

FINAL DRAFT

THE CLIMATE JUSTICE MOVEMENT IN WESTERN NEW YORK

Sam Magavern and Lynda Schneekloth 2017

Prepared for the UB Law Review, Kim Diane Connolly Professor

Climate change is already harming the entire planet and will continue to create a destabilized world long into the future. Like people across the globe, the people of Buffalo are keenly aware that the changing climate is an international matter. Many have followed the ongoing series of United Nations supported meetings called “Conference of the Parties” (COP) held each year. In 2015, the COP21 set up a significant and new way of proceeding on climate action by having each nation prepare the commitment of their country to the reduction of greenhouse gas emissions through an “Intended Nationally Determined Contribution” (INDC). After the grave disappointment of Copenhagen in 2009, all agreed that a new approach was needed.

Although climate change requires an international response and will require national policies and actions, local geographies have to be involved because it is there that the harms are felt. But how can local and regional areas respond to the climate crisis? This article offers a story of the emergence of a climate justice movement in Buffalo and Western New York as an example of how one community is addressing climate change and its unequal impacts.

Climate change affects everybody. But it does not, and will not, impact people and places the same way. Each place has a different history and is located at a different intersection of global phenomena. So to speak about any movement on climate in Buffalo, one has to recognize that this region suffered greatly from late 20th century globalization and deindustrialization. Like other “Rust Belt Cities” across the United States and the world, Buffalo was devastated by the shrinking of its industrial base and by its displacement as a center of transport. The Climate Justice Movement in Buffalo comes out of this experience.

Buffalo, founded in 1804, was an important city in the rise of the United States. It was a major center of the Industrial Revolution and home to the 19th century energy transition to electricity – with the first use of alternating current occurring at Niagara Falls. It was on top of the growth of the United States. After WWII, however, many of its advantages were lost in a global economy and expanding transport network that bypassed the city. It was a watershed moment when Bethlehem Steel closed its Lackawanna Plant in 1985 – a plant that had once employed over 20,000 workers directly and generated thousands of more jobs indirectly. Unlike almost all other metropolitan regions in the country, the Buffalo Niagara region has lost population steadily from 1980 to the present, and it suffers from particularly severe racial and geographic disparities – with people of color heavily concentrated into low-income, urban neighborhoods.

There were winners and losers in the global economic movement, and Buffalo and Niagara Falls were clearly losers. For years there was a sense of depression reflected in a lack of investment and fear of risk. In

spite of that sensibility, many sectors in the city and region have been slowly building the infrastructure for recovery for many years. In 2015-2017, people have begun to talk about the “Buffalo Renaissance.” It may seem sudden, but is based on years of work by many groups, individuals, businesses, local municipalities, and the state. But although the attitude and the actual fabric of the city is truly improving, the Renaissance is not lifting all citizens equally. For example, while the metropolitan region’s poverty rate is about average for the nation, inside the city of Buffalo over 50 percent of children are living in poverty.

In this narrative, it should be no surprise that at the same time the regional economy was disintegrating, the city also was growing a strong civic culture that has been involved in city-making across economic, social, cultural and environmental sectors. Starting in the 1980s, environmental groups such as the Friends of Olmsted Parks, the Friends of the Buffalo River and the Sierra Club Niagara Group, and social justice groups like the Coalition for Economic Justice, to name just a few, began to lift their voices.

This civic foundation gained momentum in the early 2000s with the creation of groups such as the WNY Climate Action Coalition, PUSH Buffalo, Clean Air Coalition, Partnership for the Public Good, and the Western New York Environmental Alliance. It is this foundation that has served the community well as it has become increasingly obvious that climate change has to be addressed across many sectors and addressed immediately.

Some of the significant city-building acts that occurred during the “lull” of economic depression included a Buffalo Comprehensive Plan¹ that included aspirations to be more ecological and sustainable, with specific attention to energy. In addition, some ecological and social justice issues have been brought forward by the Buffalo Green Code², a new zoning code adopted in 2016 with large public engagement to replace the City’s 1973 Euclidian zoning. Attention to a vision of sustainability, renewable energy and equity is also encoded in a regional economic sustainability plan, *One Region Forward*, an award winning community effort.³

These precedents and parallel developments helped create space for a conversation about climate change and climate justice. The movement came from different sectors and addressed different aspect of the climate crisis to include a push for renewable energy and environmental protection and for more equity and access across the entire community. Interestingly, all involved a critique of the current economic and political system that seems to always result in winners and losers.

Of the many projects we could use as examples of collaborative efforts to demonstrate the deep base of work in the region on climate justice, we’ll mention four. The design, planning and implementation of Steel Winds, a major renewable energy project built on the former Bethlehem Steel site on Lake Erie, involved a major effort by business, government, and the Wind Action Group (2006). In 2010-2011, PUSH Buffalo ran a successful campaign against National Fuel requiring the company to invest in energy conservation in low income communities.⁴

In 2015-2017, the Clean Air Coalition (CAC) and the WNY Area Labor Federation (ALF) worked for a “Just Transition” from a fossil fuel dependent economy to something new in Tonawanda after the closing of a major coal firing plant laid off workers and devastated the economy of the town and local

governments. CAC and ALF worked with local officials and community residents to push for support during the transition to a different economic model.

Lastly, many sectors got involved in the “Anti-Fracking” campaign in the state and through concerted advocacy, moved the City of Buffalo to become the first community in the state to ban fracking.⁵ Using a wide range of techniques and good scientific research, the Anti-Fracking campaign successfully moved Governor Andrew Cuomo into a position of banning the practice of fracking.⁶ This was a remarkable achievement given the power and wealth of the fossil fuel industry and its ability to impact policy. All of these efforts took enormous organizing and, in the process, developed significant relationships and networks that have been deployed in the Climate Justice movement.

We offer this very brief and selective history as a way of contextualizing the accounts in the rest of the article. The Climate Justice movement did not emerge out of nowhere. In many ways, it was a continuation of a strong and active civic community that turned its attention to the most critical matter of our time – climate change and its impact across all of our missions and constituents. The community accepted its responsibility to halt the devastation coming and to use this crisis as a way forward to a more social and ecologically just human society on the only planet we have, Earth.

The article is divided into three sections. The first sets the context for current and projected impacts of climate change on our region. This is followed by two stories about the emergence of the climate justice movement in 2015 and early 2016. The Climate Justice Campaign of WNYC and the Crossroad Collective were parallel movement building efforts that have since joined to share some campaigns. The collaboration deepens the intersectionality of climate justice work in our region. We’ll end with some reflections of our experience, what we’ve done and what may lie ahead.

Climate Impacts on Western New York

In many ways, the Buffalo Niagara region is a climate ‘sweet spot’. We are located on the Great Lakes, the largest supply of surface water in the world, we have fertile agricultural land, a relatively mild climate with winter freezes and only snowstorms as extreme weather. We will not be the first community to feel the more devastating consequences of climate change, but we are already seeing impacts. Furthermore, as a region with high rates of concentrated poverty and segregation, we are experiencing and will experience those impacts in a highly unequal and unjust manner. Like places across the earth, destabilization is already here, and will only get more extreme.

