.³⁹⁷

In Penn Central Transportation Co. v. City of New York, New York City passed the Landmarks Preservation Law, which ensured historical properties designated as landmarks were not destroyed or profoundly changed.³⁹⁸ Under the act, any property owner of a landmark had to submit plans for changes to the exterior of the landmark to the Landmarks Preservation Commission.³⁹⁹ Grand Central Terminal ("Terminal") was designated as a landmark under this act, and had contracted with another company to construct a fifty story office building above the terminal.⁴⁰⁰ The Landmarks Preservation Commission ultimately rejected the Terminal's plans for the office building, and the Terminal brought suit against the city claiming the Landmarks Preservation Law effected a taking of its property in violation of the Takings clause (among other arguments) and that the Terminal was therefore owed just compensation for the taking.⁴⁰¹ The Court held that a taking had not occurred because the law recognizes the states' rights to impose regulations for promoting the "health, safety, morals, or general welfare" of its people, even if some people's property interests are adversely affected by the regulation while others' were not.⁴⁰² Secondly, the appellants were only considering the value of the airspace above the terminal; the value

- 398 Penn. Cent. Trans. Co. v. City of New York, 438 U.S. 104, 104 (1978).
- 399 Id.
- 400 Id.
- 401 Id.
- 402 *Id.* at 105.

³⁹⁶ Id. at 1004.

³⁹⁷ Id. at 1004.

of the terminal itself had not been affected by the regulation.⁴⁰³ Additionally, the Court pointed out that the city government was not "taking" the airspace above the Terminal for its own use by enacting the regulation, it was instead prohibiting the Terminal from using it.⁴⁰⁴ It is also notable that the Terminal did not try to have a smaller version of the office building plan approved by the Landmarks Preservation Commission, and the Court did not see a reason why a less intrusive plan could not have been approved.⁴⁰⁵

Alternatively, the state of Michigan recognizes constructive takings. The UPCA defines a constructive (or de facto) taking as "conduct, other than regularly established judicial proceedings, sufficient to constitute a taking of property within the meaning of the state constitution."406 This definition appears to also encompass the more widely understood regulatory taking where an agency did not intend to take the land but effected a taking regardless in passing a regulation that bars economically beneficial use of a person's land.⁴⁰⁷ Additionally, the UPCA makes clear that a constructive taking is not to be the state's first choice method of taking a person's property under eminent domain via intentionally forcing property owners to initiate constructive taking actions to prove the need for just compensation.⁴⁰⁸ Instead, the state is to initiate condemnation proceedings in accordance with the UCPA, but a property owner is free to initiate an action for a constructive taking to prove that their property has been taken, if need be.409

Within these three types of takings (physical, regulatory, and constructive), there are also sub-distinctions for partial and temporary takings. A partial taking occurs when only part of the property is taken rather than the whole, but a substantial decrease in value occurs to the

⁴⁰³ Id.

⁴⁰⁴ Penn. Cent. Trans. Co. v. City of New York, 438 U.S. 104, 105 (1978).

⁴⁰⁵ Id.

^{406 8}A GLENDA K. HARNAD ET AL., MICH. CIV. JUR. EMINENT DOMAIN § 89 (Sept. 2016).

⁴⁰⁷ Geiger, *supra* note 318, at 232.

⁴⁰⁸ HARNAD ET AL., *supra* note 406.

⁴⁰⁹ Id.

property that is not taken.⁴¹⁰ In a regular (whole property) taking, just compensation is measured based off of the market value of the taken property.⁴¹¹ In the case of a partial taking, the just compensation is determined based off the market value of the untaken property (also called the "remainder"), rather than the portion taken.⁴¹²

Similarly, a temporary taking occurs when a piece of property is taken for only a short period of time before the property owner is returned to his or her full previous use and enjoyment.⁴¹³ As previously discussed, *First English* affirmed the right to be compensated for a temporary regulatory taking, breaking a new path from the long precedent of compensation only for physical takings.⁴¹⁴ Just like partial takings, a temporary taking can either be a physical appropriation of a person's private property or a taking effected by a regulation.⁴¹⁵ Under the temporary regulatory taking umbrella, there are two further subdivisions: prospectively temporary regulations and retrospectively temporary regulations.⁴¹⁶

Prospectively temporary regulations are regulations that are intended to be in place for only a short period of time when they are enacted, such as land-use permits.⁴¹⁷ This type of temporary regulation is to be analyzed under *Penn Central*, rather than under *Lucas*.⁴¹⁸ The factors laid out in Penn Central include "'the economic impact of the regulation on the claimant and, particularly, the extent to which the regulation has interfered with distinct investment-backed expectations,' as well as the 'character of the governmental action.'"⁴¹⁹

418 Id.

⁴¹⁰ See Jerome P. Pesick, Eminent Domain: Calculating Just Compensation in Partial Taking Condemnation Cases, 82 MICH. B.J. 34, 35 (Dec. 2003).

⁴¹¹ Id.

⁴¹² Id.

⁴¹³ See Daniel L. Siegel & Robert Meltz, Temporary Takings: Settled Principles and Unresolved Questions, 11 VT. J. ENVTL. L. 479, 480 (2010).

⁴¹⁴ See id. at 481 (discussing First English Evangelical Lutheran Church v. County of L.A., 482 U.S. 304, 312 (1987)).

⁴¹⁵ Id. at 480.

⁴¹⁶ *Id.* at 482, 496.

⁴¹⁷ Id. at 482.

⁴¹⁹ Id. at 482-83 (quoting Lingle v. Chevron U.S.A. Inc., 544 U.S. 528, 538-39 (2005)).

