



THE DEBATE

With Hurricanes Providing Fresh Examples of Needs, Panel Is Asked What Trump Can Do to Foster Environmental Justice

Natural disasters and human disasters both impact environmental justice, as we learned in putting together this DEBATE.

We initially asked a panel of experts to evaluate the civil rights implications of “the only commercial facility in the nation allowed to burn explosives and munitions waste with no environmental emissions controls . . . fueling raging fires that spewed smoke into the air just hundreds of yards from a poor, largely black community,” according to an article last July in *Pro Publica* describing the situation in Colfax, Louisiana.

Then Hurricane Harvey hit, showering the Houston area with pollution from refineries and chemical plants, followed by Hurricane Irma, which left Florida’s most vulnerable citizens without life’s necessities. Then came Maria, devastating Puerto Rico. Suddenly the federal role in fostering environmental justice was brought into immediate relief for a national audience.

The federal role began in 1994, when President Clinton issued Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations. It requires each federal agency to incorporate EJ as part of its mission via civil rights, health, and environmental statutes. President Clinton determined that those statutes provided opportunities to prevent minority and low-income communities from being subject to disproportionate environmental effects.

In 2005, President George W. Bush’s EPA administrator, Stephen Johnson, issued to senior managers a memorandum entitled “Reaffirming the U.S. Environmental Protection Agency’s Commitment to Environmental Justice.” With that memo, EPA managers were directed, for the first time, to make EJ a strategic goal in all agency programs and operations.

In 2011, President Obama enlarged the federal commitment to EJ even further with the “Memorandum of Understanding on Environmental Justice and Executive Order 12898.” The federal agencies agreed to develop EJ strategies to protect the health of people living in communities disproportionately exposed to environmental harms and risks. Agencies would now also provide the public with annual progress reports on their efforts.

How can tragedies like Colfax, where national stocks of munitions are being burned, still exist nearly a quarter century after the Clinton administration mandated environmental justice in federal actions? Why are super storms like Harvey, Irma, and Maria still adversely impacting poor and minority populations a dozen years after Hurricane Katrina? What legal tools can best be used to help affected communities? What should the Trump administration be doing to advance equity in shouldering the pollution burden and the effects of natural disasters?



“Trump says he wants to fix our regulatory system to enhance productivity. But, there are also costs and burdens that affect human life, not just profits.”

Maite Arce
President and CEO
HISPANIC ACCESS FOUNDATION



“177 million Americans live under the threat of a chemical disaster. Black, Latino, and low-income communities are disproportionately at risk.”

Lisa Garcia
Vice President of Litigation for
Healthy Communities
EARTHJUSTICE



“To understand what poor and minority people face, Trump might read journalists’ accounts about life in a contaminated community.”

Sharon Lerner
Environmental Reporter
THE INTERCEPT



“Full enforcement of environmental laws, as well as fair housing and community reinvestment laws, in congruence with the Civil Rights Act, can ensure equal treatment.”

Vernice Miller-Travis
Senior Advisor, Environmental
Justice and Equitable Development
SKEO SOLUTIONS INC.



“A comprehensive and inclusive, problem-solving approach offers the best promise for communities to achieve good health, a clean environment, and economic vitality.”

Suzi Ruhl
Office of Environmental Justice
ENVIRONMENTAL PROTECTION
AGENCY



“The great civil rights issue of the 21st century is environmental justice. We cannot escape the truth that our reliance upon clean air and clean water is not promised.”

Benjamin Wilson
Chairman
BEVERIDGE & DIAMOND, P.C.

Ticking Bomb That Will Be Felt for Generations

By MAITE ARCE

While the plant in Colfax is unique — it's the only commercial facility in the country permitted to burn explosives and munitions without emissions controls — this situation represents an environmental issue that is commonplace throughout the nation. Low-income populations, often those of color, are disproportionately subjected to environmental hazards that present a myriad of health risks for both children and adults.

The National Hispanic Medical Association and Clean Air Task Force examined the relationship between pollution and Latinos, finding that while 51 percent of the U.S. population lives in areas with unhealthy levels of ozone, Latinos are 51 percent more likely to live in these places than are whites. Latinos face elevated risks from toxic emissions and this is leading to widespread epidemics throughout this population.

