

By Jacob Tierney - Reporter, Buffalo Business First



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When Hurricane Maria devastated Puerto Rico in 2017, many displaced residents came to Buffalo, staying with family and friends. For some, the move was temporary, but hundreds stayed for good.

This might not be an isolated incident, but instead the first wave of an immigration influx into Western New York as businesses and individuals seek climate stability in a warming world.

Researchers have spotlighted Buffalo as a community that will be particularly resilient to the effects of climate change, and some experts expect Western New York to become a "climate refuge," a popular destination for those seeking to relocate.

"If you go back 10 years, this whole notion was seen as a little bit out there," said David Flynn, partner at Phillips Lytle LLP and leader of the firm's environmental law practice team. "In typical Buffalo fashion, we never really viewed ourselves as a mecca or a refuge, but I think as people have seen real-life examples of what's happening ... people are recognizing that it's a real attribute, and it's a positive attribute that can distinguish our area in a positive way from other areas."



David Flynn, Phillips Lytle LLP
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Yet just because Buffalo is resilient to the effects of climate change does not mean it's immune. Warming temperatures will likely mean the region sees fewer snowstorms, but the ones that happen will be more severe — like the deadly Christmas blizzard of 2022.

Plus, rising lake levels and high winds batter shorelines and threaten infrastructure, and cause more flooding in lakeside communities.

The shoreline — and the infrastructure built on it — "can be resilient to a few of these events, but when you start layering event after event after event, it can only handle so much," said Jill Jedlicka, executive director of Buffalo Niagara Waterkeeper.

Business and municipal leaders will need to prepare for the impact of climate change — both the physical threats that changing weather can bring and the sociological shifts that could ensue if the region does indeed become a climate refuge.

ABOUT THE SERIES

BUFFALO UNLOCKED

How far can the region's transformation go, and what's holding it back?

This year, Buffalo Business First will take a close look at how the region can capitalize on strengths and address weaknesses, improving both the local economy and quality of life for the people who live here. We will ask business leaders and other key stakeholders what Buffalo's potential is and how that potential can be unlocked.

We want to hear from you! What must be done to unlock Buffalo's potential? What assets should be utilized? What issues must be addressed? Email Managing Editor Michelle Cioci Adams. Comments may be used in upcoming stories.

Resilience: Buffalo is in a better place than most

Stephen Vermette is a professor of geography at SUNY Buffalo State University's Geosciences Department. In 2017, he published an analysis on Western New York's changing climate from 1965 to 2016, and it found that the region is better-prepared than most to handle rising global temperatures.

"I wasn't finding any significant trends in extreme weather," he said.



Dr. Stephen Vermette, professor of Geography, Buffalo State University's geosciences department.

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Temperatures are rising, as they are in the rest of the world. Lake Erie is getting warmer. However, the effects of climate change are more muted here than elsewhere.

"Extreme weather in Western New York is different from extreme weather in other parts of the country," Vermette said.

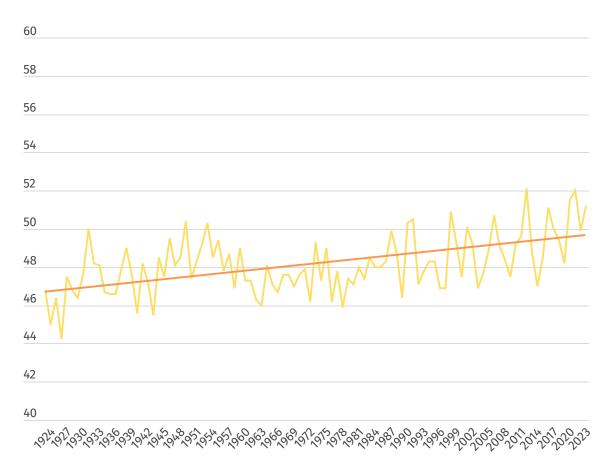
There are no rising oceans, no blistering heat waves, no hurricanes threatening widespread destruction. There's snow, and plenty of it, but this does not typically cause as much damage as other extreme weather events. And seasonal snowfall totals have remained steady over time, though individual snowstorms are becoming less frequent and more intense.

"The buzzword that I use is 'stable,' "Flynn said. "It's going to be a stable environment."

Others are starting to take notice. The New York Times in 2019 interviewed Vermette for a story about how Buffalo and Duluth, Minnesota, could become increasingly appealing to those looking to escape the brunt of climate change.

Buffalo climate trends

The average annual temperature in Buffalo has trended up in the last century, as shown below.



Source: National Weather Service

Refuge: City officials see an opportunity for Buffalo to grow

Buffalo Mayor Byron Brown in a 2019 speech declared Buffalo a "climate refuge." The city this year hired a full-time climate action manager.

Greg Pokriki, communications manager for Invest Buffalo Niagara, said the attention Buffalo has received for its climate resilience could be a selling point to attract businesses and workers here.