But, if a regulation devalues a property entirely, then it is a "per se total taking" under *Lucas* regardless of any consideration of the *Penn Central* factors.⁴²⁰

In contrast, retrospectively temporary regulations are regulations that were intended to be permanent at enactment but were later repealed.⁴²¹ Usually, the repeal comes as a result of a judicial decision or in response to a lawsuit.⁴²² In the area of retrospectively temporary regulations, there is a split over whether *Lucas*'s hard and fast per se taking rule should apply.⁴²³ In *Resource Investments, Inc. v. United States,* the Court chose to look at the dilemma from the view point of the regulation being permanent when it was enacted, thus affecting compensation by being later repealed but not affecting the taking determination in the first place-a taking could still be found if all beneficial uses of the property are gone.⁴²⁴ However, if a speculative value still remains, the per se rule from Lucas may not apply and a taking may thus not be found according to the Court in *Florida Rock Industries, Inc. v. United States*.⁴²⁵

The Michigan constitution guarantees that private property cannot be appropriated for public use without providing the landowner just compensation.⁴²⁶ This section of the constitution further provides that if the property taken is the landowner's principal residence, the just compensation cannot be less than 125% of the fair market value of the property.⁴²⁷ Generally, just compensation is calculated based on the fair market value of the property when the land is physically appropriated permanently as in the case of a traditional taking.⁴²⁸ As aforementioned, in the case of partial takings,

⁴²⁰ Id. at 483.

⁴²¹ Id. at 496.

⁴²² Id.

⁴²³ Id. at 498.

⁴²⁴ Res. Invs., Inc. v. United States, 85 Fed. Cl. 447, 493 (2009); Siegel & Meltz, *supra* note 413, at 497.

⁴²⁵ Fla. Rock Indus., Inc. v. United States, 18 F.3d 1560, 1566 n.12 (Fed. Cir. 1994); Siegel & Meltz, supra note 413, at 499.

⁴²⁶ MICH. CONST. art. X § 2, para 1.

⁴²⁷ MICH. CONST. art. X § 2, para 1.

⁴²⁸ Pesick, *supra* note 410, at 35.

both the value of the portion taken plus any decrease in value of the portion not taken as a result must be factored into the just compensation calculation.⁴²⁹ Calculating just compensation for regulatory takings, however, can be more difficult because the land's title has not been transferred to the government, so fair market value is not an appropriate measure.

E. Regulatory Takings and Just Compensation

The purpose of just compensation is to place the affected property owner in the same position they would be in had the taking never occurred.⁴³⁰ In regulatory takings, the valuation for just compensation is somewhat different than the method used for physical takings, because the taking is not permanent. A physical taking's just compensation is measured based on the fair market value of the property at the time of the taking.⁴³¹ The guidelines for valuing just compensation for a regulatory taking, however, are not so clear-cut.⁴³² Some courts have argued that rescinding the offending regulation is enough to remedy the taking.⁴³³ However, the "invalidation" remedy does not fully compensate the landowner for the time that the regulation was in effect; it only stops the landowner from continuing to suffer a taking.⁴³⁴ The "interim compensation" remedy, in contrast, proposes to compensate the landowner for the time during which the regulation was in place.⁴³⁵ A portion of the court in the influential case San Diego Gas & Electric Co. v. City of San Diego acted in support of the interim compensation remedy:

Justice Brennan (and perhaps a majority of the Court) expressed the view that, when a government agency regulates the use of private property so harshly as to effect a de facto taking of the property (or an

⁴²⁹ Id.

⁴³⁰ Thomas E. Schnur, Compensation and Valuation for Regulatory Takings, 35 DEPAUL L. REV. 931, 954 (1986).

⁴³¹ Id. at 949.

⁴³² Id. at 953.

⁴³³ Id. at 944.

⁴³⁴ Id. at 947.

⁴³⁵ Id. at 954.

interest in it), a remedy in damages is compelled by the Constitution's "just compensation" clause. If the offending entity chooses to rescind the regulation after a court has found it to be a taking, then the government is liable only for those interim damages which occurred during the time the regulation temporarily took the property.⁴³⁶

Under the interim compensation remedy, there are three schools of thought as to how just compensation should be calculated. The "rental return method" values the taking at the fair rental value that the property would have garnered on the open market among private parties during the time the regulation was in effect.⁴³⁷ But even within the rental return method there are variations; a court may base the rental amount off of the property's lowest, actual, or highest level of possible uses⁴³⁸—leading to considerable fluctuation in awards among property owners. Notably, land is valued at its highest potential use in formal condemnation proceedings for physical takings, because the market itself does not limit the value of land to actual uses.⁴³⁹

Second, the "option price method" values the property at the market value of what an option to buy the property would have been during the period the regulation was in effect.⁴⁴⁰ Additionally, at least one court has suggested that this value should also take into account taxes and engineering or permitting expenses incurred in gaining city approval for the land, depending on the proposed use.⁴⁴¹

The third method is the "lost profits method."⁴⁴² The method's title is a misnomer, because rather than recouping lost profits, a landowner recoups the interest on profits that would have been earned from the property while the regulation was in force.⁴⁴³ The lost profit method appears speculative at first glance, but as one scholar has

439 Id.

443 Id.

⁴³⁶ Michael M. Berger & Gideon Kanner, *Thoughts on the White River Junction Manifesto: A Reply to the Gang of Five's Views on Just Compensation for Regulatory Taking of Property*, 19 LOY. L.A. L. REV. 685 (1986).

⁴³⁷ Schnur, supra note 430, at 954-55.

⁴³⁸ Id. at 956.

 $^{^{440}\,}$ Id. at 957.

⁴⁴¹ Id. (discussing Lomarch Corp. v. Mayor of Englewood, 237 A.2d 881, 884 (N.J. 1968)).