According to New York State’s projections, temperatures in Western New York (a region including both Rochester and Buffalo) are projected to rise between 1.8 and 4.0 degrees Fahrenheit in the 2020s and 4.6 to 13.8 degrees by 2100.⁷ (Already, the average statewide temperature has risen about 2.4 degrees since 1970).⁸ Precipitation in Western New York is expected to rise between 0 and 8 percent in the 2020s and between minus 3 and 24 percent by 2100.⁹

Extreme weather events will increase. Annual ice cover has decreased 71 percent on the Great Lakes since 1973, leading to an increase in lake-effect snow.¹⁰ Already, precipitation from extremely heavy storms has increased 70 percent since 1958.¹¹ To visualize the impacts of these lake-effect storms on the local economy and public health, Buffalo residents need only remember the October storm of 2006, which dumped up to 3.5 feet of wet snow in areas of the city, caused numerous deaths and injuries, and damaged up to 90% of the city's trees burdened with heavy snow on leaves. This snowfall cost over \$130 million in immediate clean-up costs, not to mention all the lost work days, school days, and productivity.¹² More recently, the "Snowvember" storm of 2014 caused up to 7 feet of snow and killed at least 14 people in Buffalo.¹³

Increased heat will also cause deaths and illnesses. By the 2080s, the average number of days over 90 degrees will rise from 8 days to between 27 and 57 days.¹⁴ Northern cities, where residents tend to lack air conditioning, can be particularly vulnerable to heat waves, which are exacerbated by the "heat island" effect that makes cities hotter than more rural areas. During the 1995 heat wave in Chicago, for example, between 600 and 749 people died from the heat.¹⁵ Vulnerable people with low incomes, particularly seniors and people with disabilities, those who lack money for air conditioning, will be most at risk of death or injury. More heat also provides habitat for infectious diseases such as Lyme and West Nile that are projected to increase as the climate warms.¹⁶

Under a "business as usual" climate warming scenario, the Buffalo region will have four times as many poor air quality days by 2070-2099 because higher temperatures make air quality worse.¹⁷ Roughly 9 percent of adults in New York State have asthma, a climate sensitive disease.¹⁸ Asthma rates are particularly high in the City of Buffalo and among people with low incomes and people of color. In a survey of over 1600 households on Buffalo's east and west sides, 35 percent reported at least one case of chronic respiratory illness or asthma in the household.¹⁹ Cardiovascular disease is sensitive to both heat and air pollution, such as ozone, which increases on hotter days, and is the leading cause of death in the state.²⁰ Rates of heart disease are 33 percent higher in Erie County than in the nation, and they are particularly high among people of color and people with low incomes.²¹ Thus, people of color and people with low incomes, who already suffer most from air-quality-related diseases such as asthma and heart disease, will be hurt most by the bad air quality.

Climate change will have impacts on many business sectors, ranging from agriculture to commercial fishing to hydropower to winter tourism. It is already having a negative impact on the soft fruit industry, a major agricultural product of our region. It will also alter and harm many key natural resources, perhaps the most important of which is Lake Erie. Increased flooding is expected to raise pollution levels in the Great Lakes, while warmer water temperatures and other impacts will lead to more invasive species, more algae blooms, and declining beach health.²² It is also possible, though not certain, that increased evaporation due to warmer air temperatures will result in a major drop in water levels, which would have dramatic impacts on both the ecology and the economies of the Great Lakes.²³

These direct impacts on the Buffalo region will be amplified, and perhaps even dwarfed, by the indirect impacts. Like any contemporary city in the U.S., Buffalo is inextricably linked to state, national, and

international economies. Buffalo's fate is particularly tied to that of New York City, because New York City is the economic engine that powers New York State, and Buffalo is highly dependent on the State – receiving almost 40 percent its annual revenue from State aid.²⁴ In New York City, the sea level will rise 4 to 8 inches by the 2020s and 22 to 50 inches by 2100.²⁵ Flooding at the level currently associated with a “100 year flood” may occur 19 times more often by 2100.²⁶ Already, sea levels on New York State's coast have risen more than 12 inches since 1900.²⁷

Buffalo is unlikely to thrive if New York City and its environs are slowly getting swallowed by the sea, with frequent floods that destroy infrastructure, residential areas, and businesses. To understand the dynamics, it is useful to remember what happened to Buffalo after the attack on the Twin Towers in 2001. New York City and the State of New York were plunged into a fiscal crisis. Facing a sudden drop in revenue from New York City, combined with the costs of repairing damages, the State froze its level of aid to Buffalo for three years, creating a fiscal crisis that triggered sharp cuts in City spending and the imposition of a state “control board” to oversee the City's finances and freeze its employees' wages. As climate change causes New York to endure more events like Superstorm Sandy, the risk rises that losses in tax revenue and increases in costs will cause the State to once again freeze or reduce its aid to cities and to pass on more costs to cities and counties, with negative impacts on fiscally fragile regions like Western New York.

As this brief summary makes clear, being a cold weather city near the Great Lakes cannot insulate Buffalo from the devastation of climate change. Moreover, Buffalo's severe economic and racial disparities mean that its most vulnerable residents are highly exposed to negative climate impacts – and that Buffalo has much to gain from a sustained climate justice campaign.

The climate justice movement in WNY that emerged during 2015 and 2016 attempts to address these climate instabilities and the inequalities that they amplify. The first campaign discussed emerged from the environmental community and the second from the economic and social justice community. At this time, they work closely together on many projects and campaigns.

Climate Justice Campaign of Western New York

The release in 2014 of the Fifth Assessment Report (AR5) of the International Panel on Climate Change (IPCC) made it clear that the upcoming COP21 in Paris was critically important and that climate action must be taken.²⁸ This report plus, interestingly enough, the release of Pope Francis' Encyclical, *Laudato Si, On Care for our Common Home*, were the impetus for the Rise Up for Climate Justice campaign in Buffalo and WNY <https://laudatosi.com/watch>. Many groups participated in the campaign, which was designed to focus attention on the upcoming Paris COP21 and its significance. For five months preceding the talks, the people of Western New York engaged in gatherings, rallies, vigils, films, presentations and community rituals to send an unequivocal message to the world leaders demanding a just and sane agreement.

THE 2015 *RISE UP FOR CLIMATE JUSTICE CAMPAIGN*

Are you for Climate Justice (RU4CJ)? What could we do in Western New York to increase awareness of the urgency of addressing climate change? How could we reinforce a conversation in our region about the moral imperative to stop burning fossil fuels? How could we manage this energy transformation in a democratic manner?

From these questions the Rise up for Climate Justice campaign was born. The local Sierra Club Niagara Group made a commitment to spend some of its limited funds to support this effort, developed some goals for the work, and crafted a strategy for reaching out to the larger community.

The group began with a constrained time frame and a clear objective: between September 2015 and December 2015 the campaign set out to raise awareness of the upcoming Paris Climate talks. Additionally, the participants agreed to use those months to network within the environmental community and intersectionally with other groups and organizations who had some interest in climate change and social justice. There was little time to build a mass movement to take climate action to protect the future of our planet. As #ActinParis said, “We are the first generation that is seeing the lasting effects of the climate crisis but may be the last generation that has the chance to do anything about it.”

One of the models was the People’s Climate March of September 2014 held in NYC, where 400,000 people took to the streets demanding action on climate.²⁹ The event was exhilarating and included so many participants: indigenous communities, unions, social and economic justice groups, environmentalists, political groups. This was an entirely new coalition of interests and groups and demonstrated a much wider interest in the climate crisis than had been visible before.