The report uncovered higher rates of asthma attacks and lost school days for Latinos, which was attributed to increased emissions from oil and gas facilities. This echoes the findings of the American Lung Association, which discovered that Latinos are disproportionately burdened by asthma because they are more likely to live and work where pollution is higher. Earlier this year, researchers from the University of Southern California's Keck School of Medicine released a study showing that Latino children living in areas with higher levels of air pollution have a heightened risk of developing Type 2 diabetes.

In rural and low-income communities, land is cheap and communities are not well-informed about these issues. Not only are there fewer watchdog groups serving these com-

munities, but they also lack the resources to seek out legal assistance to help them protect their families from environmental health hazards. These factors contribute to the environmental injustices and underscore the need to elevate these communities' voices.

This is where the moral responsibility to ensure we protect Americans who are most vulnerable intersects with the economic pressures of development and commerce. Admittedly, there are other factors that heighten the effects of the environmental hazards — inadequate access to health-care, minimal access to green space, and a lack of nutritious food sources. But, the first line of defense inevitably lies with the government.

President Trump and his administration's decisions should reflect a sincere intention to protect all Americans, including minorities, the poor, and rural populations. This isn't to say that development, such as oil and gas, should be eliminated or severely hampered, but more that we need to think responsibly and weigh all the costs. Yet, there are reasons to be concerned that protecting all Americans is a priority.

Toward the end of President Obama's second term, the Bureau of Land Management adopted the Methane and Waste Prevention Rule. This rule sought to reduce natural gas waste — methane and other toxic pollutants — by requiring existing oil and gas companies operating on federal public lands to use the most up-to-date technology to capture wasted natural gas that was either released into the atmosphere or burned off and to repair leaks from equipment. The rule was developed with the input of tens of thousands of Americans around the country, including Latinos from Colorado, Nevada, Arizona, and New Mexico, where some of the largest methane concentrations are located. The rule survived an attempt from Congress to overturn it earlier this year, but that success was short-lived, as BLM announced its intention to delay its implementation as the Inte-

rior Department works to formally rescind the rule through public notice and comment.

Similarly, the Environmental Protection Agency moved to delay for two years its implementation of a rule limiting methane and smog-forming pollutants from oil and gas wells. It wasn't until July, when the D.C. Circuit struck down the 90-day delay, that the methane rule was again a tool for protecting our nation's citizens. Yet, even with its active status, there are strong concerns that the agency isn't as committed to compliance as originally intended and that Congress will take action to block the rule.

While past presidents, primarily Clinton and Obama, used the executive order titled "Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations," it would serve our nation well for President Trump to continue this momentum and further progress in combating environmental hazards.

By finding common ground with Latinos and other communities, President Trump could move the economy forward while protecting our environment and subsequently the people's health. It's about finding the balance between development and protecting our environment. It doesn't need to be one or the other.

The Trump administration has said that it wants to fix our regulatory system to enhance American productivity and well-being without unnecessary costs and burdens. But, there are costs and burdens on the other side of that coin too — ones that affect human life, not just profits.

Whereas Colfax was literally an explosion, the avoidance of addressing the issues of environmental hazards affecting our low-income and minority populations is a ticking time bomb that upon detonation will leave an aftermath felt for generations to come.

Maite Arce is founder, president, and CEO of Hispanic Access Foundation.

Hurricanes Shine Light on Threats Nationwide

By LISA GARCIA

The country is still coming to terms with the impact of Hurricane Irma, which left millions of Floridians powerless, living amid huge swaths of debris-strewn, flooded streets. That followed Hurricane Harvey's four feet of rain in Texas.

We must do all we can to support those whose health, safety, and quality of life have been impacted by these hurricanes. And, at the same time, we must understand why such devastating storms are happening — a changing climate — but also the other environmental challenges they pose. That includes the increased risk of the release of hazardous substances from refineries and chemical plants that shut down operations during such storms.

In Harvey's aftermath communities near the Houston Ship Channel were faced with a barrage of hazardous pollution stemming from refineries and chemical plants that shut down operations. Within days, some 13 refineries had closed. When refineries and chemical plants shut down, they often release thousands of tons of air pollution that can lead to premature death, according to a 2012 report from the Environmental Integrity Project.