⁴⁴² Id. at 957-58.

noted, "it is no more speculative than techniques that courts and juries often utilize in measuring damage awards in tort cases." 444

While the three methods differ from each other quite a bit, each of these three methods may have a place in regulatory takings law depending on the circumstances of the case.⁴⁴⁵

A potential takings claim will not be reviewed by the courts unless the claim is deemed ripe.⁴⁴⁶ The question of ripeness is a threshold matter, meaning if the case is not ripe, it goes no further.⁴⁴⁷ The Supreme Court has laid out two requirements to determine if a takings case is ripe under the fifth amendment:⁴⁴⁸ "[f]irst, there must be a final, reviewable decision regarding the application of the governmental regulation to the plaintiff's property. Second, there must also be a showing that the plaintiff has utilized the available state procedures for obtaining compensation for the taking."⁴⁴⁹ Thus, the plaintiff must exhaust all state remedies before turning to the federal government for help.⁴⁵⁰

Inherent in the first prong of the *Williamson County* test is that a taking actually occurred-otherwise there can exist no final reviewable decision on the matter.⁴⁵¹ If a claim is brought too soon, as in before a taking has actually occurred, it will not be ripe for resolution and will subsequently be dismissed per the rule laid out in *Langley Land Co. v. Monroe County*.⁴⁵² In *Langley*, a man brought a case based on a threat of the exercise of eminent domain against him by the county.⁴⁵³ However, because the county had not yet formally condemned the man's land,

⁴⁴⁴ Id. at 958.

⁴⁴⁵ Id.

⁴⁴⁶ See Geiger, supra note 318, at 227.

⁴⁴⁷ Id.

⁴⁴⁸ Id.

⁴⁴⁹ Id. (paraphrasing Williamson County Regional Planning Commission v. Hamilton Bank, 473 U.S. 172, 186 (1985)).

⁴⁵⁰ See id.

⁴⁵¹ Id. at 230.

⁴⁵² Id. (explaining Langley Land Co. v. Monroe County, 738 F. Supp. 1571, 1574 (M.D. Ga. 1990)).

⁴⁵³ Langley Land Co. v. Monroe County, 738 F. Supp. 1571, 1574 (M.D. Ga. 1990).

no taking had occurred and therefore the case was not yet ripe for review. $^{\rm 454}$

V. TAKINGS CASES SIMILAR TO THE FLINT WATER CRISIS

The most similar type of case to the Flint crisis arises in the context of government-induced flooding. As previously discussed, *Pumpelly* is the seminal case in this area.⁴⁵⁵ In *Pumpelly*, a destructive flood resulted from a state-sponsored dam project.⁴⁵⁶ The Court, for the first time, held that a flood could be a taking where it entirely destroyed the value of the land.⁴⁵⁷ Despite the fact that the land was not physically appropriated in the traditional sense, the flood was a physical invasion nonetheless.⁴⁵⁸ In *Sanguinetti v. United States*, the Court narrowed this ruling by holding that the flooding must be permanent in order to effect a taking.⁴⁵⁹

Later in *United States v. Cress*, the Court scaled back its strict ruling in *Sanguinetti* by holding that permanent does not necessarily have to be continuous, so as to allow recurring temporary flooding to qualify as a taking.⁴⁶⁰ The difference it seems, is one of degree.⁴⁶¹

There are fewer cases on the books involving public health crises as takings claims. In *Smith v. City of Brenham*, property owners brought a takings claim after a city landfill was placed near their land.⁴⁶² The effect of the landfill's placement was a dramatic drop in property values which were arguably permanent as long as the landfill remained.⁴⁶³ The court in this case ruled that "mere fluctuations in value during the process of governmental decision-making, absent

- 459 Romero, supra note 455, at 788.
- 460 Id.
- 461 Id.
- 462 Sandra L. Geiger, supra note 318, at 233.
- 463 Id.

⁴⁵⁴ Id.

⁴⁵⁵ Alan Romero, Takings by Floodwaters, 76 N.D. L. REV. 785, 788 (2000).

⁴⁵⁶ Pumpelly v. Green Bay Co., 80 U.S. (13 Wall.) 166, 177-78 (1871).

⁴⁵⁷ Id.

⁴⁵⁸ Id.

extraordinary delay, are incidents of ownership."⁴⁶⁴ The *Smith* case illustrates a big obstacle to environmental justice claims-that the claimant's land is not encompassed by the environmental hazard, it is rather indirectly affected as a result.⁴⁶⁵

In contrast, Flint would not face this same obstacle because the residents' lands were encompassed by the environmental hazard by way of the lead-poisoned water entering their homes.⁴⁶⁶ As a result, Flint residents' properties were not only devalued, but the residents also suffered detrimental health effects as a result.⁴⁶⁷ Both of these factors would count into the just compensation calculation. Thus, the Flint residents do not have the same hurdles that other environmental justice cases brought as regulatory takings face.

A. The Pros and Cons of Takings

Although the Flint water crisis may be an example of the negative side of takings, there are pros and cons to allowing takings claims more generally. Allowing the government to use its eminent domain power to acquire property that is unique or limited for a certain project is a pro, because otherwise projects requiring such land could be too expensive to pursue if the owners are unwilling to sell for a fair price.⁴⁶⁸ These projects could be useful to society, such as public parks, and as a result society gains social wealth through their completion.⁴⁶⁹ Further, the power of eminent domain eliminates property owners' right to hold-out.⁴⁷⁰ In doing so, the use of eminent domain allows socially beneficial projects to be completed when they may otherwise

⁴⁶⁴ Id.

⁴⁶⁵ *Id.* at 234.

⁴⁶⁶ Dixon, *supra* note 53; Schuch, *supra* note 185.

⁴⁶⁷ Daniel Goldstein, Lead Poisoning Crisis Sends Flint Real-Estate Market Tumbling, MKT. WATCH, (Feb. 17, 2016, 3:18 PM), http://www.marketwatch.com/story/lead-poisoning-crisis-sendsflint-real-estate-market-tumbling-2016-02-17; Holly Yan, Flint Water Crisis: How Years of Problems Lead to Lead Poisoning, CNN (Mar. 3, 2016, 10:12 AM), http://www.cnn.com/2016/ 01/20/health/flint-water-crisis-timeline/.