Environmentalists – like activists in areas such as health care, transportation and economic justice – belong to specific cultures and have missions and goals and practices that they have used for years. A 125-year-old group like the Sierra Club has become used to certain kinds of campaigns, strategies and tactics, and they have been good at them. Yet it was becoming increasingly clear that in spite of years of sounding the alarm on climate change, environmental organizations, and indeed scientists, were not as effective as they needed to be to address the urgency of climate change.

As climate change became more associated with environmentalism during the 1990s and early 2000s, it was more and more discounted and lost ground to the climate change deniers. This was a wake-up call: climate change had to be reframed as a cultural issue, a species issue, a survival issue. Until the movement placed climate change into a larger context, and until many more people could see how this change in the earth belonged to everybody, and until environmentalist understood the need to include new partners and new strategies, the voices calling for action would always be marginal.

The campaign that began in the summer of 2015 found the Sierra Club Niagara Group and others discussing the shift required to reframe climate change, to lift up new imaginations of the future and to diversify actions on climate change. Today, only two years later, this may sound naïve, but it was difficult for many steeped in science and environmentalism to acknowledge that climate change was a justice issue. The expectation from the COP21 talks by many traditional environmentalists was that decisions would be based on clear science and that when everybody knew the facts, they would, of course, take right action.

Since the U.N. Climate Talks (COP21) were already in process with individual nations preparing their “Intended Nationally Determined Contribution” (INDC), i.e., how much they would cut the emissions, all we had to do was to implement the plan.

Of course, it doesn’t work that way. Along with many others at this time, including the 2014 coalition that brought us the People’s Climate March, the local environmental groups began to unpack what climate justice might be. We recognized that adopting climate justice as the new frame for action on climate change greatly expanded collective insights and capacity. All of us would benefit from the economic critique and political knowledge from unions and economic justice organizations; stories and tactics from social justice campaigns; health impacts from the medical establishment; and a deep foundation of conviction that was a part of the faith-based communities.

THE STORY

When the Sierra Club started this campaign, they did not have the whole three months outlined and organized. But the group did identify three kinds of actions: a vehicle for people to be involved and take action; the identification and involvement of partners; and public events to educate and develop cohesion. The campaign hoped to impact elected leaders and institutions to push for ethical action from Washington in the upcoming COP21 talks.

The Climate Justice Pledge: The vehicle used for organizing was a **CLIMATE JUSTICE PLEDGE** that asked organizations, elected officials and individual to sign. The language outlined the critical nature of the climate crisis and asked people:

1. *To call on President Obama to lead the world to a universal, legally binding agreement to cut greenhouse gas emissions with provisions to protect the poorest and most vulnerable and indigenous people.*
2. *To meet with our elected officials and ask them to sign the pledge. To work on policy and legislation to move to renewables and to develop a just transition strategy for impacted communities;*
3. *To take action as groups and individuals on behalf of the Earth and future generations.*

Those who signed on to the campaign made a commitment that each would, to the best of our collective abilities as a larger community, impact the global conversation in every way possible. And as it happened, we actually were able to accomplish more than anticipated.

Structure: How to begin such a campaign? Who makes decisions? What would work best to engage and education people? *What specifically can we do in the Niagara Region to address the climate crisis?* How do we get people involved? How encourage and support collective and individual action? These beginning questions were discussed within the Executive Committee of the Sierra Club Niagara Group with Roger Cook and Lynda Schneckloth facilitating.

Having committed the Sierra Club Niagara Group and our meager resources to this campaign, the next steps were to (1) form a working committee to evolve the campaign and (2) contract for some support. Key members volunteered for the working committee. Further, we were fortunate to find two amazing individuals to help us: Rebecca Sophia Strong, a dancer and organizer who was fantastic in creating and

energizing events and Antonina Simeti of Timbre Consultants, a planner recently moved to Buffalo interested in justice campaigns. These two were invaluable in the success of the campaign, supported in part by a small grant from the Community Foundation for Greater Buffalo.

Building Alliances: The immediate need was to build power in advance of an opening event planned for mid-September to involve other sectors. Given the context of the Pope's Encyclical, Buffalo's large Catholic population, and the increased awareness of the moral implications of climate change, we began the Rise Up for Climate Justice with a Prayer Vigil. On Sept. 1, the "World Day of Prayer for the Creation" designated by Pope Francis, a group gathered for song and prayer. This was the beginning of a powerful relationship with faith groups that evolved into the Interfaith Climate Justice Community.

Another key tactic was to involve elected officials from the beginning. Members of the Steering Committee contacted the City of Buffalo Common Council President, Darius Pridgen and asked for and received a resolution on Climate Justice unanimously endorsed by all Council members. Others visited and spoke with union brothers and sisters asking them to sign the pledge and to participate in our rally and campaign. The Western New York Environmental Alliance, a coalition of over 100 environmental organizations, was a great support when it voted to support the climate justice campaign as one of its major efforts and offered to use climate justice as the topic for its annual winter congress. And after the Steering Committee reached out to universities and social justice organizations, the UB Law Clinic and the Partnership for the Public Good and UB Law Clinic committed to participate in the rally and campaign.

As a part of the public education strategy, members tabled the many events in Buffalo the summer and fall of 2015 explaining the campaign and asking people to sign the Climate Justice Pledge. And those in the group who were sophisticated in the use of social media deployed on-line tools to inform people of the regional campaign and used RU4CJ (Are You For Climate Justice?) on material such as posters, stickers, and communications.

Actions for Rise Up For Climate Justice Campaign: On September 24, 2015 we held the Rise Up for Climate Justice rally in the center of the city of Buffalo at Niagara Square. This day coincided with Pope Francis' U.S. visit and address to Congress. Whenever possible, we crafted events to reinforce state and worldwide climate actions to reinforce the local participation in the global climate justice movement.

The rally began with creative festivities focused on climate justice issues to generate an energetic crowd – dance, song, the people-boat, *U.S.S. Climate Justice*, moving through the crowd, face painting, poetry readings by young people and information tabling. There were drummers from the Seneca Nation of Indians who provided a sense of space and movement for the crowd of over 400 people.

The talks began with a rousing address by Common Council President Darius Pridgen. The speakers included the range of partners: union leaders with Deborah Hayes speaking for the Communications Workers of America; Sister Sharon Goodremote who spoke as a representative of Catholic Bishop Malone; Agnes Williams and drummers spoke on behalf of the Seneca and indigenous people; Maxine Murphey, from PUSH spoke about lack of affordability in the energy sector; Bridget Murphy, a student from the UB Law School, spoke of neighborhood-based change; Subashni Raj spoke about her country, Fiji, an island on the front lines of climate change; and Alan Lockwood, MD, from Physicians for Social

Responsibility spoke to the health consequences of global warming. Already 20 unions or union leaders had signed the pledge as had elected officials including State Senators Marc Panepinto and Tim Kennedy, and Paul Dyster, Mayor of Niagara Falls.

We had begun. To facilitate the actions in the next three months, we expanded the Steering Committee to include representatives from the various sectors who had participated in the rally: faith leaders, social and environmental justice, other traditional environmental groups and unions.

Between the beginning of September and the end of December 2015, seventeen different organizations of the campaign held twenty-three events focused on climate justice: films, presentations and panel discussion, public hearings, hikes and bike rides, art showings and a “Party for the Climate.” The Steering Committee itself assumed responsibility for encouraging and publicizing the 23 events sponsored by all our partners about climate justice. It also took major responsibility for participation on the national climate Day of Action, Oct. 24 by bringing our community into the Thunderclap that reached over 73,000 people. The Committee sponsored the “Gathering” on the eve of the Paris Talks, and regathered on the Dec. 19 national Day of Action at the closing of the COP21.