"I saw an opportunity to kind of greater tell that story to our expats," he said.

He worked with Flynn and others to make climate a key pillar in Invest Buffalo Niagara's "Be in Buffalo" campaign, a marketing effort designed to tout the region's strengths.

"We kind of doubled down on it," he said.

The effect climate change could have on immigration to Buffalo is multifold, according to Pokriki and Flynn.

First, there are individual disasters like Hurricane Maria that could uproot people from their homes and send them searching for a new place to live.

There's also the slower, steadier influx that could come as businesses and individuals take a proactive approach, making the deliberate decision to leave warmer climes and head for Buffalo.

Businesses are considering their costs. Insurance in places like Florida can be greatly expensive, and many companies are stepping up environmental, social and governance considerations, putting climate at the forefront of their decision-making.

Individual workers are making their own, similar calculations.

"It's just more attractive for a long-term investment, and on the talent side, I think you're seeing that people are not just seeing but reacting to these climate-based changes that have the ability to impact their quality of life," Flynn said.

Risk: Being in a better place doesn't mean Buffalo is safe

Though Western New York has much to be grateful for, it still faces plenty of climaterelated challenges. A refuge is not a haven.

"I don't like when people call it a climate haven," Pokriki said. "Every place is going to experience the effects of climate change. We're not excluded from that."

One of the region's largest assets is also its biggest challenge — Lake Erie.

Rising temperatures mean the lake freezes less frequently. As cold air sweeps down from Canada, it sucks up lake water and dumps it across Western New York in the form of lake-effect snow.

Vermette said there's not enough data to show whether lake-effect events are becoming more extreme or more frequent, but there are some indications that's the case. The region's average annual snowfall has remained steady, but it sees fewer snow days each year — meaning individual snowfalls are heavier.



Jill Jedlicka, executive director, Buffalo Niagara Waterkeeper.

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A frozen lake helps protect the shoreline. High winds over an unfrozen lake can cause waves. If the winds are intense enough they can cause a seiche — pushing water from one end of the lake to another. Western New York on multiple occasions has experienced seiche-related flooding. Water levels across the lake in Toledo, Ohio, drop as the wind pushes massive quantities of water hundreds of miles toward Buffalo.

"We need to rethink our entire shoreline," Jedlicka said. "We're kind of staring down a barrel of a gun of climate change that we know is only going to get worse in the next 10, 15, 20 years."

Though Jedlicka agrees that Western New York is in a better position than most regions when it comes to climate resilience, she and her organization have worked to temper that optimism with caution.

Buffalo Niagara Waterkeeper has spent decades cleaning up the remnants of Buffalo's industrial past. Now it's working to continue that mission while also tackling a slew of shoreline resilience projects meant to combat flooding and erosion.

"They're seeing their communities starting to crumble, and they're feeling the costs of maintaining boardwalks and roads and buildings that are getting flooded and infrastructure that is crumbling," Jedlicka said.

Waterkeeper is involved in the \$110 million transformation of LaSalle Park into Ralph Wilson Park. The infrastructure along the shoreline had been destroyed by heavy flooding. The shoreline is being redesigned to greatly reduce the impact of waves and flooding.

Similar projects will need to happen along much of the coastline if the region is to prevent flooding, Jedlicka said.



A view of Lake Erie and the Buffalo shoreline

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Response: What can Buffalo do to keep environment on its side?

Western New York cannot repeat the mistakes of its past, Jedlicka said.

"We have the opportunity like not many other communities around the country to kind of push that reset button and define what is going to be the trajectory of our next generation of economic development," she said. "Are we just going to do the same thing we did 100 years ago and just build wherever we wanted without a thought of what the cumulative impact is on our natural resources? We've lived through that hell once before."

Vermette's research doesn't make policy recommendations, but he hopes business leaders and lawmakers take a proactive approach.

"Now is the time to prepare, not when everything is happening, and as far as I understand it there really has not been any real preparation for this happening," he said.

Flynn said some steps are already in the works. Municipalities have started to take a more proactive approach toward planning for snow following the 2022 blizzard.



A look at Main Street on Christmas Morning.

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Business leaders should be similarly proactive, Flynn said. State and federal regulations related to climate change will continue to be implemented, though it's still unclear what form many of them will take. The businesses that anticipate and prepare for these

changes will be better off than those scrambling to adapt to a mandate, but this requires foresight beyond the next quarter or fiscal year.

"It's getting away from a 'what do I need to do' mentality and evolving into a longer view,' " Flynn said.

Jedlicka said businesses taking proactive steps to protect and restore the environment will reap the economic benefits, pointing to the economic benefits that cleaning up the Buffalo River has had for the community. Industry and the environment do not need to be at odds, she said.

"If we're going to take advantage of that, we all need to be on the same page," she said.