⁴⁶⁸ Charles E. Cohen, Eminent Domain After Kelo v. City of New London: An Argument for Banning Economic Development Takings, 29 HARV. J.L. & PUB. POL'Y 491, 534 (2006).

⁴⁶⁹ Id. at 535.

⁴⁷⁰ Id. at 535-36.

be cost-prohibitive.⁴⁷¹ Similarly, takings allow private investment in property which might otherwise be too risky if the government could take one's property without paying just compensation.⁴⁷²

On the downside, the nature of takings is that they are coercive.⁴⁷³ A property owner whose land is being taken through eminent domain more than likely does not want to sell their land to the government, but has no say in the matter.⁴⁷⁴ In fact, most states' eminent domain laws require the condemning entity to offer to buy the property on the open market before initiating condemnation proceedings.⁴⁷⁵ This implies that by the time a condemnation proceeding has begun, the property owner has already refused to sell his or her land.⁴⁷⁶

In addition, the just compensation guaranteed by the Fifth Amendment and by many state constitutions often undercompensates property owners.⁴⁷⁷ This is because the Supreme Court has determined that just compensation only encompasses the fair market value of the property at that moment; it does not encompass sentimental value or a current slough in the housing market.⁴⁷⁸ As a result, property owners whose land is taken lose out on the chance to benefit from a higher selling price later when the market comes back – the government reaps that benefit instead.⁴⁷⁹

Just compensation also does not include the costs involved in relocating, attorney's fees, annoyance, and more.⁴⁸⁰

However, there is a possibility that the property owner could benefit from his or her land being taken under a theory known as "reciprocity of advantage."⁴⁸¹ There are two levels to this theory. The

⁴⁷¹ Id. at 536.

⁴⁷² Id. at 542.
473 Id. at 536.
474 Id. at 536-37.
475 Id. at 536.
476 Id.
477 Id. at 537.
478 Id.
479 See id.
480 Id. at 538.
481 Id.

narrower level states that "a property owner may enjoy reciprocity of advantage if he enjoys some advantages from the actual project for which his property is taken that are 'not enjoyed by the community as a whole.'"⁴⁸² In contrast, the broader level states that the undercompensated land owner might still benefit if society as a whole benefits from the taking.⁴⁸³ However, the counter argument to this theory is that the property owner cannot take advantage of the benefits that society receives as a result of the taking if he is forced to leave the community as a result.⁴⁸⁴

Far worse than any of the aforementioned negatives however is the reality that eminent domain is disproportionately used to take poor, minority owned property.⁴⁸⁵ The infamous *Poletown* case demonstrates this reality through the dangers that come from determining what constitutes a public use on an ad hoc basis.⁴⁸⁶ In *Poletown*, the Michigan Supreme Court balanced the benefit to the public of the taking against the potential loss to the private property owners.⁴⁸⁷ In the end, the court ruled that the undoubtedly devastating loss to the private property owners was nonetheless outweighed "by the benefits that accrue to the workers who continue in their jobs, the social benefits to other firms, the unemployment compensation that is not drawn out of the public fisc, and so on."⁴⁸⁸ As a result, hundreds of predominantly Polish families were removed from the property, and some of these families were forced to sell the land at less than 5% of its value in order to accommodate General Motors.⁴⁸⁹ While

 ⁴⁸² Id. (quoting Hanoch Dagan, Takings and Distributive Justice, 85 VA. L. REV. 741, 768 n.84 (1999).
 ⁴⁸³ Id

⁴⁸⁴ Catherine E. Beideman, Eminent Domain and Environmental Justice: A New Standard of Review in Discrimination Cases, 34 B.C. ENVTL. AFF. L. REV. 273, 294 (2007).

⁴⁸⁵ Jim Bailey, Ethnic and Racial Minorities, the Indigent, the Elderly, and Eminent Domain: Assessing The Virginia Model of Reform, 19 WASH. & LEE J. CIVIL RTS. & SOC. JUST. 73, 87 (2012).

⁴⁸⁶ Id.

⁴⁸⁷ Id.

⁴⁸⁸ Id. (quoting Thomas S. Ulen, The Public Use of Private Property: A Dual-Constraint Theory of Efficient Governmental Taking, in TAKING PROPERTY AND JUST COMPENSATION: LAW AND ECONOMIC PERSPECTIVES OF THE TAKINGS ISSUE 186, 187 (Nicholas Mercuro ed. 1992)).

⁴⁸⁹ Bailey, supra note 485, at 88.

Poletown is a famous example, it is not the only example of eminent domain being used disproportionately to take land from minorities.⁴⁹⁰

While the phrase public use may seem pretty clearly self-defining, the definition was broadened significantly in *Poletown* as well as *Kelo*. Currently, a majority of states understand the phrase to mean "anything that would tend to increase the economic activities of an area." 491 Under this reasoning, economic development takingstakings to develop an area into a more economically prosperous property – can be allowed if the condemner can show the project will generate increased economic activity.⁴⁹² In *Kelo*, this kind of taking was allowed because the Court stated that "promoting economic development is a traditional and long accepted function of government." 493 Wiping out entirely economically "blighted" areas for the purpose of redeveloping the land is still constitutional despite the safeguards of due process, just compensation, and the public use requirement.⁴⁹⁴ Scholars argue that courts should not consider an economic development purpose as valid when the result will disproportionately impact poor or minority groups.⁴⁹⁵

Consider the issue from another angle. From 1949 to 1973, 2,532 projects were completed using eminent domain for the purpose of economic development or getting rid of blight.⁴⁹⁶ These projects forced approximately one million people from their homes, with roughly 660,000 of those displaced being African-American.⁴⁹⁷ The increasing incidence of takings of minority owned property is a direct effect of the ever-broadening definition of public use.⁴⁹⁸

- 490 Id.
- 491 Beideman, supra note 484, at 276.
- 492 Id.
- 493 Id.
- 494 Id.
- 495 Id.
- ⁴⁹⁶ Bailey, *supra* note 485, at 90.
- 497 Id.
- ⁴⁹⁸ See id. at 91.