The Gathering: The second community event was quite different from the beginning rally. *The Gathering* was designed as a ritual coming together of the Rise Up for Climate Justice Campaign on the eve of the Paris Talks on November 28, 2015. In the invitation, local leaders and participants were invited to bring a poem or a prayer related to the earth, to justice or to love that they would be willing to share with the larger group.

The Gathering was an opportunity to speak of individual and collective grief about the losses that would come from climate change and fears about what we might lose if the talks were not successful. It was also a time to send a clear message of our high expectations to world leaders. To provide a setting for the expression of the complex emotions about the upcoming talks, we anchored a large tree branch in the middle of the room and asked people to place a stone at the base with a message of their grief, and to tie a ribbon on it with an expression of their hope. The evening was opened by drumming of the Seneca who were using the event to initiate a new drum. We shared a Thanksgiving meal that was, in large part, provided by our Seneca neighbors.

The Gathering was also an opportunity for a formal send off to the group of law students from the University of Buffalo who, under the supervision of UB Law Professor Jessica Owley, were going to attend the COP21. To visibly send the message, we had made a scroll with the names of over 2000 people and over 60 organizations and elected officials who had signed the Climate Pledge. The scroll was 42 feet long and tied with a red ribbon. These young women and men from Buffalo traveled with our hopes, prayers and expectations. They promised to send back messages on their blog of their experiences and to speak with us at our Dec. 19 Day of Action marking the end of the talks

What happened was a lesson to all of us that we can always be surprised by how our actions move out into the world. The local Sierra Club had arranged a meeting of the students with Michael Brune, Executive Director of the national Sierra Club. In a small ceremony, the students spoke about the Climate Justice Campaign and presented him with the scroll and an expression of our community’s hopes and expectations. In receiving it, Brune said with conviction: “This is how we win.”

What happened next was unplanned but almost magically carried the action forward. After Brune's time with the students, he had a meeting with John Kerry, then Secretary of State, and gave the scroll to him. And the Climate Pledge arrived as close to the president as one could have ever imagined, accomplishing what we had so optimistically addressed in September when we wrote the Pledge: *We call on President Obama to lead the world to a universal, legally binding agreement to cut greenhouse gas emissions with provisions to protect the poorest and most vulnerable and indigenous people.*

December of 2015 was a tense time as we listened to daily reports from Paris. During the COP21 conference on December 8, the Western New York Environmental Alliance held their Congress, "Taking Climate Action" attended by many of our partners and students, anticipating movement on a regional agenda. On December 16, the Rise Up for Climate Justice campaign co-sponsored a "Party for the Planet" with the Crossroads Collective – at which Buffalo and Niagara launched a commitment of regional participation in New York Renews – a campaign for state legislation to meet climate goals in a democratic manner. And on the December 19 National Day of Action at the close of the Paris Talks, we sponsored a Climate Justice Café and heard the report of the law students and their experiences at the COP21 meeting. We ended the campaign hopeful that at last, there was the possibility that the world might take action to sustain the planet and people.

The *Rise Up for Climate Justice* campaign is over, the U.N. Climate Paris Talks are over; the agreement among the nations has been signed. Yet in some sense, at the beginning of 2016 it felt as if the work was just beginning, but clearly, not from scratch. The Western New York region had a strong foundation to build on and an increasingly educated public willing to take action to cut greenhouse gas emissions, to increase 'carbon negative' actions, and to ensure that this energy transformation is embedded in a just transition and promotes energy democracy.

THE CLIMATE JUSTICE CAMPAIGN MATURES

The Climate Justice Coalition of WNY continues to build a comprehensive climate justice movement for the region with our partners. The momentum generated by the Rise Up for Climate Justice campaign was carried forward in a coalition that includes faith-based, environmental, labor, social and economic justice communities. The coalition has been and will continue to be a resource for collective and individual climate actions in WNY. The campaign's goal is to make climate justice personal to people's lives and our shared community through public education, outreach, policy and advocacy.

At the beginning of 2016, the Climate Justice campaign was reinforced by another climate justice coalition, the Crossroads Collective. The story of Crossroads Collective is covered in the next section and will outline some of the major efforts that have brought these two coalitions together such as NY Renews and the ensuing legislation and political work in support of the *NYS Climate and Community Protection Act*.

The steering committee, taking a breath from the intensity of 2015, spent time talking about what we wanted, not just what we didn't want to see happen. *We envision a sustainable economy free of fossil fuels that yields benefits for all citizens on the earth. We choose to build a community that strives for justice and concern for all forms of life now and in the future, knowing that we are all one.*

Because the issues, players and volunteer nature of the partners associated with climate justice are so diverse, the Climate Justice Campaign of WNY has not lent itself to a structured organization, work tasks, etc. Each organization continues to work within their own mission and together move toward climate justice. A structure outlined by Joanna Macy and Chris Johnstone in their book, *Active Hope: How to Face the Mess We're in Without Going Crazy* (2010, New World Library, Novato, CA) has been exceptionally helpful in thinking about the range of actions to take. The framework is simple to say, incredibly complex to deploy:

Stop Bad Things

Do Good Things

Shift Culture

With its foundation in environmentalism, the Climate Justice Campaign has continued to focus on issues such as earth protection and fighting against environmental pollution with climate change occupying much of its work, now with the added critique of its variable impact across diverse populations. What follows are some examples of the work that has been done or is continuing since the end of the 2015 five-month campaign.

STOP BAD THING: ELIMINATION OF FOSSIL FUELS

Bomb Trains: The Bomb Train campaign monitors and seeks to stop the movement of crude oil on trains through our region. The trains that crisscross the United States and Canada, rolling cars filled with highly flammable oil, are very dangerous. The most visible reminder of their potential harm occurred in July 2013 in Lac-Mégantic, a small Quebec town. An unattended 74 car freight train filled with Bakken crude ran out-of-control train into the town, derailed and exploded.³⁰ The fireball lasted two days, killed 47 people and totally destroyed the town.

The U.S. train fleet is not designed to haul this highly flammable material; the cars not sufficiently protective and the tracks in deplorable condition. Yet these trains go through cities and towns across the state. In Buffalo, up to 35 such trains have gone through the city each day during some months even though 75% of Buffalo residents live within one mile of the train's paths.

The train watchers group is facilitated by Charley Bowman of the Sierra Club and the WNY Peace Center Environmental Task Force. They are engaged in a citizen science project and empirically keep track of how many trains pass through the city by standing watch – even, at times, staying up all night. They also advocate with local and state politicians to put more stringent requirements on the trains and to repair the tracks and have mounted a public education campaign to encourage citizens to demand better preparation for disaster and evacuation plans.

NO Northern Access Pipeline: Another major anti-fossil fuel action has been the opposition to the Northern Access Pipeline that would bring fracked gas from the drilling fields of PA under the Niagara River at Grand Island in WNY to Canada. This intense campaign united impacted citizens all along the proposed 97 miles pipeline route connecting them in their common opposition: landowners in the southern tier of the state; residents north of Buffalo who were fighting a dangerous compressor stations and dehydration

stations; small towns along the way who only found out about the pipeline after their elected officials had agreed and taken money from National Fuel.