In the Manchester area of Houston, near a Valero Refinery and three chemical plants, residents in this mostly Latino community were being hit with gas-like odors and suffered from headaches, sore throats, and itchy eyes. One of those impacted is Bryan Parras, who lives in the Eastdown community just a few miles away.

Parras is a member of Tejas Environmental Justice Advocacy Services. The group, with the assistance of

Earthjustice, successfully sued EPA in 2012 to bring about more stringent national refinery standards, which were finalized in 2015. Parras told the *Houston Press* that the soreness and chest pain that he normally suffers when he takes people out on toxic tours is now harming him in his home. "The stuff was getting sucked into my home through the window and air conditioning units."

Meanwhile, in another Texas town that is disproportionately exposed to oil refineries and chemical plants, most of the focus has gone toward trying to return to a normal life for those who are displaced.

"There's nowhere for people to go," said Hilton Kelley, founder and executive director of the Community in Power and Development Association in Port Arthur. "Conditions here are appalling and people are very disturbed, upset, and angry." But Kelley and his community are not beaten. "I lost my house and I lost my restaurant, but I'm ready to go to work to hold people accountable."

Some of the nation's highest levels of cancer-causing chemicals benzene and 1,3-butadiene were identified in the Manchester community. In fact, the University of Texas School of Public Health found that children who live within two miles of the ship channel have a 56 percent higher incidence of leukemia than those who live 10 miles away.

Chemical plants are often in close proximity to oil refineries. The Chevron Phillips Chemical Plant in nearby Sweeny — 50 miles from Houston — notified the Texas Commission on Environmental Quality just days after the storm that it expected to release well over 100,000 pounds of hazardous pollutants.

Around that same time the Arkema Chemical Plant, 25 miles from Houston, suffered two explosions when containers carrying combustible substances lost refrigeration. The explosions prompted authorities to order the evacuation of people living within 1.5 miles of the plant, and 15

law enforcement officers ended up in the hospital due to smoke inhalation.

Chemical explosions like the one that occurred at the Arkema Plant happen all the time. From 2004 to 2013, more than 1,500 chemical accidents occurred at hazardous facilities, killing 58 people and injuring more than 17,000. The federal government must act to provide quick remediation of any contamination from these types of violations and during extreme weather events.

Even more important is to act proactively to protect people now. About 177 million Americans live under the serious threat of a chemical disaster. Black, Latino, and low-income communities are disproportionately at risk.

The Obama EPA offered some measure of protection to communities by finalizing the Chemical Disaster Rule in late 2016, which requires oil, gas, and chemical facilities to analyze safety risks and consider whether stronger measures of protection could be implemented. But instead of moving forward to implement the rule, the new EPA administrator, Scott Pruitt, has delayed implementation until 2019, so that *no* chemical plant has to implement any new safety measures until then. This postponement is a threat to all of us. EPA's own predictions indicate that at least 300 more accidents involving dangerous chemicals are likely to happen during this nearly two-year delay.

We must demand that our elected representatives do more to protect us from these dangers by demanding that the EPA reverse course on the delay and implement the Chemical Disaster Rule.

The safety of communities living nearest refineries and chemical plants depends on it.

Lisa Garcia is the vice president of litigation for healthy communities at Earthjustice.

Keith Rushing, advocacy communications manager of diversity at Earthjustice, contributed to this article.

The Human Cost of Abandoning Regulations

By SHARON LERNER

I read the *Pro Publica* article about a hazardous waste disposal facility in Colfax, Louisiana, with horror and fascination. I hadn't known about the incinerator that has been burning explosives and munitions without environmental emissions controls. And so I didn't realize what the people living near it had endured — the exposure to toxic vapor, contaminated soil and water, and illnesses that they understandably believed to result from that exposure.

But while I was enlightened, outraged, and saddened by “Kaboom Town,” I wasn't surprised by it. Over the past few years, I've reported on environmental tragedies that have befallen other mostly poor and black communities like the one in Colfax. Though these situations involved other companies and chemicals, their basic dynamics are eerily similar to the ones reporter Abraham Lustgarten described so well.