The NAACP wrote an amicus brief in the *Kelo* case arguing just that point.⁴⁹⁹ In its brief, the NAACP pointed out that minorities are affected both more frequently and more harshly by the use of eminent domain.⁵⁰⁰ Further, it posited that the government had been using the public use exception of eminent domain as a means to keep poor and minority neighborhoods segregated from other parts of the community.⁵⁰¹ The NAACP poignantly notes that minority populations have been disproportionately taken advantage of through the use of eminent domain because these groups have "historically lacked a strong political voice." 502 Thus, even with a stronger public use restriction in place, minority groups can still be taken advantage of when it comes to eminent domain because they have less access to the court systems to fight the condemnation or fight for just compensation. In turn, would-be condemners have an incentive to go after minority-owned land when seeking property for a project because they stand a better chance at getting the property for a cheaper price.⁵⁰³ Fortunately, in response to the Kelo decision, most states have passed legislation that better attempts to define public use.⁵⁰⁴ The hope in passing such legislation is that in the future all property will be on equal footing for takings purposes rather than being disadvantaged from the start based on the color of the owner's skin.

The actual result of the public use restriction legislation has been mixed. Several states' formulations leave open the possibility of condemnations based on blight, thereby allowing condemners to continue targeting minority-owned lands for eminent domain based projects if they can make the land fall under blight's broad description.⁵⁰⁵ Stronger reform is thus needed to serve the purpose of the original anti-*Kelo* legislation.

502 Id. at 92; see also Beideman, supra note 484, at 291.

⁴⁹⁹ Id. at 90.

⁵⁰⁰ Id.

⁵⁰¹ Id. at 91.

⁵⁰³ See Bailey, supra note 485, at 92.

⁵⁰⁴ Id. at 93.

⁵⁰⁵ Id. at 94.

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Another area of takings law in which minorities are disproportionately affected is environmental justice claims.⁵⁰⁶ In these types of cases, a hazardous waste site or otherwise unpleasant environmental hazard is placed near neighborhoods primarily occupied by minority groups.⁵⁰⁷ As a result, these property owners experience staggering property devaluation.⁵⁰⁸ In a study examining the relationship between the racial and economic circumstances of a location and its hazardous waste facilities, it was determined that between twenty-six and forty-six percent of people living near hazardous waste facilities were African-American.⁵⁰⁹ In response to this study, United Church of Christ conducted a broader study which concluded that "poor people of all races were more likely than middle and upper class groups to live near hazardous waste sites."⁵¹⁰

For example, in *Bean v. Southern Waste Management Corp.*, a predominantly African-American community was challenging the Texas Department of Health's permit granted to Southern Waste Management, allowing it to place a solid waste plant in their neighborhood.⁵¹¹ However, to meet their burden on their equal protections violation, the plaintiffs were required to prove that Southern Waste Management intended to discriminate against their neighborhood on the basis of their race when it chose the location for its new hazardous waste site.⁵¹² The Court ultimately ruled that the plaintiffs failed to meet that burden.⁵¹³

Another case, *R.I.S.E., Inc. v. Kay*, similarly arose when Kay sought to place a solid waste plant in a predominantly African-American neighborhood.⁵¹⁴ But once again, the court ruled that the government had not acted with discriminatory intent when it chose the placement

- ⁵⁰⁶ Beideman, *supra* note 484, at 284.
- 507 Id.
- 508 Id. at 286.
- ⁵⁰⁹ Id. at 285-86.
- 510 Id. at 286.
- 511 Id. at 288.
- 512 Id. at 289.
- 513 Id.
- 514 Id.

for the landfill.⁵¹⁵ The ultimate outcome of this line of cases has been that the ruling that the Equal Protection clause does not protect against disproportionate impact—rather, purposeful discrimination is required.⁵¹⁶

B. Was the Flint Water Crisis a Taking?

Even if the Flint water crisis is a valid takings claim, the claim must be ripe for review before it can be brought to the courts for relief.⁵¹⁷ The Supreme Court affirmatively stated the test for ripeness of a takings claim in *Williamson County Regional Planning Commission v. Hamilton Bank of Johnson City*.⁵¹⁸ First, "the government entity charged with implementing the regulations has reached a final decision regarding the application of the regulations to the property at issue."⁵¹⁹ Second, the plaintiff must exhaust his or her efforts at just compensation through state remedies and procedures before proceeding to federal court.⁵²⁰

Application of these prongs to the Flint crisis could prove difficult since the water crisis was likely a non-traditional regulatory taking. However, it is arguable that the "entity charged with implementing the regulations" (namely the MDEQ) has reached a final decision since the city has since switched back to the DWSD pipeline and begun making efforts to restore Flint back to its pre-crisis status.⁵²¹ However, this prong of the test will be where most of the battle lies in getting relief for the residents of Flint, since a court could alternatively rule that there was no "final" decision in a formal sense. To meet the second prong of the test, the Flint residents will have to first pursue their claims in state court before they could proceed to federal court for

⁵¹⁵ Id. at 290.

⁵¹⁶ Id. at 290 (discussing Village of Arlington Heights v. Metropolitan Housing Development Corp., 429 U.S. 252, 264-65 (1977)).

⁵¹⁷ See Geiger, supra note 318, at 227.

⁵¹⁸ Id.

⁵¹⁹ Williamson Cty. Reg'l Planning Comm'n v. Hamilton Bank of Johnson City, 473 U.S. 172, 186 (1985).

⁵²⁰ Id. at 194.