Here, as elsewhere, localized pipeline fights are highly unequal in terms of power. The gas company sites pipeline all the time and has good relationships with the Federal Energy Regulatory Commission (FERC). The people who will be impacted have no background in siting pipelines, are unfamiliar with state or federal regulatory structures, and don't necessarily understand the connection among themselves as some are fighting eminent domain, others the siting of dangerous facilities, others concerned about potential leaks and water pollution, some fighting for habitat protection. During the last year or so, Diana Strablow and others have gathered these people, their groups and different agenda into a coherent strategy of opposition, located the people who could translate FERC and NYS Department of Environmental Conservation powers, and visited the Attorney General's office for support. An early action was to bring Josh Fox and his film, "How to Let Go of the World and Love the Things Climate Can't Change" to WNY in May 2016. In support of public education and advocacy, there were many rallies, postcard mailings, letter writing campaigns and so on.

The action by Native Americans and allies against the Keystone Pipeline at Standing Rock had a huge impact on the strategy and activities of our local group and campaign. The chants "Water is Life" resonated in WNY as the Seneca Nation of Indians joined the No Northern Access Pipeline campaign to protect their own land adjacent to the Northern Access Pipeline route. Members of the Climate Justice Campaign, in return, have actively participated in indigenous actions against the Keystone Pipeline here in WNY.³¹

We are relieved and grateful that the NYS Department of Environmental Conservation denied the 401 Water Quality permit on the basis that the proposed project crosses 180 streams, 270 wetlands and 7 ponds along the way. We don't know how much the public pressure played in that decision but we do know that a whole new group of people and organizations are now very sophisticated about the role of fossil fuels in climate change and are willing to fight the injustice inherent in the actions that work against address to climate change.³²

DO GOOD THINGS: ENERGY, ECOLOGY AND POLITICS

There are, indeed, endless actions to stop dangerous and polluting practices in our region, but the Climate Justice Campaign also works to bring about good actions through policy, legislation, and advocacy for renewable energy such as wind, solar and geothermal. One project is the partnership with Crossroads Collective on the New York Renews campaign. Two others address alternatives to gas and focus on transportation, and a third is concerned with preserving biodiversity.

Complete Streets: One of our partners, the Western New York Environmental Alliance, set the table for collaboration among many different groups working on alternative transportation under the leadership of Justin Booth and GoBike. The Complete Streets members have been enormously successful in gathering support across many sectors: environment, recreation, health, social and economic justice. They have transformed the city of Buffalo into a bike friendly place through incorporation of Complete Streets principles into the new Buffalo Green Code. And through the encouragement of many players, there are now formal gatherings of bicycle riders for events and races. What is especially significant is the Buffalo

Slow Roll that meets every Monday evening and includes community members ages 4 – 93. Thousands of riders get to see diverse neighborhoods across the city through this venue.

Electric Bus Campaign: It has been measured: approximately 34% of WNY regional greenhouse gas emissions come from transportation. So, the more people move into carbon free transportation whether bikes or electric cars, the better address to climate change. Buses are big emitters of carbon dioxide, particulate matter, nitrous oxide and other gases. Members of the campaign have established an ‘Electric Bus’ campaign to work with our local company, the Niagara Frontier Transportation Authority, to move quickly away from diesel and methane driven buses to electric. This campaign is especially interesting because it intersects with the Crossroad Collective’s organizing campaign, the Buffalo Transit Riders Union. Together, these campaigns could change the structure of public transit in our region.

Our Outer Harbor Campaign: Climate change does not just impact human beings and surely it is terribly unjust to all the other creatures who inhabit this planet. The Our Outer Harbor campaign is one project that includes both stopping a bad action but also moves into doing a right one. It addresses other than energy aspects of climate justice, namely green land use policy and protection of habitat and species. The Lake Erie shoreline of the City of Buffalo was for years occupied by industry that left in the 1970s. Since that time, much of this land has been unused which gave it time and space to regenerate natural ecological systems. This same area has been, and continues to be, an international flyway for water fowl and migratory birds, hosts a diversity of pollinators and provides outstanding fish spawning area. Nevertheless, the state agency, the Erie Canal Harbor Development Corporation, that owns the property has wanted to economically develop this land for housing and commercial uses.

A very large and mixed constituency of individuals and groups organized quickly to stop the plan proposed in 2015. Under the leadership of the Western New York Environmental Alliance, a coalition of over 25 organizations, the Our Outer Harbor Campaign, has worked to ensure the protection of this area and to conserve habitat for vulnerable species like pollinators that serve as the base of our food chain. This coalition won a battle over the new zoning code, and the City of Buffalo’s new “Green Code” designates the land as green. This was a positive step, but the Our Outer Harbor Campaign continues to monitor and protect the area for both public access and habitat protection.

SHIFT CULTURE: MOVE TO REGENERATIVE CULTURE

There is an increasing awareness that as a culture we cannot simply insert deep climate action into the existing social and cultural milieu in which we live. In fact, political analyst Naomi Klein argues that it was neoliberal power players who truly understood how much transformation would be required to address climate change and climate justice – and decided to resist it. (Naomi Klein, *This Changes Everything: Capitalism vs. The Climate* 2015). The result is that over 20 years ago, the fossil fuel companies and their allies developed a concerted and effective campaign of disinformation to ensure that no climate action would be taken.

Everything will change. The question is whether this will happen to us, or whether we take action now to transform some of the basic beliefs of our culture and economy. Can we envision a transition to a less consumptive, less extractive, more equal, more responsive and ecological way of living? It is evident that in our little corner of the world and across this nation and the earth, many people do want to live more

gently on this earth, and the conversation was reinforced at the 2015 Paris Talks. Here in WNY one of the spaces for this conversation is among the partners of our coalitions through our combined presentations, workshops, rallies and films, and through the ongoing collaborative planning and practice at cross sector engagement. We certainly don't have it down yet – there are constantly misunderstandings, emphasize, and surprises. But we're getting better at it.

So briefly, here are two efforts that work on cultural shift, seeking ways to imagine life past the climate crisis to create a culture and society based on regeneration rather than exploitation. The first is the Interfaith Climate Justice Community, and the second is the Youth and Climate Justice Campaign.

Interfaith Climate Justice Community: Eileen O'Connor, Sister of Mercy and one of the leaders of the Catholic "Care for Creation" group, tells the story this way. In early 2015, her friend Roger Cook, member of the United Church of Christ and Sierra Club member, called her and asked, "What are you Catholics doing to prepare for the Pope's Encyclical?" And so, the conversation began and the Interfaith Climate Justice Community emerged at the very beginning of the Rise Up for Climate Justice campaign.

The group that coalesced around this matter was greatly reinforced by the Pope's Encyclical, but not exclusively. Many institutional religions had issued statements about climate change and climate justice at this same time. Through calls and emails, we gathered an interdenominational prayer vigil on September 1, 2015 on the celebration of the Day of Creation. Members of many religious groups, including Catholics, Presbyterian, Hindu, UCC, Moslem, Quaker, Baptist, Buddhist, pagans, and Methodists attended that service, joined us in the 9/25 Rally at Niagara Square, signed the petitions and got their parishioners to sign, and were central in the November Gathering event.

This group, a collaboration of the Climate Justice Coalition of WNY, the Network of Religious Communities and the Catholic Care for Creation, now has between 60 and 100 people/congregations attending events organized by a small planning group. They have taken on four major issues: greening of religious facilities; responsible investment and divestment; political action and lobbying; and deepening spirituality with climate justice. Climate Justice is a moral issue, a faith matter, because of the shared belief that the earth is a gift from God and humans are to be good stewards. As the Sisters of Mercy noted during their international meeting in Buffalo in July 2017, we need "Mercy for the Earth" and "Mercy for all Creation." That is the mission.