As in Colfax, the people in Beaumont, Texas; Columbus, Mississippi; and St. John the Baptist, Louisiana, are living near industrial facilities that emitted chemicals that threaten their health. In each of these cases, as in Colfax, the plant polluted the area for decades and the community has long struggled with health problems they suspected were tied to the contaminants. And in each place, residents have struggled tremendously to stop and escape the pollution.

This magazine asked me to address why such problems continue to plague our country. Part of the answer is simply that companies stand to gain from various polluting activities. In St. John the Baptist, the source is the country's only neoprene-producing factory. In Beaumont, it's an ExxonMobil refinery that already

processes some 365,000 barrels of crude oil each day and is about to expand. In Columbus, the polluter was Kerr-McGee, a now-defunct chemical company that, for a time, coated most of the country's railroad ties with creosote. In each case, the cost of improved environmental controls would cut into profits.

In these and countless other communities across the country, residents have found themselves pitted against entities that are much better equipped for political battle. Lustgarten describes the situation in Louisiana, where a bill introduced by a local legislator that would have banned the open burning of hazardous materials failed after it “drew Louisiana's chemical industry out of hiding.”

Unsurprisingly, Clean Harbors, the company that owns the plant, along with the military, which produced some of the waste it burns, have “so far been able to outmaneuver” the community, as Lustgarten reports.

The term — outmaneuver — suggests a fair fight, in which the wiliest can and should win. Yet such battles are rarely decided by their merits or even cleverness. Instead these are all too often contests of power. And the residents of Colfax, or of St. John the Baptist — where an African American community that pre-dates the civil war has a risk of cancer from air pollution that is more than 800 times the national average — are no match for the well-financed goliaths that are endangering their health.

The arc of these stories isn't new, nor is the power imbalance that drives it. But the governmental response to environmental injustice can change, which brings me to the second question this journal posed to me: “What should the Trump administration do to address the environmental and public health concerns of the Colfax community and other communities that confront similar risks?”

Under normal circumstances, this question might elicit a to-do list. But

because Trump has already aligned his administration with White Nationalism and appointed an avowed opponent of environmental and health protections to head EPA, it seems essential to first address what the administration should not do.

For starters, the administration shouldn't roll back laws that are designed to protect the public from environmental harm or flout scientific evidence in an apparent effort to protect polluters. Nor should it reject and attack the science of climate change — a tactic that, as Harvey and Irma have just shown, leaves poor communities particularly vulnerable. EPA shouldn't cut funds for environmental enforcement or environmental justice. And the agency that's supposed to protect all Americans from environmental harm shouldn't dismiss civil rights complaints without addressing the matters that sparked them.

Less than a year into Trump's term, it's too late on all of these counts. Trump and EPA Administrator Scott Pruitt have already made it clear in dozens of ways that they place industry's concerns above protection of the environment and public health. And much of their work — including rolling back efforts to address climate change; reversing a proposed ban of the pesticide chlorpyrifos; delaying the chemical safety rule; and closing civil rights cases — has or will disproportionately affect poor and minority Americans.

Given all that's already transpired, it feels naïve to assume this administration actually wants to address these concerns. If they do, Trump and his appointees might start by reading “Kaboom Town” or one of the other journalistic accounts of life in a contaminated community, and deeply consider the human cost of abandoning environmental regulation.

Sharon Lerner is an environmental reporter for *The Intercept* and a reporting fellow for The Investigative Fund. Read her stories at theintercept.com/staff/sharon-lerner/.

Now Is the Time for Enhancing the Federal Role

By VERNICE MILLER-TRAVIS

In *After the Storm: Restoring America's Gulf Coast Wetlands*, published by ELI Press after Hurricane Katrina, I contributed an essay on the environmental justice implications of the tragic storm. "Race and class intersected with the Katrina disaster in ways that compounded the impacts upon communities of color, tribal and low-income communities," I noted. "Issues of race and class will affect environmental cleanup and restoration, public health, regional equity, community revitalization, and economic recovery."