⁵²¹ Lin et al., supra note 221.

review. If a Michigan court decides a takings claim brought on the basis of the water crisis is not yet ripe for review, it will be dismissed.⁵²²

There is no doubt that the residents of Flint, Michigan suffered calculable damages due to the high levels of lead and other toxicities present in their water supply for approximately two years. As Governor Snyder's task force discovered, the MDEQ is mostly to blame for the water crisis, as countless poor decisions and mistakes piled up, and the MDEQ continued to try to cover up their errors and spread the blame.⁵²³ However, because the MDEQ is a state agency, Flint residents are limited from recovering damages from the MDEQ under tort law based on sovereign immunity. As previously discussed, sovereign immunity is an immunity that keeps a state government agency from being liable in tort for actions taken in the exercise or discharge of a governmental function.⁵²⁴ Additionally, in Michigan, the governmental officer or agent must be acting reasonably and his or her conduct must not amount to gross negligence.⁵²⁵

To distinguish a physical taking from a mere tort, the Federal Circuit established a two-part balancing test in *Ridge Line, Inc. v. United States*.⁵²⁶ The first part of the test is that the "government intend[ed] to invade a protected property interest or the asserted invasion is the direct, natural, or probable result of an authorized activity."⁵²⁷ Second, the impact of the government's actions on the plaintiff's property rights has to be "substantial and frequent enough to rise to the level of a taking."⁵²⁸ The *Ridge Line* two-part test has been applied to a wide variety of non-traditional physical invasions.⁵²⁹ The Flint water crisis

⁵²² See Geiger, supra note 318, at 230.

⁵²³ Letter from Flint Water Advisory Task Force to Governor Snyder (Dec. 9, 2015), http://flintwaterstudy.org/wp-content/uploads/2015/12/FWATF-Snyder-Letter-12-29-15. pdf [hereinafter Letter to Governor Synder]; Dixon, *supra* note 53.

⁵²⁴ Mich. Comp. Laws Serv. § 691.1407.

⁵²⁵ Id.

⁵²⁶ Tyler J. Sniff, The Waters of Takings Law Should Be Muddy: Why Prospectively Temporary Government-Induced Flooding Could Be a Per Se Taking and The Role for Penn Central Balancing, 22 FED. CIRCUIT B.J. 53, 55 (2012).

⁵²⁷ Ridge Line, Inc. v. United States, 346 F.3d 1346, 1355 (Fed. Cir. 2003).

⁵²⁸ Id.

⁵²⁹ Sniff, *supra* note 526, at 65.

meets the requirements of the first part of the test because the heightened lead level in the water was a direct and probable result of MDEQ's failure to add corrosion control chemicals to the water leaving the plant.⁵³⁰ The water crisis also satisfies the second requirement, because the heightened lead levels were toxic and resulted in illness, lower property values, and increased mitigation costs.⁵³¹ Additionally, the city has not yet totally recovered from the crisis.⁵³² Thus, the Flint water crisis is ripe for takings claims by the residents who suffered from it for far too long.

Additionally, sovereign immunity would not protect the state from claims of regulatory takings by Flint residents. Also, a takings claim would allow more damages for the affected residents, because any tort claims allowed through a limited exception to sovereign immunity would not allow monetary damages to be paid but would instead only allow injunctive or other equitable relief.⁵³³ Although the water crisis would not be a regulatory taking in the traditional sense, because it was a not a regulation or statute which authorized the switch to Flint River water, a regulatory taking argument is still plausible.

In the Flint water crisis, the emergency management law is what allowed the takeover of the city of Flint in the first place so that the state could enter the new contract to change the city's water to the KWA pipeline.⁵³⁴ The entrance into this contract is arguably the type of regulatory action that the eminent domain clause of the Michigan constitution seeks to cover.⁵³⁵ Additionally, the failure of state actors (particularly the MDEQ) to adhere to the correct regulations for the treatment of corrosive materials in the water and continuing violations thereafter by attempting to cover up the mistakes⁵³⁶ could also constitute a regulatory taking. The argument would be that at least for

⁵³⁰ Egan, *supra* note 169.

⁵³¹ See infra discussion at 19–21.

⁵³² See Goldstein, supra note 467.

⁵³³ See Adams, supra note 296.

⁵³⁴ Local Financial Stability & Choice Act, 2012 Mi. P.A. 436.

⁵³⁵ MICH. CONST. art. X § 2, para 1.

⁵³⁶ Letter to Governor Snyder, *supra* note 523; Dixon, *supra* note 53; Smith, *supra* note 177.

the period that the contract was in effect and Flint residents were subjected to their drinking water being drawn from the Flint river as a result of the KWA pipeline being incomplete,⁵³⁷ the residents' property was effectively taken because as a result of the water crisis, their residential properties experienced a drastic devaluation.⁵³⁸ It is also arguable that the values of the residents' properties will never fully recover from the water crisis,⁵³⁹ and if so, the water crisis could be classified as a permanent regulatory taking.

To illustrate, the Supreme Court has held that a temporary taking occurred where a government entity's actions caused reoccurring flooding of a nearby state wildlife management area.⁵⁴⁰ In *Arkansas Game & Fish*, the United States Army Corp of Engineers constructed a dam near the wildlife management area (WMA) owned by the Arkansas Game and Fish Commission.⁵⁴¹ Under a plan for the dam, the Corp of Engineers was to seasonally release varying levels of water from the dam.⁵⁴² However, the Corp of Engineers also released water at varying times for a period of seven years at the request of local farmers in the area, which resulted in the temporary flooding of plaintiff's property.⁵⁴³ The flooding had a detrimental economic effect, because it devastated approximately eighteen million board feet of timber wood to be cut for lumber.⁵⁴⁴ Although different from a traditional takings case, the Court recognized this fact by stating:

[N]o magic formula enables a court to judge, in every case, whether a given government interference with property is a taking. In view of the nearly infinite variety of ways in which government actions or regulations can affect property interests, the Court has recognized few invariable rules in this area.⁵⁴⁵

⁵³⁷ Egan, supra note 142.

⁵³⁸ Goldstein, *supra* note 467.

⁵³⁹ Id.