Youth and Climate Justice Campaign: Of all the injustices associated with climate change, one of the most searing is the impact of this generation's actions and inactions on the next generation. Early in the public awareness of climate change, it seemed as if there was time to make changes. We now know that the changes are happening so rapidly that the earth has already warmed 1.5 degree C and non-reversible patterns of climate will be here for centuries if not thousands of years. Our children, their children and beyond the seventh generation will have to manage in a less hospitable world. If we don't take action, there is the possibility that our descendants may witness the end of life on earth as we have known it. How can we ask young people to even think about this?

Of course, young people know. In 2016, a Youth and Climate Justice workshop was organized by members of both the Climate Justice Campaign and Crossroads Collective and lead by the Massachusetts Avenue Project (MAP). It was impressive how much many of young people knew about climate change

and about the structure of economic injustice or privilege in which many of them lived. They also asked, “Where are the grownups?” Yes, where are we? Given the interest and success of that workshop, the WNYEA in 2017 secured a grant from the Overbrook Foundation to run a year-long youth engagement campaign to reach youth across the city with the intent of institutionalizing a structure for continued youth engagement. Many partners of the Climate Justice Coalition and the Crossroads Collective are participating in this project.

SOME REFLECTIONS

The pattern of collaboration and coalition building in the region has been quite successful although all know that much more needs to happen. We are not naïve. The election of Donald Trump has destabilized the world and will continue to create ripples of shocks through all our interdependent systems. All the more reason to continue to link and create alliances among all working to transform the world to bring about ecological, social and economic justice. As the vision of the Climate Justice Campaign of WNY says:

We envision a sustainable economy free of fossil fuels that yields benefits for all citizens on the earth. We choose to build a community that strives for justice and concern for all forms of life now and in the future, knowing that we are all one.

Crossroads Collective

The Crossroads Collective unites ten Buffalo-based groups fighting for climate justice.³³ The ten partners bring a wide range of skills, ranging from urban farming to activist theater, from grassroots leadership training to affordable housing development, from policy research to community organizing. What the groups share is a vision of a “just transition” from an extractive economy based on consumerism, exploitation, and militarism to a regenerative economy based on caring, cooperation, and deep democracy.

Many of the partners have worked closely together over the past decade, while others are new to the network. Their current incarnation as the Crossroads Collective was galvanized by the Chorus Foundation, which was looking to fund climate justice work over a sustained period of time in “frontline” communities around the nation (after a competitive process, Chorus chose coalitions based in Alaska, Northern California, Kentucky, and Buffalo).

Launched in March 2016, Crossroads has focused on promoting sustainable neighborhood redevelopment, holding public utilities accountable, passing statewide climate justice legislation, advocating for public transit, improving food policies and systems, and doing popular education and movement building at the intersection of climate change with racial and economic justice.

Part of Crossroads’ mission is to expand and replicate the success of the Green Development Zone that PUSH Buffalo, Massachusetts Avenue Project, and other partners have created on the City’s west side. This zone is a 25-block hub of green, affordable housing, urban farming, community gardening, green infrastructure, and job creation that showcases what climate justice looks like when it is being achieved.

In 2017 the Partnership for the Public Good released a major report on the Green Development Zone, highlighting its achievements in building or renovating over 75 units of housing, weatherizing over 200 units, creating numerous gardens, rebuilding a public park, and generating quality jobs for numerous disadvantaged workers, all while dramatically reducing the greenhouse gas emissions from the neighborhood.³⁴ Crossroads partners are working to bring this type of community-controlled development to other parts of Buffalo as well. In 2017 Open Buffalo helped residents of an east side neighborhood, the Fruit Belt, to incorporate the City's first community land trust, which will preserve affordable housing and promote sustainable development in an area threatened by gentrification.

Crossroads has also been active in legislative and regulatory advocacy. In 2016, National Fuel, a natural gas utility, requested a \$42 million rate hike from the state regulator, the Public Service Commission. Crossroads led a statewide campaign to deny the rate hike and framed it as a matter of climate justice. National Fuel, a highly profitable company, would extract money from low-income consumers and use it to extract and burn more fossil fuels.³⁵ The Collective called attention to the issue of energy poverty, pointing out that in New York state, energy costs consume 41 percent of household income for those who are at or below 50 percent of the federal poverty level.³⁶ Meanwhile, as the Public Accountability Initiative reported, CEO pay at National Fuel had mushroomed from \$2.4 million in 2007 to \$6.7 million, or \$3,230 per hour, in 2015; National Fuel had raised its dividends for the 46th straight year, and National Fuel's largest individual shareholder had earned \$12.2 million in dividends in 2015.³⁷ These economic justice arguments mobilized Buffalo residents in a way that climate change arguments alone could not. Crossroads used a blend of grassroots organizing, policy research, opposition research, and press strategy to win its campaign: in the end, the Public Service Commission allowed a rate hike of only \$5.9 million.³⁸

Crossroads has also served as one of the major partners in the NY Renews campaign to reshape the state's energy policy in several ways, including through passage of the Climate and Community Protection Act, which has been called "the nation's most ambitious climate bill."³⁹ The Act would: i) turn the state's emission reduction goals into legally binding mandates; ii) devote 40 percent of the State's clean energy spending to environmental justice communities; and iii) ensure that the jobs created by clean energy spending are high quality. Crossroads members worked closely with the Climate Justice Coalition and other local and statewide allies to do organizing, advocacy, press, and strategy work and helped the campaign reach an important milestone when the Act passed the State Assembly in June 2016 (it has yet to pass the State Senate).

Another focal point for climate justice is public transit. Transportation now accounts for 34 percent of the State's emissions, more than homes and buildings (31 percent) or power generation (21 percent).⁴⁰ Expanded use of public transit dramatically reduces carbon emissions and other harmful pollutants. At the same time, public transit is a key factor in economic opportunity and equality. Over 56,700 households in the Buffalo-Niagara metropolitan area do not own a vehicle.⁴¹ Approximately 67% of these households are low-income. Crucially, almost 58 percent of jobs in the region are beyond the reach of transit networks.⁴² People of color use the bus much more than whites, even when controlling for income. In the City of Buffalo, 21 percent of black, 15 percent of Hispanic, and 26 percent of Asian and Pacific Islander workers commute by transit, compared to only 5 percent of whites.⁴³ To fight for better funded,

higher quality public transit that heeds the voices of its riders, the Coalition for Economic Justice, aided by its Crossroads partners, has formed the Buffalo Transit Riders Union and initiated a powerful organizing campaign.⁴⁴ This campaign parallels the Electric Bus Campaign referred to earlier –enabling a larger voice for transit to address matters of climate justice.

Food systems are another place where the imperatives of climate change and social justice intersect. Massachusetts Avenue Project (MAP) operates a large urban farm, a youth employment and development program, a mobile market, and other programs. It has been instrumental in creating a food policy council in Buffalo and in bringing a farm-to-school program to the Buffalo schools. Now, with the help of Crossroads, MAP has begun efforts to bring the Good Food Purchasing Program to Buffalo – which entails procurement policies that promote sustainability, health, worker justice, animal welfare, and localism. Meanwhile, African Heritage Food Coop is working with Crossroads to fulfill its vision of a community-controlled food economy on Buffalo’s east side, starting with a sustainable food distribution business but expanding into a bricks-and-mortar coop, an urban farm, and other ventures.