History repeats. Before Hurricane Harvey swept through Texas and the Gulf Coast, and Maria devastated Puerto Rico and the U.S. Virgin Islands, preexisting environmental and ecological threats rooted in centuries of bad land use planning, and in the case of Houston no planning or zoning, and a legacy of residential segregation and expulsive zoning continued to shape local conditions.

Among these threats were Superfund sites like the San Jacinto Waste Pits, which via Harvey may have released 2,300 times the actionable levels of the neurotoxic dioxin into the nearby San Jacinto River and other areas. Around a dozen Superfund sites' contaminants were mixed into the floodwaters and carried across the city, into the bayous and waterways, including Galveston Bay and the Gulf of Mexico. These toxic contents have spread throughout nearby residential areas, where citizens are concerned that toxic mud carried by floodwater may have contaminated their homes.

Additionally, the Arkema Chemical plant, which was pushed unsuccessfully by Houston officials, residents, and the press to divulge the content of the compounds it was manufacturing,

graphically demonstrated the problem. Prior to Harvey, the company's CEO warned that if the facility lost power the chemicals could spontaneously combust. The Arkema plant did lose power after Harvey, and as a result the chemicals inside the facility exploded in thick, black, toxic clouds for days. Thankfully area residents were evacuated, because the heat of the blast disintegrated every structure at the facility, including steel girders. The Harris County district attorney is now investigating whether Arkema broke any laws, especially because the last reported inspection was carried out four years ago.

In Puerto Rico and the U.S. Virgin Islands, one of the main concerns these territories have daily is the need to protect freshwater sources, threatened by salt water incursion and landfills, including ones that contain coal ash. Sadly, failing wastewater plants have been flooded by Hurricane Maria, leading to discharges of raw sewage into most communities, as well as waterbodies that flow into the sea. Additionally, the herbicides and pesticides spread on agricultural lands have also now been spread across these island territories in the receding floodwaters.

Puerto Rico's 23 Superfund sites and other hazardous waste sites and facilities, including pharmaceutical plants, were flooded, creating a toxic brew that inundated most parts of the island. Moreover, Maria hit the inordinately complex Vieques Superfund site, which holds exploded and unexploded naval munitions, impacting all the marine life in and near this small former fishing village.

We were asked about the situation in Colfax, Louisiana, but that was before the hurricanes hit, exposing faultlines in environmental justice dating back to Hurricane Katrina and earlier. In terms of the appropriate federal role for achieving environmental justice in communities like Colfax or those impacted by the recent natural disasters, full enforcement of existing environmental laws, as well as fair housing

and community reinvestment laws, must be utilized in congruence with the Civil Rights Act of 1964 to ensure equal treatment. National flood control standards, flood zone mapping, building codes, and the national flood insurance program must be updated and renewed — we can't continue to rebuild our communities as we have in the past when safer geotechnical engineering and construction technologies, materials (e.g., porous concrete), stormwater management, and land use design systems now exist.

For the communities affected by the hurricanes, it's paramount that all relevant federal agency staff be brought together in emergency preparedness teams to help coordinate damage assessments, restore power and telecommunications, restore drinking and wastewater infrastructure, and provide access to food, medicines, and medical care. Communities facing environmental justice challenges prior to the storms are at a higher risk from the storm ravages, compounded by unchecked environmental threats.

EPA must deploy staff to ensure that Superfund sites and other hazardous waste sites are secure so their contaminants won't leach into nearby communities, waterways, and the air. In Houston, strict enforcement of the Clean Air Act, the Refinery Rule, and the Methane Rule (which federal courts just reinstated) must be fully and fairly enforced. The Clean Water Act and Safe Drinking Water Act must be strictly enforced to allow communities to receive the most important life sustaining substance — clean water.

Now is the time to turn the power of the federal government loose in light of the enormity of these challenges that no local, state, tribal, or territorial government, or commercial interest, can shoulder by itself.

Vernice Miller-Travis is the senior advisor for environmental justice and equitable development at the environmental consulting firm Skeo.