⁵⁴⁰ Arkansas Game & Fish Comm'n v. United States, 133 S. Ct. 511, 512 (2012).

⁵⁴¹ Id.

⁵⁴² Id.

⁵⁴³ Id.

⁵⁴⁴ Id. at 515.

⁵⁴⁵ Id. at 518.

This piece of the Court's opinion seems to put forth the idea that a regulatory taking can be sustained with a substantive government action, rather than strictly requiring a regulation of some sort to be the cause of the plaintiff's harm. In addition, the Court recognized that any takings claim is a fact specific inquiry and few bright-line rules can be applied with ease in this area.⁵⁴⁶ Further, the Court reaffirmed its holding from *United States v. Causby*, that a temporary takings claim can lie where government action occurring offsite of the plaintiff's property "gives rise to 'a direct and immediate interference with the enjoyment and use of the land.'"⁵⁴⁷ Lastly, the Court made an important point about temporary takings; that "[o]nce the government's actions have worked a taking of property, 'no subsequent action by the government can relieve it of the duty to provide compensation for the period during which the taking was effective.'"⁵⁴⁸

The water crisis in Flint was undoubtedly the result of a government action that occurred away from the resident's property as in *Causby*.⁵⁴⁹ The MDEQ is a state agency, whose actions (or non-actions) by way of failing to mediate the water crisis by addressing the corrosiveness of the water in residents' homes constitutes an action offsite within the meaning of *Causby*.⁵⁵⁰ Additionally, the MDEQ's action caused a "direct and immediate interference"⁵⁵¹ with Flint residents' use and enjoyment of their land, because as a result of the crisis the residents could no longer use their tap water to cook, drink, or make baby formula and instead were forced to use bottled water.⁵⁵² These tasks are all well-within the uses contemplated of a residential property, and the residents were not provided with bottled water until months into the water crisis;⁵⁵³ thus the government's action directly

⁵⁴⁶ Arkansas Game & Fish Comm'n v. United States, 133 S. Ct. 511, 518 (2012).

⁵⁴⁷ Id. at 519 (quoting United States v. Causby, 328 U.S. 256, 266 (1946)).

⁵⁴⁸ Id. (quoting First English Evangelical Lutheran Church v. County. of L.A., 482 U.S. 304, 321 (1987)).

⁵⁴⁹ United States v. Causby, 328 U.S. 256, 266 (1946).

⁵⁵⁰ *Id.*; Letter to Governor Snyder, *supra* note 523; Dixon, *supra* note 53; Smith, *supra* note 177.

⁵⁵¹ *Causby*, 328 U.S. at 266.

⁵⁵² See Dixon, supra note 53; Spangler, supra note 218.

⁵⁵³ See Dixon, supra note 53; Spangler, supra note 218.

impacted the residents' use and enjoyment of their land by forcing them to resort to their own devices to meet their water needs.

Moreover, once it is established that the MDEQ's actions amounted to a temporary regulatory taking of Flint residents' property, then subsequent remedial measures taken by the MDEQ to control the crisis (including finally implementing a corrosion control program)⁵⁵⁴ will not relieve the state of its duty to compensate the residents for the time during which the water was hazardous and unusable.⁵⁵⁵

C. Flint's Water Crisis was Physical, Too

"Physical" as defined in takings law developed into a flexible definition over time. While early on in the history of the common law a physical taking was defined strictly as when the government physically appropriated private property for a public use,⁵⁵⁶ the definition quickly evolved to include cases of government-caused flooding as in *Pumpelly* or the invasion of airspace over a plaintiff's property in *Causby*.⁵⁵⁷ Using these cases as a reference point, it is not hard to see how the introduction of lead and other toxins into Flint residents' water supply⁵⁵⁸ could arguably be a physical taking. The contaminated water flowing into the homes of the Flint residents' constitutionally guaranteed property rights.⁵⁵⁹ In *Loretto*, the Court reiterated how important a property owner's rights are to the owner receiving the full benefit and breadth of property ownership.⁵⁶⁰

⁵⁵⁴ Spangler, supra note 218.

⁵⁵⁵ Arkansas Game & Fish Comm'n v. United States, 133 S. Ct. 511, 519 (2012) (quoting First English Evangelical Lutheran Church v. County. of L.A., 482 U.S. 304, 107 S. Ct. 2378 (1987)).

⁵⁵⁶ Geiger, supra note 318.

⁵⁵⁷ United States v. Causby, 328 U.S. 256, 266 (1946); Pumpelly v. Green Bay Co., 80 U.S. (13 Wall.) 166, 177–78 (1871).

⁵⁵⁸ Dixon, supra note 53; Schuch, supra note 185.

⁵⁵⁹ See Loretto v. Teleprompter Manhattan Catv Corp., 458 U.S. 419, 436 (1982).

⁵⁶⁰ See id.

Further, a physical taking can lie no matter how 'small' the invasion.⁵⁶¹ Thus, even though the Flint residents might have retained other uses and rights in their properties during the Flint water crisis, the fact that the crisis did not amount to a full appropriation of their rights is of no consequence in determining that a taking did indeed take place.⁵⁶²

D. A Temporary Taking?

If the Flint water crisis was only a temporary taking, then by definition it had a start and an end point. Determining the start point is less difficult; it could perhaps be when the Flint City Council voted to connect Flint to the newly incorporated KWA knowing there would be a two-year intermission before the city could connect to the finished pipeline.⁵⁶³ Or, maybe the taking began two months later when the city began drawing water from the Flint River.⁵⁶⁴ Alternatively, the crisis could also have begun in September of 2014 when problems with the water quality first began to materialize.⁵⁶⁵

In contrast, determining the water crisis's end point is far more difficult. Although the city reconnected to the DWSD in October of 2015,⁵⁶⁶ the effects of the crisis are lingering. By February of 2016, approximately four months after the city stopped using Flint River water, Flint residents were still being advised to use lead filters and or bottled water until further notice.⁵⁶⁷ The city of Flint also proposed a \$55 million deal to remove all lead pipes from the city;⁵⁶⁸ a project that will undoubtedly take much time to accomplish. Additionally, the incidence of Legionnaires disease cases increased among Flint

- 564 Dixon, supra note 53; Edward Kurtz, supra note 160.
- 565 Id.
- 566 Lin et al., supra note 221.
- 567 Yan, *supra* note 467.
- 568 Id.