These campaigns and projects are accompanied by Crossroads’ efforts to build an intersectional movement – not just through grassroots organizing but also through arts and culture. The WASH Project, a community arts center, and Ujima Theatre, a member-based, multi-cultural company, have brought their skills to bear on a number of projects. Ujima created an original piece for Crossroads, titled *Free Fred Brown*, about a young black man who becomes the reluctant face of a movement while in prison for “theft of services” from the “National Gas Company.” In the play, a surprise snowstorm wreaks havoc on the region. Fred’s neighborhood suffers the most and demands explanations. The cast members devised the play collectively and drew each key plot element from real experiences. Another example of popular education was the 2016 Youth Climate Summit, led by the Massachusetts Avenue Project, where nearly 100 youth talked about what climate justice means, what they can do about it, and how to involve their friends and family. WASH, Ujima, and other Crossroads partners and allies have also created a series of community events, including two May Day celebrations, that have introduced climate justice concepts to diverse Buffalo residents with poetry, song, dance, and, in 2017, a group performance about environmental justice featuring giant handmade puppets – all taking place at a locally-owned roller rink on Buffalo’s east side.

Crossroads Collective and the Climate Justice Coalition have forged an important partnership. Together we have engaged in each other’s campaigns such as the opposition to utility rate hikes and the promotion of energy democracy. We have developed the strategy to support each other’s efforts when we need broad power, and yet to work within our own sectors when this would be most effective, keeping communication open through joint campaigns and programs

Concluding Thoughts

Buffalo and the Western New York Region are engaging in the Climate Justice movement through the two coalitions that emerged in the last months of 2015 and the beginning of 2016. This was without doubt a significant moment in the history of the world and the earth when reflecting on the achievement at the UN COP21 Paris talks. It remains a remarkable achievement that over 190 countries, from the U.S. and China to the small island nations, sat together in U.N. Paris Climate Talks (COP21) to TALK about a global address to the increasingly dangerous climate crisis and came to an agreement!

Given the situation today in mid-2017, it is hard to feel successful about anything. But it would be unfair and untruthful to ignore what has been accomplished within the region, the country and the world. In Buffalo, the last five months of 2015 and beginning of 2016 were intensive and incredibly energizing. Those who had participated in the Rise Up for Climate Justice campaign and the formation of the Crossroad Collective gave voice to the Climate Justice movement and made significant partnerships with others.

The agreement reached at COP21 left many hopeful. Yet, being hopeful is not to say the agreement is what we had hoped for or needed. It is not nearly bold enough. In fact, if all of the pledges agreed to by nations in Paris are met, the earth will still experience catastrophic climate change as it will only limit global warming to roughly 2.7 C (4.9 degrees F) above preindustrial levels. This level of warming will result in injustice throughout the world with the most vulnerable most impacted and would leave a devastated planet for our descendants.

What is hopeful is that all the nations of the earth did come an agreement about climate action; they even identified an aspirational goal of 1.5 degrees C above preindustrial levels; they agreed to review country goals in five years instead of ten, and agreed to annually report action toward their pledge. They have established a framework for action, this is the good news. And the withdrawal of the U.S. did not generate 'followers' but rather stiffened the resolve of other nations. We thank them.

At COP21, most leaders tried and most engaged with a great sense of purpose. But the negotiators could not step out of their role as heads of state to understand and act on the reality that we, together, share this planet. There will be no winners if we don't all win.

So we, the people, must lead: we must create a massive, global climate justice movement so overwhelming that governance structures cannot but act. Climate action must be addressed at the international level but must work deeply into cities and regions. This is where most humans live, have the power to take action themselves, and the standing to impact our leaders. Regions like Buffalo Niagara can and should lead the way. We have a strong foundation to build on and an increasingly educated public willing to take action to cut greenhouse gas emissions, to increase 'carbon negative' actions, and to ensure that this energy transformation is embedded in a just transition and promotes a new vision of human society.

What have we learned during the last two years? Together, we have more power than we ever could imagine. This is critical because building power is key to the kind of climate action and radical social transformation that will be required to stabilize the planet and bring about a more just and ecologically

functioning world. This is not just another campaign or project – this is about the continuation of life on earth and the better, more just world that we can imagine.

¹ City of Buffalo Office of Strategic Planning, “Buffalo’s Comprehensive Plan: Queen City in the 21st Century,” (City of Buffalo, 2006), <http://regional-institute.buffalo.edu/wp-content/uploads/sites/3/2014/06/Queen-City-in-the-21st-Century-Buffalos-Comprehensive-Plan1.pdf>.

² “Using the Unified Development Ordinance,” City of Buffalo, accessed July 15, 2019, <https://www.buffalony.gov/1224/Using-the-Unified-Development-Ordinance>.

³ “One Region Forward: A New Way to Plan for Buffalo Niagara,” (Buffalo, N.Y.: University at Buffalo Regional Institute, State University of New York at Buffalo School of Architecture and Planning, 2014), http://bap-home.net/solarize/wp-content/uploads/sites/28/2017/05/1RF_A-New-Way-To-Plan-For-Buffalo-Niagara_FinalPlan_reduced.pdf.

⁴ Anthony Hilbert, “Energy Poverty in Buffalo’s West Side: PUSH, National Fuel, and the Fight for Equitable Energy Access,” Partnership for the Public Good and University at Buffalo Department of Geography, June, 2016, https://ppgbuffalo.org/files/documents/environment/air_pollution_climate_change_energy/environment_-_energy_poverty_in_buffalos_west_side.pdf.

⁵ “Hydraulic Fracturing, ‘Fracking,’ Banned in Buffalo, NY,” *Huffington Post*, originally published February 9, 2011, updated December 6, 2017, https://www.huffpost.com/entry/hydraulic-fracturing-bann_n_820647?guccounter=1.

⁶ Thomas Kaplan, “Citing Health Risks, Cuomo Bans Fracking in New York State,” *The New York Times*, December 17, 2014, <https://www.nytimes.com/2014/12/18/nyregion/cuomo-to-ban-fracking-in-new-york-state-citing-health-risks.html?mcubz=3>.

⁷ Radley M. Horton et al., New York State Energy Research and Development Authority, “Climate Change in New York State: Updating the 2011 ClimAID Climate Risk Information,” (New York State Energy Research and Development Authority, 2014), https://pdfs.semanticscholar.org/4ec5/b3ba14caa96b74b09c1aeec0cb6d2a4f0800.pdf?_ga=2.241734082.1117111139.1563555253-2146102656.1563555253.

⁸ New York State Department of Environment and Conservation, “Impacts of Climate Change in New York,” accessed July 25, 2019, <http://www.dec.ny.gov/energy/94702.html>.

⁹ Ibid.

¹⁰ Eric Holthaus, “Global Warming is Probably Boosting Lake-Effect Snows,” *Slate*, November 19, 2014, http://www.slate.com/blogs/future_tense/2014/11/19/lake_effect_snow_in_buffalo_climate_change_is_making_snowstorms_more_extreme.html.

¹¹ Environmental Protection Agency, “What Climate Change Means for New York,” EPA 430 F-16-034 (Environmental Protection Agency, 2016), <https://19january2017snapshot.epa.gov/sites/production/files/2016-09/documents/climate-change-ny.pdf>.

¹² “Lake Storm Aphid,” Wikipedia, accessed July 19, 2019, https://en.wikipedia.org/wiki/Lake_Storm_%22Aphid%22.