A Comprehensive, Inclusive, Problem-Solving Approach

By SUZI RUHL

Communities with environmental justice concerns want what all communities want: good health, a clean environment, and economic vitality. Since environmental justice coalesced in the 1990s as a local and national movement, significant progress has been made, while critical challenges continue. As environmental justice has matured over the past three decades to provide a crucial platform for helping underserved and overburdened communities, many of the original challenges have grown more intense, complex, and controversial.

The challenges captured in Colfax reflect those faced by communities across the country and across administrations. The federal government's role is to develop more effective and efficient approaches so that communities like Colfax can experience economic, health, and environmental vitality.

Under Director Matthew Tejada, EPA's Office of Environmental Justice mixes community support and federal coordination to achieve environmental justice consistent with administration policy. The process begins with the understanding that environmental justice may include, but is not limited to, decisions about whether to site a facility or not. It involves meaningful engagement of impacted populations and consideration of their living conditions and health status, potential for pollution exposure, and the application of environmental laws.

Since the inception of environmental justice, a fundamental approach is supporting meaningful engagement and public participation across the agency and federal family. A highly successful illustration is Brownfields to Healthfields. Launched by community organizations living near contaminated sites, B2H focuses on strengthening

community health, equity, sustainability, and resiliency.

A core principle of B2H is that it is driven by communities impacted by pollution. It accounts for the reality that low-income, minority, and tribal/indigenous populations likely live in medically underserved areas that are also food deserts, are designated as having high or persistent poverty, and are exposed to contamination from a variety of sources. B2H sets the community vision for reuse of the contaminated property (e.g. health care, healthy foods, recreation) as the centerpiece to address remediation and engage diverse stakeholders (e.g. academic institutions, grant makers, bankers, community developers) to support implementation of their vision. OEJ works collaboratively with B2H through multiple sectors and in geographic areas (e.g., vision health care facilities in Appalachia, parks and urban agriculture in coastal and inland port communities).

Another adaptive strategy EPA is employing is leading coordination of federal resources for underserved and overburdened communities. The Federal Interagency Working Group on Environmental Justice provides an important framework for coordinating resources across federal agencies to support environmental justice at the community level.

The EJIWG is also instrumental in coordinating federal policy decisions. In 2012, it created the NEPA Committee to improve the effective, efficient and consistent consideration of environmental justice issues in the National Environmental Policy Act process through the sharing of best practices, lessons learned, research, analysis, training, and consultation. The NEPA Committee represents 10 cabinet departments, three independent agencies, and the White House Council on Environmental Quality.

In 2016, the NEPA Committee produced EJIWG Promising Practices for Environmental Justice Methodologies in NEPA Reviews, which contains a variety of methods that may be suit-

able to advance consideration of environmental justice in real time as the NEPA process unfolds. Completion of an accompanying National Training Product and a companion Citizens Guide are underway.

These efforts are designed to facilitate engagement of minority, low-income, and tribal/indigenous populations and foster effective and efficient participation by impacted populations in NEPA decisionmaking. For example, the Department of Energy considered environmental justice during its environmental review of the long-term management and storage of elemental mercury. Measures to address environmental justice included the translation of key documents for populations with low English proficiency. This experience informed the NEPA Committee.

OEJ also applies adaptive solutions to the burgeoning expansion of natural disaster emergency management. With both human-made and natural disasters, there are stages of essential action. The role of the federal government in protecting human health and the environment for overburdened and underserved populations does not begin or end with response, but also includes recovery and preparedness. As communities rebuild, evidence-based prevention models must be deployed to address the significant and complex needs of impacted communities.

Environmental justice requires addressing the full range of challenges facing communities. It must be centered on the impacted populations, and engage the full range of relevant stakeholders, including those contributing to pollution and those whose mission is to address essential service needs. Our experience has shown that a comprehensive and inclusive, problem-solving approach offers the best promise for helping all communities achieve good health, a clean environment and economic vitality.

Suzi Ruhl is senior attorney advisor, EPA Office of Environmental Justice, and a member of the Federal Interagency Working Group on Environmental Justice.

Learning From Disaster Response in the Trump Era

By BENJAMIN F. WILSON

In 2017, the practice of environmental law reminds us, as Dr. King said, that we are “caught in an inescapable network of mutuality, tied into a single garment of destiny.” This truth is particularly evident in the context of the environmental justice movement.