⁵⁶¹ Id.

⁵⁶² See id. at 436-37.

⁵⁶³ Adams, supra note 138.

residents in the wake of the water crisis,⁵⁶⁹ and only time will reveal how much more damage this exposure to lead has done.

Even beyond the effects of the lead itself however, the Flint water crisis affected property values in the city of Flint dramatically.⁵⁷⁰ The water crisis dropped the average home price in Flint from \$46,700 in August of 2015 to \$30,700 in December of 2015.⁵⁷¹ Although the city is now taking steps toward recovery, it is not clear that the property values in Flint will recover just as well: "[i]n the absence of comprehensive infrastructure improvements, [residents] face significant losses in property value without any prospect of recovery." 572 The drop in market value of home prices in Flint could take up to twenty years to rebound.⁵⁷³ More recently, government loan providers Fannie Mae and Freddie Mac began requiring lenders to certify that a home's water is safe before it can insure a loan for that property.⁵⁷⁴ Such a restriction is a huge hiccup to buying and selling real estate in Flint, where property owners may physically be unable to secure a safe water certificate on their land due to the lasting effects of the water crisis.575

In addition, the residents' property insurance will not help recoup the damages suffered as a result of the crisis.⁵⁷⁶ Many residents have had to spend a lot of money to install water filtration systems or replace pipes in their homes,⁵⁷⁷ and are thus forced to make these repairs out of pocket.

Moreover, many property owners in Flint sought property tax reductions based on a discrepancy between what their land appraises

571 Id.

⁵⁶⁹ Id.

⁵⁷⁰ Goldstein, supra note 467.

⁵⁷² Id.

⁵⁷³ John Wisely, Water Woes Could Sink Flint's Property Values Even More, DETROIT FREE PRESS (Feb. 7, 2016, 11:49 PM), http://www.freep.com/story/news/local/michigan/flint-water-c risis/2016/02/07/flint-property-values/79823532/.

⁵⁷⁴ Goldstein, supra note 467.

⁵⁷⁵ Id.

⁵⁷⁶ Id.

⁵⁷⁷ Id.

for and the true fair market value of the land.⁵⁷⁸ Others sought poverty exemptions.⁵⁷⁹ As a result, the city of Flint is facing even bigger budget woes than it did before the water crisis began.⁵⁸⁰ Consequently, the city's recovery from the water crisis could take even longer than originally anticipated.

CONCLUSION

The switch to Flint River water and the rapid corrosion of the pipes coupled with the warming summer months allowed Legionella to grow in city line pipes.⁵⁸¹ It was concluded by the state that about 30% of the confirmed cases had no known exposure to the water in Flint before they became ill.⁵⁸² As of March 18, 2016, Michigan's Legionnaire's death toll was ten people. This is one of the highest and worst outbreaks in U.S. history.⁵⁸³

Lead has the most severe effects on the central nervous system. The signs of intoxication from lead include: "dullness, restlessness, irritability, poor attention span, headaches, muscle tremor, abdominal cramps, kidney damage, hallucinations, and loss of memory."⁵⁸⁴ Lead poisoning victims, especially children, are at risk of mental retardation and behavioral disruption.⁵⁸⁵ Even when exposure is slow and symptoms do not immediately present, lead may still affect children's brain development resulting in reduced IQ and behavioral changes

⁵⁷⁸ Id.

⁵⁷⁹ Id.

⁵⁸⁰ Id.

⁵⁸¹ Abby Goodnough, Legionnaires' Outbreak in Flint Was Met With Silence, N.Y. TIMES (Feb. 22 2016), http://www.nytimes.com/2016/02/23/us/legionnaires-outbreak-in-flint-was-metwith-silence.html?_r=0.

⁵⁸² Id.

⁵⁸³ Kristina Sgueglia, Michigan's Legionnaires Death Toll Rises to 10, CNN, http://www.cnn.com /2016/03/18/us/flint-michigan-legionnaires/ (last updated Mar. 18, 2016, 6:36 PM).

⁵⁸⁴ Lead in Drinking Water: Background document for development of WHO Guidelines for Drinking-Water Quality, WORLD HEALTH ORG., 2011, http://apps.who.int/iris/bitstream/10665/7537 0/1/WHO_SDE_WSH_03.04_09_eng.pdf.

⁵⁸⁵ WORLD HEALTH ORG., LEAD POISONING AND HEALTH FACT SHEET, No. 379, 2016, http://www.who.int/mediacentre/factsheets/fs379/en/.

such as shortening of attention span and reduced educational attainment.⁵⁸⁶ Lead exposure also causes anemia, hypertension, renal impairment, and toxicity to the reproductive organs. The neurological and behavioral effects of lead are believed to be irreversible. As lead exposure increases, so does the range and severity of symptoms and effects.⁵⁸⁷

These are not effects that can be adequately addressed by replacing the pipes, although that is a fundamental first step that should have already been completed. The Flint community cannot be made whole for these grave injustices, but they will certainly benefit from monetary damages to assist them with the lifelong ailments and trauma they experienced during this crisis that will persist far into the future. Allowing the government officials who set in motion events, beginning with the eradication of local government, and corroborated to keep pertinent information about the safety of the drinking water from the citizens to avoid liability is a tragedy that rivals the Flint Water Crisis itself. Admittedly, takings law is not the most direct route to seeking redress, but, the law does allow just compensation to be sought and delivered.

586 Id. 587 Id.