-
- ¹³ "November 13–21, 2014 North American Winter Storm," Wikipedia, accessed July 19, 2019, https://en.wikipedia.org/wiki/November_13%E2%80%9321,_2014_North_American_winter_storm.
- ¹⁴ Radley M. Horton et al., New York State Energy Research and Development Authority, "Climate Change in New York State: Updating the 2011 ClimAID Climate Risk Information".
- ¹⁵ Cynthia Rozenweig et al., "Responding to Climate Change in New York State: the ClimAID Integrated Assessment for Effective Climate Change Adaptation in New York State," (New York State Energy Research and Development Authority, 2011), 404, <https://nescaum-dataservices-assets.s3.amazonaws.com/nyclimatescience.org/ClimAID-Report.pdf>.
- ¹⁶ *Ibid.*, 402.
- ¹⁷ Union of Concerned Scientists, "Confronting Climate Change in the Northeast: New York," 4.
- ¹⁸ Cynthia Rozenweig et al., "Responding to Climate Change in New York State: the ClimAID Integrated Assessment for Effective Climate Change Adaptation in New York State," 401.
- ¹⁹ Jamson Lwebuga-Mukasa et al., "Local Ecological Factors, Ultrafine Particulate Concentrations, and Asthma Prevalence Rates in Buffalo, New York, Neighborhoods," *Journal of Asthma* 42, no. 5 (2005), 337-348, <https://doi.org/10.1081/JAS-62972>.
- ²⁰ *Ibid.*, 401, 406.
- ²¹ Erie County Department of Health, "Erie County New York Community Health Assessment: 2017-2019," (Erie County, New York), 24, <http://www2.erie.gov/health/sites/www2.erie.gov.health/files/uploads/pdfs/cha.pdf>.
- ²² Sara C. Pryor et al., "Chapter 18: Midwest," 419 in *Climate Change Impacts in the United States: The Third National Climate Assessment*, eds. Jerry M. Melillo Terese (T.C.) Richmond, and Gary W. Yohe (U.S. Global Change Research Program, 2014), doi: 10.7930/J0J1012N, referring to "Key Message 6: Increased Risks to the Great Lakes," <https://nca2014.globalchange.gov/report/regions/midwest>.
- ²³ Brent M. Lofgren et al., "Evaluation of Potential Impacts on Great Lakes Water Resources Based on Climate Scenarios of Two GCMs," *Journal of Great Lakes Research* 28, no. 4 (2002), 537-554. See also J. Great Lakes. Res. 28(4):537-554. See also Matt Kaspar, "How Climate Change Is Damaging the Great Lakes, With Implications For the Environment and the Economy," *ThinkProgress*, January 18, 2013, <https://thinkprogress.org/how-climate-change-is-damaging-the-great-lakes-with-implications-for-the-environment-and-the-economy-ad8a2f5e867d/>,
- ²⁴ Office of the New York State Comptroller, "2014 Fiscal Profile: City of Buffalo," (New York State), <https://www.osc.state.ny.us/localgov/pubs/fiscalprofiles/buffalo.pdf>.
- ²⁵ Radley M. Horton et al., New York State Energy Research and Development Authority, "Climate Change in New York State: Updating the 2011 ClimAID Climate Risk Information".
- ²⁶ *Ibid.*
- ²⁷ New York State Department of Environment and Conservation, "Impacts of Climate Change in New York," accessed July 25, 2019, <http://www.dec.ny.gov/energy/94702.html>.
- ²⁸ "IPCC Fifth Assessment Report," Wikipedia, accessed July 25, 2019, https://en.wikipedia.org/wiki/IPCC_Fifth_Assessment_Report.
- ²⁹ "The People's Climate March 2014: A Climate Justice Story," Grassroots Global Justice Alliance, accessed July 25, 2019, <http://ggjalliance.org/PCM2014climatejusticestory>.
- ³⁰ Lac-Mégantic rail disaster," Wikipedia, accessed July 25, 2019, https://en.wikipedia.org/wiki/Lac-M%C3%A9gantic_rail_disaster.
- ³¹ Keystone Pipeline, Wikipedia, accessed July 25, 2019, https://en.wikipedia.org/wiki/Keystone_Pipeline.
- ³² "Northern Access Pipeline: No Northern Access 2016 Pipeline," Sierra Club Niagara Group, accessed July 25, 2019, <https://niagarasierraclub.com/issues/northern-access-pipeline/>.

³³ Two anchor partners, PUSH Buffalo and Open Buffalo, are joined by eight supporting partners: African Heritage Food Coop, Coalition for Economic Justice, Cooperation Buffalo, Massachusetts Avenue Project, Partnership for the Public Good, Public Accountability Initiative, WASH Project, and Ujima Theatre.

³⁴ Skye Hart and Sam Magavern, "PUSH Buffalo's Green Development Zone: a Model for New Economy Community Development," Partnership for the Public Good, June 21, 2017, https://ppgbuffalo.org/files/documents/push_buffalo_27s_green_development_zone.pdf.

³⁵ Partnership for the Public Good, "The Public Service Commission Should Deny National Fuel's Request for a Rate Hike," October 26, 2016, https://ppgbuffalo.org/files/documents/environment/air_pollution_climate_change_energy/environment_-_the_public_service_commission_should_deny_national_fuels_request_for_a_rate_hike.pdf.

³⁶ New York State Department of Public Service, "Staff Report," Case 14-M-0565, (New York State, 2015), 4 <http://documents.dps.ny.gov/public/Common/ViewDoc.aspx?DocRefId={73F1F127-09C1-460D-9F42-D6AE106B3C52}>. See also Anthony Hilbert, "Energy Poverty in Buffalo's West Side: PUSH, National Fuel, and the Fight for Equitable Energy Access," Partnership for the Public Good, June 16, 2016, https://ppgbuffalo.org/files/documents/environment/air_pollution_climate_change_energy/environment_-_energy_poverty_in_buffalos_west_side.pdf.

³⁷ "National Fuel Hikes Rates in Buffalo to Pay Billionaire Shareholder Mario Gabelli," Public Accountability Initiative, 2016, <http://public-accountability.org/wp-content/uploads/NationalFuelRateHike.pdf>.

³⁸ David Robinson, "National Fuel granted a 2 percent rate increase," *The Buffalo News*, April 20, 2017, <http://buffalonews.com/2017/04/20/national-fuel-granted-2-percent-rate-increase/>.

³⁹ Natasha Geiling, "The New York Assembly Just Passed the Nation's Most Ambitious Climate Bill," *ThinkProgress*, June 2, 2016, <https://thinkprogress.org/the-new-york-assembly-just-passed-the-nations-most-ambitious-climate-bill-ea4d0f4ce7e5/>.

⁴⁰ NYSEDA, "Clean Energy Powers New York," accessed July 25, 2019, <https://www.nyserda.ny.gov/About/Tracking-Progress/Clean-Energy-Powers-New-York>.

⁴¹ Adie Tomer, "Transit Access and Zero-Vehicle Households," as part of the Metropolitan Policy Program, (Washington, DC: Brookings Institute, 2011), https://www.brookings.edu/wp-content/uploads/2016/06/0818_transportation_tomer.pdf.

⁴² Ibid.

⁴³ Ibid.

⁴⁴ See, for example, Jay Tokasz, "Transit riders air grievances in march to Lackawanna bus stop." *The Buffalo News*, March 26, 2017.