Despite having made substantial progress in the development and enforcement of our environmental laws, we continue to witness injustice, as environmental threats disproportionately harm our nation’s low-income, minority communities.

In 2005, winds of over 120 miles per hour tore across Louisiana and the Gulf Coast as Hurricane Katrina devastated regions disproportionately represented by African American, poor, and unemployed residents. In 2012, Hurricane Sandy brought flood waters that ravaged many of New York City’s Significant Maritime Industrial areas — where more than 600,000 people, predominantly African American, live and work. Hurricane Harvey had similar consequences for Houston’s low-income and minority communities, spreading toxic chemicals from nearby industrial facilities with the rising waters. In the West, the expanding forest fire season has had a devastating impact on some rural and poor communities. Most recently, Hurricane Maria left Puerto Rico in shambles, leaving many without electricity or potable water.

These disasters brought destruction to large swathes of the country, leaving their worst marks on our nation’s most vulnerable communities lacking the infrastructure, advocates, and resources to defend themselves.

All is not lost, however. The harrowing impact and frequency of these disasters have demanded greater remedies in response, and each success or

failure has revealed measures that federal, state, and local actors can meaningfully take to ensure better outcomes at each exercise of their discretion.

Houston and Tampa learned from the mistakes of New Orleans in effectively preparing for Hurricanes Harvey and Irma. As we write, federal resources are being brought to bear in Puerto Rico — arguably insufficiently — to remedy the damage from Hurricane Maria. This process too will provide meaningful lessons, even in its shortcomings.

In preparation for Irma, perhaps the strongest hurricane ever recorded in the Atlantic, federal and state agencies took sizeable, proactive efforts. These included collaborative work by the Environmental Protection Agency, Federal Emergency Management Agency, and relevant state agencies to address anticipated fuel shortages, monitor public water systems, secure Superfund sites, and assess conditions at major industrial facilities located in the storm’s path.

Though an encouraging change from past practice, these efforts must be expanded beyond the disaster relief context to better ensure that environmental justice considerations are made at every juncture in the development, implementation, and enforcement of environmental laws.

Beyond the measures applied in preparation for Irma, underused mechanisms such as Title VI of the Civil Rights Act of 1964 should be used to develop collaborative, stakeholder-driven solutions in circumstances where federal funding results in discriminatory outcomes. In shaping settlements, state and federal environmental agencies should provide higher incentives, such as greater penalty mitigation, for completing supplemental environmental programs that further environmental justice goals. These tools are underutilized and provide some of the only significant resources available to impacted communities.

To the extent that solutions cannot be found at the federal level — a likely result of the Trump administration’s proposed 2018 budget cuts and the

president’s recent dismissive comments about federal assistance to Puerto Rico — state and local resources must be brought to bear. Urban planning and environmental zoning laws must take into account potentially disproportionate impacts of their application to vulnerable communities. Further, use of certain recovery programs which have historically failed to benefit minority communities, such as federal grants, small-business loans, and insurance payouts, can be encouraged — or better, mandated — in such ways as to counter discriminatory impacts.

Finally, the dedication of non-governmental actors — from corporations making siting decisions to non-profit organizations advocating on behalf of communities through environmental laws — is key to efficiently developing solutions. Businesses communications, early and often, with communities can help to identify potential risks and avoid costly adversarial proceedings. Though the environmental challenges facing low-income, minority communities cannot always be attributed to a single cause or actor, where negotiation and partnership can be used to repair these communities, improve public health, and provide infrastructure for resilience, all parties ultimately benefit.

The great civil rights issue of the 21st century is environmental justice. We cannot escape the insidious truth that our reliance upon clean air and clean water is not promised. These life-sustaining resources face greater threats from the increasingly devastating impacts of climate change.

Together, as public, private, and community stakeholders, we must learn from our past challenges, our shared successes, and develop effective solutions. As the poet Maya Angelou says, “Our mission . . . is not merely to survive, but to thrive.”

Benjamin F. Wilson is chairman of the environmental law firm Beveridge & Diamond, PC., and chairman of the ELI board of directors. **Stacey J. Sublett**, an associate at B&D, assisted in the article’s preparation.